1.0 INTRODUCTION
2.0 GENERAL COURSE OF PLAY
3.0 GAME EQUIPMENT
  3.1 The Game Map
  3.2 Game Charts and Tables
  3.3 The Playing Pieces
  3.4 Game Scale
  3.5 Game Equipment Inventory
  3.6 Rules Questions
4.0 SEQUENCE OF PLAY
5.0 MOVEMENT OF COMBAT UNITS AND LEADERS
  5.1 How to Move Units
  5.2 Effects of Terrain on Movement
  5.3 Special Terrain
  5.4 Effects of Leaders on Movement
  5.5 Stacking
  5.6 Terrain Effects Chart
6.0 ZONES OF CONTROL
  6.1 How Zones of Control Operate
  6.2 Effects of Zones of Control
7.0 INTERVENTION
  7.1 Intervention Counters
  7.2 The Moslem Off-Map Armies
8.0 BOMBARDMENT, COUNTER-BOMBARDMENT, AND REPAIR
  8.1 Crusader Bombardment
  8.2 Moslem Counter-Bombardment
  8.3 Repairing Wall Breach Damage
  8.4 Bombardment Table
9.0 FIRE COMBAT
  9.1 Line of Sight and Other Restrictions on Fire Combat
  9.2 Fire Combat Results
  9.3 How to Resolve Simultaneous Fire Combat Retreats
  9.4 Fire Combat Range Attenuation Table
  9.5 Fire Combat Results Table
10.0 MELEE COMBAT AND LADDER ASSAULT
  10.1 Restrictions on Melee Combat
  10.2 Retreat Before Melee Combat
  10.3 Ladder Assault
  10.4 Effects of Leaders on Melee Combat
  10.5 Effects of Army Morale Levels on Melee Combat
  10.6 Melee Combat Results
  10.7 Advance After Melee Combat
  10.8 Melee Combat Result's Table
11.0 REGROUPING OF COMBAT UNITS
  11.1 Isolation
  11.2 Regrouping
  11.3 Re-Deployment
12.0 SIEGE ENGINES
  12.1 Siege Towers
  12.2 Giant Catapults (Mangonels)
  12.3 Small Catapults and Ballistae
13.0 ENGINEERING
  13.1 Filling the Foss
  13.2 Crusader Tunneling
  13.3 Moslem Engineering Points
  13.4 Subterranean Combat Table
14.0 LEADERS
  14.1 Command Radius of a Leader
  14.2 Leadership Morale Ratings
  14.3 Leadership Combat Bonus
  14.4 Loss of Leaders
15.0 CAVALRY AND THE NAPHTHA GRENADIERS
  15.1 Restrictions on Cavalry
  15.2 Crusader Cavalry Charge
  15.3 The Naphtha Grenadiers
16.0 CONRAD OF MONTFERRAT (Optional)
17.0 INITIAL SET-UP
18.0 VICTORY
  18.1 Crusader Victory
  18.2 Moslem Victory
  18.3 Draw
HISTORICAL NOTES
MOSLEM ORGANIZATION AND TACTICS
CRUSADER ORGANIZATION AND TACTICS
DESIGNER'S NOTES
[1.0] INTRODUCTION

The Siege of Acre simulates a crucial battle in the centuries-long war called the Crusades. The port city of Acre was considered key to the possession of nearby Jerusalem. In 1191, after a siege of almost three years, Acre fell to the Christian Crusaders under King Richard the Lion Hearted of England, King Philippe of France, and King Guy of Jerusalem. Acre simulates the last climactic month of the siege after Richard's arrival when the Moslem Army, under the brilliant Saladin, almost broke the siege and destroyed the Christian Army. The Moslem failure meant another century of Western presence in Palestine.

[2.0] GENERAL COURSE OF PLAY

Acre is played in a series of Phases, not all of which are used in any Game-Turn. One Player controls the besieging Crusader Army, while the other directs the relieving Moslem Army and the besieged garrison of Acre.

Each Game-Turn begins with a Planning Phase. After completing that Phase, the players decide whether they wish to bombard or assault during that Game-Turn. In the former case, the Crusader Player fires his catapults at the walls of Acre, after which the Moslem Player returns fire with his small catapults and undertakes repairs. In the latter case, both players have ten separate impetus turns (within a turn of movement, fire combat, and melee combat with the Crusader Player trying to capture the city, while the Moslem Player attacks to relieve the siege.

[3.0] GAME EQUIPMENT

CASES:

[3.1] THE GAME MAP

The 22" x 35" map sheet portrays the city of Acre and the surrounding areas as they were at the time of the siege, including all the terrain significant to the battle. Also printed on the map sheet are various charts used in the play of Acre. These include the Terrain Effects Chart, Bombardment Table, Counter-Bombardment Table, Wall Repair Table, Fire Combat Range Attenuation Table, Fire Combat Results Table, Melee Combat Results Table, and Subterranean Combat Results Table. A numbered hexagonal grid is superimposed over the terrain features printed on the map sheet in order to regulate movement and combat.

[3.2] GAME CHARTS AND TABLES

Various visual aids are provided for the Players in order to simplify and illustrate certain game functions. These are the Terrain Effects Chart, Melee Combat Table, Fire Combat Table, Range Attenuation Table, Bombardment Table, Counter-Bombardment Table, Wall Repair Table, Subterranean Combat Table, and Mine Planning Sheet.

[3.3] THE PLAYING PIECES

The playing pieces (or units) represent the contingents of fighting men, the siege artillery, and the historical leaders who took part in the actual siege. The numbers and symbols on the pieces represent strength, movement capability and the type of unit represented by the piece. These playing pieces are referred to as units. There are also several markers used for informational purposes such as Breach Damage Level markers, etc.
victory conditions by the end of Game-Turn Sixteen, the Moslem Player automatically wins.

THE GAME-TURN
1. THE PLANNING PHASE
   A. Allocation Segment
      The Crusader Player secretly notes if he is going to bombard or assault during this Game-Turn. The Moslem Player then secretly notes the number of Engineer Points allocated to wall repair and tunnel discovery for this Game-Turn. He secretly chooses an Intervention counter. Repaired siege engines and wounded leaders may be returned to play.
   B. Strategic Movement Segment
      First the Crusader Player may move any of his units up to double their Movement Allowance between the outer works and the Foss, but not within four hexes of a Foss hex. The Crusader Player may also relocate his siege units. The Moslem Player may then move his garrison units up to double their Movement Allowance on or within the walls of Acre. No Moslem unit may be moved into a Foss hex. Finally, the Moslem Player may relocate his small catapults.
   C. Crusader Tunnel Segment
      The Crusader secretly notes on his Mine Planning Sheet which hexes he is attempting to "tunnel." He rolls a die for each hex to see if the tunneling operations have succeeded.
   D. Moslem Tunnel Discovery Segment
      Using the Engineer Points allocated for tunnel discovery, the Moslem Player may attempt to discover Crusader tunnels. If he is successful, subterranean combat occurs. Undiscovered tunnels under walls and towers are then "caved in" creating permanent breaches.

2. BOMBARDMENT AND REPAIR PHASE
   The Crusader Player may bombard only if he has not planned an assault for this Game-Turn; if he has, or if the Moslem Player has chosen the "Saladin Attacks" Intervention counter, the Players skip this phase and proceed immediately to the Assault Phase.
   A. Crusader Bombardment Segment
      The Crusader Player may attempt to breach the walls of Acre with any of his giant catapults using the Bombardment Table (6.4). Damage Level markers are placed to indicate damage to the walls.
   B. Moslem Counter-Bombardment Segment
      The Moslem Player may use his small catapults to counter-bombard any Crusader giant catapults using the Counter-Bombardment Table (6.5). All attacks are allocated before any are resolved.
   C. Moslem Damage Repair Segment
      Using the Engineer Points allocated for that Game-Turn to wall repair, the Moslem Player may attempt to repair damaged wall and tower hexes using the Wall Repair Table.

3. ASSAULT, REPAIR, AND REGROUPING PHASE
   If the Crusader Player has chosen to bombard, and the Moslem Player has not chosen the "Saladin Attacks" Intervention counter, the Assault Phase is omitted in the current Game-Turn and play proceeds to a new Game-Turn.
   A. Crusader Movement Segment
      The Crusader Player may move his units.
   B. Moslem Movement Segment
      The Moslem Player may move his units.

C. Simultaneous Fire Combat Segment
   The Crusader and Moslem Players may direct fire combat at each other's units. Note that combat is resolved sequentially, all results are applied simultaneously.
   D. Crusader Foss Filling Segment
      The Crusader Player may fill the Foss by using his combat units as "engineers." Only units which have not been moved during this Impulse may be used to perform this task.
   E. Moslem Garrison Maneuver Segment
      The Moslem Player's garrison units may melees (attack) any Crusader unit adjacent to them. Individual melee results are applied immediately.
   F. Crusader Maneuver Segment
      The Crusader Player may melee (attack) any Moslem (garrison or army) unit adjacent to his own. Ladder assaults may occur. Individual melee results are applied immediately.
   G. Moslem Army Maneuver Segment
      The Moslem Player's army units may melee (attack) any Crusader units adjacent to them. Melee results are applied immediately.
   H. Simultaneous Disruption Removal Segment
      All disrupted combat units are un-disrupted (the counters are turned right-side up).

   *Note: The Players repeat the sequence of Segments A through H up to 10 times, each sequence constituting an Impulse. At the end of the last Impulse or after an earlier Impulse, if both Players agree, play proceeds to Segment I."

I. Regrouping Segment
   First the Players determine which of their units are isolated, and those units are eliminated and placed in the Regrouping Box. All units on the map may then be redeployed within the restrictions of Case 11.2. Then each Player "pairs" all eligible units in the Regrouping Box (see Case 11.3, Regrouping). One unit of each "pair" is then destroyed (permanently removed from the game) and one unit redeployed on the map.

GAME-TURN INDICATION
   The Game-Turn marker is advanced one space on the Game-Turn Record Track to signal the passage of one Game-Turn, unless either Player has fulfilled his victory conditions, in which case the game is over.

[5.0] MOVEMENT OF COMBAT UNITS AND LEADERS

GENERAL RULE:
   During his Movement and Strategic Movement Segments, each Player may move as many or as few of his combat units and leaders as he wishes. These units may be moved in any direction or combination of directions, so long as their Movement Point Allowances are not exceeded. Note: Movement of siege units is covered in Section 12.0.

PROCEDURE:
   Units are moved through the hexgrid one at a time along a path of contiguous hexes. When a unit is moved into a hex, a portion of its Movement Point Allowance is expended. Movement costs vary depending on the type of terrain in the hex. The cost for each type of terrain is listed on the Terrain Effect Chart (5.27). Note: In this Section (5.0) the term "unit" refers to both combat units and leaders.
CASES:

[5.1] HOW TO MOVE UNITS

[5.11] A Player may move his units only during his Movement Segment or the mutual Strategic Movement Segment. Note that advance Meele combat (Case 10.7) is not considered movement for purposes of this Section.

[5.12] Friendly units may never be moved into a hex containing Enemy combat units. Friendly combat units may be moved into a hex containing only an Enemy leader and/or siege units, in which case the Enemy leader or siege unit is eliminated. Friendly leader and/or units may not be moved into a hex containing Enemy leaders and/or siege units.

[5.13] Friendly combat units may be moved through hexes containing other Friendly units, but at the end of a Movement Segment, no combat unit may ever occupy the same hex as another combat unit. There is no "stacking" of combat units in this game. One leader, however, may occupy the same hex as a Friendly combat unit (see Case 5.5, Stacking). There may be one siege unit in a hex in addition to any other units.

[5.14] Once a Player moves a combat unit into an Enemy-controlled hex (see Section 6.0, Zones of Control), he must not move that unit any further during that Movement Segment (i.e., the unit must end the Movement Segment in that hex). The Player may move the unit again in his next Movement Segment, but only if it is moved immediately into a non-Enemy controlled hex.

[5.15] The number of Movement Points expended by a unit during a single Movement Segment may never exceed its given Movement Point Allowance (Exception: Strategic Movement). Unused Movement Points may never be accumulated from one Segment to another or transferred between units.

[5.16] During the Planning Phase, both Players have a Strategic Movement Segment. During this Segment (only) the Crusader Player may move his units up to double their Movement Point Allowance between the outer works and the Foss but not within four hexes of a Foss hex. Then the Moslem Player may move his garrison units up to double their Movement Point Allowance on or within the walls of Acre. A unit need not be within its Leader's Command Radius to move its full Strategic Movement allowance.

[5.17] During the Strategic Movement Segment, Crusader siege units may be relocated anywhere between the Foss and the outerworks. Moslem small catapults may be relocated anywhere on or within the walls of Acre.

[5.2] EFFECTS OF TERRAIN ON MOVEMENT

Moving a unit into a hex costs a certain number of Movement Points, depending on the type of terrain in the hex.

[5.21] The cost to move a unit into a Clear terrain hex is one Movement Point.

[5.22] The cost to move a unit into a Breached Wall or Tower hex is two Movement Points.

[5.23] The cost to move a unit from a Wall or Tower hex to an adjacent Unbreached Wall or Tower hex is 1/2 Movement Point. The cost to move a unit from a non-Wall/Tower hex into an Unbreached Wall or Tower hex is one Movement Point (however, see Case 5.24).

[5.24] A unit may not be moved into an Enemy-controlled Unbreached Wall or Tower Hex unless it is moved into such a hex from an adjacent Wall or Tower hex.

[5.25] A unit may never be moved into a hex if it does not have sufficient Movement Points remaining in its Movement Point Allowance to pay for the cost of the hex.

[5.26] Other terrain types that affect Movement are the Foss, outerworks, and the camps. The effects of these types of terrain are listed on the Terrain Effects Chart (5.27) and case 5.3.

[5.27] Terrain Effects Chart (see map)

[5.3] SPECIAL TERRAIN

[5.31] The Foss

The Foss was a wide ditch dug outside the walls of Acre. It was not designed to be flooded as some fosses were, but it was still a substantial obstacle, preventing siege engines from being rolled to the walls and impeding the advance of infantry. The Foss could be filled by the Crusaders with rocks, debris, and bundled stacks of wood called "lasses" during his Movement Segment. The Terrain Effects Chart shows the effect of filled and unfilled Foss hexes.

[5.32] The Outerworks

The army of Guy dug an even wider ditch and built a short parapet and cavalry traps to help defend against Saladin's army. It has the same effects as the foss, but cannot be filled.

[5.33] Camps

The tent camps contained the Crusaders' wives and camp followers, as well as their gear and provisions. Their loss would have crippled Crusader morale and seriously delayed the Crusaders' drive.

[5.34] The Towers

Each Tower represents a stretch of wall including a single tower taller than the wall. The Prison, the Accursed Tower (Maledictum), and the Castle are larger and stronger towers giving the defenders even more protection against fire attacks.

[5.35] The Walls

The weakest sections of the wall, without towers, were still in excess of 10 meters high, with numerous firing embrasures and slits for bowmen. However, men stop the walls were more vulnerable to missile fire than men within the towers. Gates and sally ports were set in the walls at frequent intervals, but were built-up enough so as not to be considered weak points. The walls and towers can be breached by giant catapult fire and subterranean tunneling.

[5.4] EFFECTS OF LEADERS ON MOVEMENT

At the beginning of each Movement Segment, any fire and/or melee units that are further than twice their leader's Command Radius (in hexes) from that leader may expend a maximum of only one-half their Movement Point Allowance in that Movement Segment (see Case 14.1, Command Radius).

[5.5] STACKING

In Acre, units of the same type may not generally be "stacked" together in the same hex. Note that fire units and melee units are considered combat units while leaders and siege units are not. Stacking restrictions apply at the end of each Movement Segment and/or Phase. Except during retreats, Players may move Friendly units through other Friendly units (see Case 5.13, How to Move Units).

[5.51] No more than one combat unit may occupy a particular hex at the end of any Movement Segment or Phase.

[5.52] No more than one leader may occupy a particular hex at the end of any Movement Segment or Phase.

[5.53] No more than one siege unit may occupy a particular hex at the end of any Movement Segment or Phase.

[5.54] A Player may freely combine units of different types in the same hex, as long as no more than one of each unit type is present. The maximum number of units that could be combined in any one hex in this manner would be three: one leader, one combat unit, and one siege unit (Exception: see Case 15.14, Cavalry). The Informational markers never count in any way for stacking purposes.

[5.6] TERRAIN EFFECTS CHART (see map)

[6.0] ZONES OF CONTROL

GENERAL RULE

Each combat unit in the game exerts a Zone of Control. The six hexes immediately surrounding a hex occupied by a combat unit constitute the Zone of Control of that unit. Zones of Control affect Siege units, leaders and information counters do not exert Zones of Control.

[6.1] HOW ZONES OF CONTROL OPERATE

[6.11] Each combat unit exerts a Zone of Control, except when it is stacked with a siege tower. Disrupted combat units do not exert Zones of Control. Siege units, leaders and information counters do not exert Zones of Control.

[6.12] A combat unit's Zone of Control does not extend through an All-Sea hexside.

[6.13] A combat unit that is in an Unfilled Foss hex or Outerworks hex exerts a Zone of Control only into adjacent Foss or Outerworks hexes.

[6.14] A combat unit that is not in an Unbreached Wall or Tower hex does not exert a Zone of Control into any Unbreached Wall or Tower hexes.

[6.15] Friendly Zones of Control do not negate the effects of Enemy Zones of Control for any purpose. Friendly units and leaders do not exert Zones of Control in the hex they occupy for the purpose of tracking Command Radius.

[6.2] EFFECTS OF ZONES OF CONTROL

[6.21] A unit that is moved into an Enemy-controlled hex must cease movement in that hex. There is no additional cost in Movement Points to move a unit into an Enemy-controlled hex, but a unit so moved may be moved no further for the remainder of that Movement Segment.

[6.22] A unit that is in an Enemy-controlled hex at the beginning of a Movement Segment may be moved during that segment if and only if the first hex it is moved to is not Enemy-controlled. Players should note that this rule prevents Crusader units from being moved across walls defended solely by Moslem Zones of Control.

[6.23] A unit may not enter an Enemy-controlled Wall/Tower hex, except from an adjacent Wall/Tower hex, without conducting a ladder assault (Case 10.3).

[6.24] A Player may not trace the Command Radius of a leader to a combat unit through an Enemy-controlled hex. Exception: Friendly units negate Enemy Zones of Control in the hex they occupy for the purposes of tracing Command Radius.

[6.25] A unit forced to retreat as a result of combat may never be retreated into or through an Enemy-controlled hex.

[6.26] Friendly Zones of Control never affect Friendly units. There is no additional effect when more than one unit exerts a Zone of Control into the same hex.
[7.0] INTERVENTION

COMMENTARY:
While the Crusader Army besieged Acre, Saladin's Moslem Army waited for an opportunity to crush the Christians. Saladin could not send his entire army against the Crusaders each day; supplies would be exhausted and morale would suffer from the effects of the continual attrition. Instead, Saladin sent skirmishers to the outskirts of each day, and made an occasional raiding attack, always in response to a Crusader assault on the walls. Thus the whole of the army was committed only rarely, but with potentially more decisive results.

GENERAL RULE:
Each Game-Turn, the Moslem Player decides which portion of Saladin's army to utilize. By choosing one of three possible options, the Moslem Player may bring onto the map either the Army of Mosul, the Army of Egypt, or the entire off-map Moslem Army. He is limited in the number of times that he can choose any given option.

PROCEDURE:
During the Allocation Segment of the Planning Phase — after the Crusader Player has chosen whether he will attack or assault, but before he has revealed his choice to the Moslem Player — the Moslem Player secretly selects one of the three Intervention counters. If the Crusader Player has chosen to bombard, the Moslem Player must reveal whether or not he has selected the "Saladin Attacks" Intervention counter. If he has, play automatically proceeds to the Assault Phase. If the Moslem Player has not selected the "Saladin Attacks" counter, play proceeds to the Bombardment Phase. If, on the other hand, the Crusader Player has chosen to assault, play proceeds directly to the Assault Phase (and there is no Bombardment Phase during that Game-Turn). In this case, the Moslem Player need not reveal his chosen Intervention counter until the end of the Game-Turn.

CASES:

[7.1] INTERVENTION COUNTERS

There are three different Intervention counters, each of which represents an option for the deployment of the Moslem off-map armies against the Crusader forces besieging Acre. The three Intervention counters are: "Saladin Attacks," "Army of Egypt," and "Army of Mosul."

[7.11] Selection of the "Saladin Attacks" counter automatically means that there will be an Assault Phase during that Game-Turn, regardless of whether or not the Crusader Player opts for one. During that Assault Phase, the Moslem Player is allowed to deploy on the map any and all units and leaders of the Army of Sinjar, the Army of Egypt, and the Army of Mosul. The "Saladin Attacks" Intervention counter may be selected a maximum of twice during the game.

[7.12] Selection of the "Army of Egypt" Intervention counter allows the Moslem Player to deploy on the map any and all units and leaders of the Army of Egypt during the Assault Phase of the current Game-Turn, if the Crusader Player has opted for an Assault Phase. The "Army of Egypt" Intervention counter may be selected a maximum of six times during the game.

[7.13] Selection of the "Army of Mosul" Intervention counter allows the Moslem Player to deploy on the map any and all of the units and leaders of the Army of Mosul during the current Game-Turn, if the Crusader Player has opted for an Assault Phase. The "Army of Mosul" Intervention counter may be selected a maximum of eight times in the game.

[7.2] THE MOSLEM OFF-MAP ARMIES

[7.21] Army units that the Moslem Player is allowed to utilize during a given Assault Phase as determined by the Intervention counter he has selected may be deployed on the map at the beginning of any Movement Segment of the Assault Phase in any hex along the north or east map edge, or along the south map edge on hexes 0010 to 0075. All deployment units on the map in a Movement Segment expend one Movement Point.

[7.22] The Moslem Player need not bring all the units he is allowed to deploy during the Assault Phase onto the map in any one Segment; he may bring some units on in one Segment and the rest in a subsequent Segment of the same Assault Phase — or not at all. Note that regardless of whether or not the Moslem Player utilizes all of the units he is allowed to utilize by the chosen Intervention counter, the selection of that counter does count toward the limit on the number of times it may be selected. The Moslem Player must select one of the three Intervention counters each Game-Turn.

[7.23] If the Crusader Player moves one of his units into an intersection during an Assault Phase in which the Moslem Player has chosen the "Army of Egypt" or the "Army of Mosul" Intervention counter, the Moslem Player may freely move all of the additional off-map armies onto the map, regardless of which Intervention counter he has selected. This does not count against his two-time limit on the use of the "Saladin Attacks" counter.

[8.0] BOMBARDMENT, COUNTER-BOMBARDMENT, AND REPAIR

GENERAL RULE:
Bombardment is the process by which the walls of Acre may be reduced and breached. During the Bombardment Segment of the Bombardment, Counters-Bombardment, and Repair phase, the Crusader Player allocates each of his giant catapults in turn to fire at a particular Wall or Tower hex. For each bombardment, he rolls the die and consults the Bombardment Table (8.4) to determine the effect of the bombardment. During the Counters-Bombardment Segment, the Moslem Player may have small catapults counterbombard the Crusader giant catapults using the Counters-Bombardment Table (8.5). Finally, during the Wall Repair Segment, the Moslem Player may attempt to repair any wall/tower breaches using the Wall Repair Table (8.6).

CASES:

[8.1] CRUSADER BOMBARDMENT

This rule simulates the effects of a 48-hour-long bombardment by the Crusaders' giant catapults. To have effect, a siege engine had to concentrate its fire on one particular point of the wall.

[8.11] At the beginning of the Bombardment Segment, the Crusader Player must allocate the fire of each giant catapult for that Game-Turn to a particular Wall or Tower hex. He cannot roll the die to resolve any bombardment until he has completed all allocations, and once the allocations have been completed, they may not be changed.

[8.12] Each giant catapult may be fired at only one Wall/Tower hex per Game-Turn. Each giant catapult's fire is resolved individually; their fire may not be combined against the same hex. However, one hex may be fired upon by more than one giant catapult in the same Bombardment Segment (the fire of each being resolved individually).

[8.13] A giant catapult can bombard at a range of up to six hexes. The Crusader Player need not trace a Line of Sight (see Case 9.1) between a giant catapult and its target hex.


[8.15] To indicate the present Breach Damage Level of a hex, the Moslem Player places a Breach Damage Level marker within Acre pointing at the hex.

[8.16] A breached Wall or Tower hex may be moved into, and units occupying such a hex may be attacked normally, without ladder assault. The Terrain Effects Chart lists the characteristics of both Breached and Unbreached hexes.

[8.17] Giant catapult fire affects only Wall/Tower hexes. Giant catapults never affect Friendly or Enemy units in any way.

[8.2] MOSLEM COUNTER-BOMBARDMENT

[8.21] At the beginning of the Counters-Bombardment Segment, the Moslem Player must allocate the fire of each of his small catapults or a particular Crusade's giant catapult. He cannot roll the die to resolve any Counters-Bombardment until he has completed his allocations, and once completed, these allocations may not be changed.

[8.22] Only small catapults which are on Wall/Tower hexes may fire at giant catapults. The range of small catapults is six hexes. The Moslem Player need not trace a Line of Sight between any small catapult occupying a Wall/Tower hex and its target.

[8.23] Giant catapults which are damaged by small catapult fire are automatically "repaired" and may be returned to play during the Crusader Strategic Movement Segment after two Game-Turns. Examples: A giant catapult damaged in Game-Turn Three may return during the Strategic Movement Segment of Game-Turn Five.

[8.24] Small catapult fire affects only Crusader giant catapults during the Counters-Bombardment Segment of the Game-Turn. Combat units are affected by small catapult fire only during the Assault Phase. Note: Small catapult fire has no effect on giant catapults during the Assault Phase.

[8.3] REPAIRING WALL BREACH DAMAGE

During the Wall Repair Segment, the Moslem Player may utilize any Engineer Points which he allocated to wall repair during the Planning Phase to attempt to repair damaged Wall/Tower hexes.

[8.31] The Moslem Player determines how many Engineer Points are allocated to wall repair. Prior to resolving any repair attempts, the Moslem Player must allocate each Engineer Point to a particular Wall/Tower hex. More than one Engineer Point may be allocated to a particular Wall hex. The Moslem Player cannot roll the die to resolve any repair attempts until all available Engineer Points have been allocated. Once completed, Engineer Point allocations may not be changed.

[8.32] For each Engineer Point allocated to the repair of a particular Wall/Tower hex, the Moslem Player may roll the die once and consult the Wall Repair Table (8.6) to determine how much of the Breach Damage Level is reduced. There is no limit on the number of times a particular hex may be repaired. Note, however, that a hex may never have a "negative" Breach Damage Level.

[8.4] BOMBARDMENT TABLE (see map)
[9.0] FIRE COMBAT

GENERAL RULE:
Fire combat takes place during the Simultaneous Fire Combat Segment of the Assault Phase. Only fire units (including small catapults and ballista) have fire combat capability. Leaders, sieve towers, giant catapults, and melee units may not engage in fire combat. In general, a fire unit may attack any hex within range to which an unblocked Line of Sight may be traced. Fire combat is always voluntary, and all results are applied simultaneously, after all fire combat has been resolved.

PROCEDURE:
To fire, the owning Player announces which hex a fire unit is firing at. The Range Attenuation Table is consulted to determine the units’ Fire Strength. A die is rolled, and the result is cross-referenced with the Fire Strength column yielding the result. Any results are applied to defending combat units after all other fire combat attacks have been resolved, simultaneously with all other results. Note: As fire combat results are not applied until after all fire combat have been resolved, Players will have to “remember!” all such results. In practice, it is useful to apply all Disrupted and Eliminated results as the attacks are resolved. But apply results that affect each other in local areas (nearby attacks) together.

CASES:

[9.1] LINE OF SIGHT AND OTHER RESTRICTIONS ON FIRE COMBAT

[9.11] In order for a unit to be able to fire, the owning Player must trace a Line of Sight from the firing unit to the hex at which the fire is directed. A Line of Sight is defined as a straight line traced between the center of the hex occupied by the firing unit and the center of the hex being fired upon, which does not pass through any Camp hex, Wall hex, or Tower hex (breached or not). If the owning Player cannot trace a Line of Sight to a combat unit and a potential target, that unit cannot fire at that target.

[9.12] A Line of Sight cannot be traced along the border between two hexes, one of which is Blockin terrain. A Line of Sight may be traced through an otherwise eligible hex that is occupied by Friendly or Enemy units.

[9.13] A fire unit can only fire at one hex per Segment. A hex may be attacked by more than one unit in a single Segment, in which case each attack is resolved separately.

[9.2] FIRE COMBAT RESULTS

Fire combat results are applied simultaneously, after all fire combat has been resolved. Hence, a fire unit eliminated by fire combat would still be able to fire during the Segment in which it is eliminated. Similarly, all Retreat results are applied simultaneously by hex, after all fire combat has been resolved.

[9.21] Combat results apply to fire and melee units (combat units subject to the catapults, and ballista are never affected by fire combat results and remain in a hex regardless of whether or not a unit in the same hex is fired upon and is disrupted, eliminated, or retreats.

[9.12] A leader in a hex with a unit that is retreated may be retreated along with the unit at the owning Player’s option. A leader in a hex with a combat unit that is eliminated is subject to the Leader Loss Procedure (see Case 14.4, Loss of Leaders).

[9.23] Disruptions

An affected combat unit is flipped over to indicate its disrupted status. Disrupted units cannot engage in fire combat or melee attack or be used to fill Foss hexes (see Case 13.1). A disrupted unit disrupted a second time must be retreated. A disrupted unit is automatically “undisrupted” — its counter is flipped back right-side-up — during the Disruption Removal Segment of each Assault Impulse. Disruption affects only melee and fire units.

[9.24] Retreat (see also Case 9.3)

An affected unit must be retreated a number of hexes equal to its Movement Point Allocation plus three (Exception: Case 9.25) ignoring terrain movement costs. A Disrupted unit that suffers a retreat result is retreated. A unit cannot be retreated into a Prohibited terrain hex, into an Enemy-controlled hex, or a Friendly combat unit (Exception: units may retreat through Friendly fire combat units); neither can it be retreated off the map (Exception: Case 9.26). A retreating unit must be retreated as far away in hexes as the combat results indicate from the hex which it occupied when the combat is resolved. Any unit that cannot be retreated within these guidelines is eliminated. A unit may be retreated into a hex containing only an Enemy leader and/or siege engine, thereby eliminating any such Enemy unit. A unit that has suffered a Retreat result may not use road movement rates during the next Game-Turn.

[9.25] A unit in a Wall/Tower hex that must be retreated is retreated only two hexes. If the unit is Moslem, or is an Airship on the map, or is an Airship on the map and has suffered a Retreat result, it may not be retreated off the map toward the Camp hex of that unit’s nationality.

[9.26] A Moslem Army unit which is retreated off the map is not eliminated but may not be brought back onto the map during the current Assault Phase. Exception: units of Saladin’s Guard Faylag may be brought back onto the map if so retreated in the next Movement Phase.

[9.27] Eliminated

The affected combat unit is placed in the Regrouping Units Box. Note: Moslem garrison units have two Steps (are backpinned with a reduced strength). If disrupted, place a “disrupted” counter on the unit. If eliminated, reduce the unit one step (by flipping the counter to the backpinned side if at full strength, or by removing it from play if it has already lost a step). If a full strength (not halved strength) Moslem garrison unit is in a non-breached Wall/Tower hex, and it suffers a retreat result, the Moslem Player may elect to take a step loss and remain in place. If the Wall/Tower hex is breached, the unit suffering the retreat result must be retreated.

[9.3] HOW TO RESOLVE SIMULTANEOUS FIRE COMBAT RETREATS

Retreats required by the resolution of fire combat are accomplished simultaneously, hex-by-hex (i.e., all units that must be retreated are retreated one hex, and any units unable to do so within the restrictions listed in Case 9.24 are consequently eliminated). Then all surviving retreating units are retreated a second hex, and any that cannot do so are eliminated, and then all are retreated a third hex, and so forth.

[9.31] A unit in the process of being retreated exerts a Zone of Control only into the hex from which it has just been moved. Example: A Friendly unit retreated from hex 1610 to hex 1617 would exert a Zone of Control only into hex 1616. Note that even if it could be retreated into hex 1616 because the Friendly unit was retreated from that hex and it would be exerting a Zone of Control into that hex.

[9.32] If a Friendly unit could retreat into a hex which an Enemy unit could also retreat into, neither unit may retreat into that hex. If forced to do so, they are eliminated instead. A Player may not voluntarily retreat his unit into the same hex as his opponent is retreating a unit to if he has an alternative retreat.

[9.4] FIRE COMBAT RANGE ATTENUATION TABLE

See map

[9.5] FIRE COMBAT RESULTS TABLE

See map

[10.0] MELEE COMBAT AND LADDER ASSAULT

GENERAL RULE:
Melee combat takes place during the Melee Combat Segments of the Assault Phase. Only melee units may engage in attacks using melee combat. Some units have the option to retreat before melee combat. Ladder assault is a special form of melee combat wherein the defending unit is in an Unbreached Wall or Tower hex. Leaders and army morale may affect melee combat results and are applied immediately, and attacking units may advance if the Enemy unit is eliminated or retreated.

PROCEDURE:
The attacking Player determines his Attack Strength by totaling the individual Melee Strengths of all units involved in the attack plus the Leader Bonus if any (see Case 10.4). The defending Player determines the Defense Strength by adding the defending unit’s Melee Strength to the Leader Bonus (if any). The Attack Strength is compared to the Defense Strength. This comparison is stated as a ratio — Attack Strength to Defense Strength. This ratio is simplified to conform to one of the ratios listed on the Melee Combat Results Table (10.8), rounding the result “down” in favor of the Defender if necessary. The Attacker rolls the die. The Morale Rating of one Leader may be added to the die roll by the Attacker and subtracted from the die roll as applicable (Case 10.5). The adjusted die roll is then cross-referenced with the odds ratio on the Melee Combat Results Table. Any results are applied immediately, prior to the resolution of any other melee attack.

CASES:

[10.1] RESTRICTIONS ON MELEE COMBAT

[10.11] During the Moslem Garrison Melee Segment, only Moslem garrison units may attack using melee combat. During the Moslem Army Melee Segment, only Crusader units may engage in melee attacks. During the Moslem Army Melee Segment, only Moslem Army units may engage in melee attacks.

[10.12] Melee attacks are voluntary. A Player is not compelled to have a unit engage in a melee attack.

[10.13] A melee unit may attack any Enemy combat unit in a hex adjacent to the hex occupied by the attacking unit. A melee unit may attack a Leader or siege unit in any adjacent hex not also occupied by a combat unit. When the hex is occupied by both a combat unit and a Leader or siege unit, only the combat unit may be attacked. No unit may attack more than one Enemy unit in any single Melee Segment, and no unit may be attacked more than once per Melee Segment.
In example A, the Moslem Bowman unit from Faylag 1 (which is surrounded by Enemy Zones of Control) fires upon the Crusader Breton Crossbow unit, inflicting a retreat result. In turn, the Crusader Breton Crossbow unit (which is also surrounded by Enemy Zones of Control) fires upon the Moslem Bowman unit from Faylag 1 and inflicts a retreat result. During the simultaneous retreat procedure, both units are forced by Enemy Zones of Control to enter the same hex as the first hex of their retreat paths. In this example, both units would be eliminated (Case 9.32).

In example B, the Moslem Bowman unit from Faylag 1 (which is surrounded by Enemy Zones of Control at the beginning of the Simultaneous Fire Phase) fires upon the Crusader Guienne Crossbow unit, in fletching a retreat result. In turn, the Crusader Guienne Crossbow unit fires upon the Moslem Bowman unit from Faylag 1 and inflicts a retreat result. During the simultaneous retreat procedure, both units may be retreated into the hexes indicated by arrows. In this example, both units which have been forced to retreat may retreat because their Zones of Control extend only into the hex from which they are retreating.

[10.14] All Friendly melee units adjacent to an Enemy unit may combine to execute a single melee attack against that Enemy unit.

[10.15] Disrupted melee units may not attack.

[10.2] RETREAT BEFORE MELEE COMBAT

All Moslem units with a Movement Point Allowance of nine, as well as the Moslem Naphtha Grenadiers unit and the Moslem Archers of the Eyes units, may retreat before combat if melee attacked. No other units have this option.

[10.21] Whenever the Crusader Player announces a melee attack against one of the units listed above, the Moslem Player may elect to Retreat before Combat. He must announce the retreat before the die for the attack is rolled. The unit is retreated a minimum of three hexes and a maximum of the unit's full Movement Point Allowance at the option of the Moslem Player, and it is disrupted.

[10.22] The Moslem Naphtha Grenadiers unit and the Moslem Archers of the Eyes unit cannot be retreated before combat if one or more of the attacking units is cavalry.

[10.23] Moslem Horse archer units outside the command Radius of their Leader must be retreated before combat if threatened with melee combat, even if such retreat would result in their elimination. Such units must be retreated their full Movement Point Allowance plus three hexes. (Historically these formations never engaged in melee combat; their purpose was to skirmish and harass opposing units with missile fire, and if threatened seriously, they would withdraw.)

[10.24] Crusader units allocated to melee combat against units that Retreat before Combat may be advanced normally (see Case 10.7, Advance after Combat).

[10.25] Units that undertake Retreat before Combat may not be attacked during the current Melee Segment.

[10.3] LADDER ASSAULT

Ladder Assault is a special procedure that is required as a prerequisite to melee attack against a unit in an Unbreached Wall or Tower hex. Any unit that is not in a Wall or Tower hex or in a hex containing a Friendly siege tower must undergo the ladder assault procedure in order to be able to make a melee attack against a unit in a Wall or Tower hex.

[10.31] For each separate melee unit making a ladder assault, the die is rolled by the owning Player. On a roll of 1 or 2, the unit failed to mount the wall and cannot participate in any melee attack against the defending unit (Exception: see Case 10.33). On a roll of 3 through 6, the attempt to mount the wall succeeds, and the unit must participate in a melee attack against the defending unit (Exception to Case 10.1, Restrictions on Melee Combat).

[10.32] In order to contribute a Combat Bonus and/or a Morale Rating effect to a melee combat against a unit in a Wall or Tower hex, a leader must either be in a Wall hex or in a hex with a Friendly siege tower unit or undergo the ladder assault procedure successfully. If a leader undergoes the ladder assault procedure, the owning Player follows the same procedure as for his melee units (Exception: see Case 10.33).

[10.33] German knights and leaders (due to the heavy armor they wore) fail to mount a wall on a die roll of 1 through 3.

[10.34] Only units and/or leaders in Clear terrain or filled foss hexes may make ladder assaults.

[10.35] A ladder assault must be made against a specific unit. A unit may not be moved from a non-Wall/Tower hex into an unoccupied Enemy-controlled Wall/Tower hex. If there is no Enemy unit in a particular Wall hex free from Enemy Zones of Control, then units may be moved freely into that hex.

[10.36] Cavalry units may not conduct ladder assault.

[10.4] EFFECTS OF LEADERS ON MELEE COMBAT

[10.41] A Leader may add the Combat Bonus of any leader that is in the same hex as one of the combat units belonging to that leader's faction or contingent (see Case 14.3, Leadership Combat Bonus Melee) to the Melee Strength of that unit in any melee combat (attack or defense) in which that unit is involved.

[10.42] The Morale Rating of a leader may be added to the resolution die roll of any melee attack involving only units of that leader's faction or contingent (see Case 14.1) of that leader. The Morale Rating of a leader may be subtracted from the resolution die roll of any melee attack involving only units of that leader's faction or contingent so long as the unit is within the Command Radius of the leader. When both Players utilize leaders' Morale Ratings in a given melee, the Defender's die roll modifier is subtracted from the Attacker's to yield the final effect on the die roll for that melee.

[10.5] EFFECTS OF ARMY MORALE LEVELS ON MELEE COMBAT

At the beginning of the game, the Morale Levels of both armies is zero (i.e., normal). Certain actions
may affect the morale of either army positively or negatively. If one Player's Army Morale Level is less than or greater than zero, all melee die rolls are adjusted accordingly.

[10.51] The first time the Moslem Player moves (or retreats) a Moslem off-map army unit into Acre, the Morale Level of the entire Moslem Army and garrison is increased by 1. Wall/Tower hexes count as part of Acre.

[10.52] Should 30 Moslem Army units (not garrison units) be eliminated (placed in regrouping box since the beginning of the game), the Moslem Army Morale Level is decreased by 1.

[10.53] If King Richard is killed, the Army Morale Level of the English Army (only) is decreased by 1.

[10.54] If King Phillippe is killed, the Army Morale Level of the French Army (only) is decreased by 1.

[10.55] If the German Leader Leopold is killed, the Morale of the German Army (only) is decreased by 1.

[10.56] Changes in the Moslem Army morale affect melee combat involving Moslem Army and/or Moslem garrison units equally. Increases or decreases in Crusader Army Morale affect only melee attacks involving units of the particular nationality. All such melee attacks are affected, even if they also involve units of another nationality.

[10.57] Army Morale Level melee effects are cumulative. Thus If the Moslem Army Morale Level were 1 (for Case 10.52) and 1 (for Case 10.51) and -1 (for Case 10.52) and the English and French Army Morale Levels were both -1, a die roll for an attack by a combination of English and French units on a Moslem unit would be reduced by one, not counting adjustments for leaders. However, the Army Morale Level of a particular force does not affect a particular die roll more than once, regardless of the number of affected units involved. That is, if the Moslem Army Morale Level were -1 and two Moslem units made a melee attack, the die roll would be adjusted by -1, not -2.

[10.58] Army Morale Level effects are permanent, although they may be altered by additional Morale Level adjustments.

[10.6] MELEE COMBAT RESULTS

The results of melee combat are applied immediately after the die is rolled, before another melee attack is resolved.

[10.61] Melee combat results apply to fire and melee units (combat units). All other units (leaders and siege units) which are alone in a hex are automatically eliminated if melee attacked.

[10.62] Disruption

See Case 9.23 for the effects of Disruption.

[10.63] Retreat


[10.64] Elimination

See Case 9.27 for the effects of Elimination.

[10.7] ADVANCE AFTER MELEE COMBAT

[10.71] Whenever a defending unit is eliminated as a result of a melee attack, one attacking unit plus one leader may be advanced into the vacated hex immediately, disregarding Zones of Control, by the attacking Player, at his option (Exception: see Case 10.74).

[10.72] Whenever a defending unit is retreated as a result of melee combat, the hex it vacates and the hexes through which it is retreated constitute the Path of Retreat. At the owning Player's option, any of the attacking units, including leaders, may be advanced along the Path of Retreat disregarding Zones of Control (Exceptions: see Cases 10.73 and 10.74). Friendly advancing units may be moved only into hexes through which the Enemy unit retreated. Friendly advancing units may not enter hexes occupied by Enemy combat units or containing prohibited terrain. A unit may be advanced up to a maximum of its Movement Point Allowance.

[10.73] A unit cannot be advanced into a Wall/Tower hex in an Enemy Zone of Control unless that unit participated in a melee attack against a unit in that hex during the current Melee Segment. In that case, it can be advanced normally.

[10.74] Crusader knight (both cavalry and foot) units must be advanced after combat as far as possible along the Path of Retreat. Exception: The Crusader Player is not required to advance knight units into outwork hexes. (Knights had a tendency to charge the Enemy in situations that a cooler observer would recognize as suicidal. A standard MOSLEM retreat in the face of a Crusader charge, followed by a counterattack against the overextended knights.)

[10.8] MELEE COMBAT RESULTS TABLE

(see map)

[11.0] REGROUPING OF COMBAT UNITS

COMMENTARY:

Leadership in the course of a medieval battle was often a problematic affair, and command control in the best of circumstances was difficult. At Acre, each day's fighting produced many stragglers, resulting from a combination of men who just ran away before they could be rallied and those who were defeated. Hence, the Elimination result on the Combat Results Table represents the disorganization of units as much as the killing of personnel. Accordingly, it is possible to reconstitute many of the units Eliminated in Acre.

GENERAL RULE:

Combat units that are eliminated during the Assault, Repair, and Regrouping Phase as a result of either combat or isolation are placed in the Regrouping Box. During the Regrouping Segment, approximately half of such units may be returned to play by the owning Player and re-deployed with the other units of its type. For each unit returned to play, one equivalent unit is removed from the Regrouping Box and considered permanently destroyed.

PROCEDURE:

At the beginning of the Regrouping Segment, each Player attempts to trace a Line of Communication from each of his units to a Friendly base (Exception: see Case 11.14, Isolation). Each unit for which such a Line of Communications cannot be traced is Isolated and is eliminated and placed in the Regrouping Box. After isolated units have been eliminated, each Player "pairs" those of his units that are in the Regrouping Box and removes half of each pair from the game permanently. The other half of each pair is re-deployed, along with all other surviving units, on the map (or, in the case of the Moslem Army units, off the map).

Note that only combat units are placed in the Regrouping Box. However, all of a Player's units currently in the game are deployed on (or off) the map.

CASES:

[11.1] ISOLATION

[11.11] A unit is isolated if a Line of Communications cannot be traced from the unit to a Friendly base.

[11.12] A Line of Communications is a path of contiguous hexes, none of which contains impassable terrain and none of which is Enemy-occupied or Enemy-controlled. The Line may be as long and as circuitous as necessary, so long as each hex meets these listed criteria.

[11.13] Any hex along either the north or east edge of the map may be considered a Friendly base for every Moslem Army unit. Any Crusader Camp hex is considered to constitute a Friendly base for a Crusader unit.


[11.15] At the beginning of each Regrouping Segment, all units determined to be isolated are eliminated and placed in the Regrouping Box.

[11.2] REGROUPING

During the Regrouping Segment, after all redeployment has been completed, each Player matches up identical pairs of units from among those in the Regrouping Units Box. Each pair must be composed of two units identical in type, strength, and nationality (e.g., two German 12-4 knights units). All such pairs of units are removed from the Box, and one of each pair is returned to play and re-deployed as stipulated in Case 11.3. The remaining unit of each pair is permanently destroyed and removed from play. Note: There is no limit on the number of Game-Units which a unit may remain in the Regrouping Box; if there is no possible "pair" present in the Box, then the unit remains there. Players may not, however, refuse to regroup units which can be paired. Note also that Moslem garrison units which have been regrouped are re-deployed at full strength.

[11.3] RE-DEPLOYMENT

After all isolated units have been placed in the Regrouping Box, the owning Player re-deploys all surviving units.


[11.32] The Crusader Player places his units anywhere between the outworks and the foss, but not within four hexes of a Wall/Tower hex.

[11.33] The Moslem Player removes all Moslem army units from the map during the Re-deployment Segment.

[12.0] SIEGE ENGINES

COMMENTARY:

The types of siege of Acre were heavily influenced by the technology of the siege engines present. The giant catapults, small catapults, ballistae, and siege towers employed both offensively and defensively were technically complicated and limited in number. One of the siege towers used at Acre was the largest that had ever been constructed. These instruments of siege were powerful weapons — when used correctly. And as there was limited wood, leather, and machinery available to build and repair these siege engines, their proper utilization was crucial to the outcome of the siege.

GENERAL RULE:

The Crusader Player may deploy siege towers, giant catapults, small catapults, and ballistae.
Both Players have small catapults. The siege towers may be utilized to nullify the defensive benefits of Wall hexes. Giant catapults may be used to increase the Breeze Damage Level of particular Wall/Tower hexes. Small catapults and ballistae may be used against combat units or (by the Moslem Player only) to counter bombard Crusader giant catapults (see Case 8.2).

CASES:

[12.1] SIEGETOWERS
Siege towers were built of wood either at Acre or "pre-fabricated" in Europe and reassembled in the Holy Land. Armed with heavy plating and covered with animal skins (to protect against Greek fire), the siege towers were used to provide a protected firing platform and allow the attackers to reach the walls without clambering up ladders while under fire.

[12.11] Each siege tower counter represents the tower itself and the men assigned to move it. Thus, siege towers may be moved by themselves; it is not necessary to have them pushed by other units.

[12.12] Siege towers may not be moved into Unfilled Foss hexes.

[12.13] Siege towers have no Melee Strength and are damaged if alone (or with only a leader) in a hex attacked by or moved through by an Enemy combat unit (see Case 12.17).

[12.14] A Moslem unit in a Wall hex attacked by a fire unit in a hex with a siege tower gains no defensive benefit from the wall. However, a unit in a Tower hex does receive the appropriate defensive benefit even if fired upon by a unit in the same hex as a siege tower (see 5.27, Terrain Effects Chart).

[12.15] A melee unit stacked with a siege tower may merely move a Moslem unit in a Wall/Tower hex without the normal prerequisite of the ladder assault procedure (Exception to Case 10.3).

[12.16] If a siege tower is in the same hex as a Crusader combat unit, both are immune to all Moslem fire except that of small catapults during the Assault Phase (only). Should a unit in a hex with a siege tower be forced to retreat, the unit retreats leaving the tower unassailled.

[12.17] When a siege tower is damaged, it is immediately removed from the map and is lost to the Crusader Player for three Game-turns. During the Allocation Segment of the third Game-turn after the turn in which the siege engine was damaged, the Crusader Player may re-deploy it on the map.

[12.2] GIANT CATAPULTS (MANGONEELS)
"The Victorious," "The Furious," "The Wrath of God," "The Evil Neighbor," and "God's Own Sling" were the names that the Crusaders attached to the giant catapults that they built to destroy the walls of Acre.

[12.21] A giant catapult may be fired only during a Bombardment Phase (see Section 8.0, Bombardment).

[12.22] Giant catapults may be used to attack (bombard) the walls of Acre only; they may not be used to attack Moslem units. Giant catapults have a range of six hexes, and the Crusader Player need not trace a Line of Sight between the catapult and the Wall or Tower hex that is the target.

[12.23] Giant catapults have no Melee Strength or Movement Allowance. A giant catapult in a hex without a Friendly combat unit that is moved through or attacked by a Moslem combat unit is damaged. Giant catapults cannot be moved except during the Strategic Movement Segment, when they can be deployed in any hex between the outer works and the fosst at the option of the Crusader Player. A giant catapult can be deployed in a Filled Foss hex, but not in an Unfilled Foss or Outerworks hex.

[12.24] When a giant catapult is damaged, it is immediately removed from the map and is lost to the Crusader Player for two Game-turns. During the Allocation Segment of the second Game-turn after the turn it was damaged, the Crusader Player may re-deploy it on the map.

[12.3] SMALL CATAPULTS AND BALLISTAE
Both sides at Acre had small stone-throwing catapults, and the Crusaders possessed many javelin-throwing ballistae. The Crusader weapons were utilized primarily against Saladin's outside army, as they were not strong enough to affect the walls not accurate enough to fire through the wall and tower embrasures to hit men deployed there.

[12.31] All small catapults and ballistae may be fired during each simultaneous Fire Combat Segment of an Assault Phase at combat units (only). Small catapults that fire during the Assault Phase never affect leaders, siege engines, or other catapults. To fire at a combat unit, a Line of Sight must be traced from the firing catapult to the target unit (see Case 9.11). A small catapult firing at a combat unit in a siege tower uses the Fire Combat Results Table. A small catapult firing at a siege tower uses the Counter-Bombardment Table.

[12.32] Crusader small catapults and ballistae may not be fired at units in Wall/Tower hexes.

[12.33] During the Counter-Bombardment Segment (only), Moslem small catapults that are in Wall/Tower hexes may fire at Crusader giant catapults. The Moslem Player need not trace a Line of Sight to direct such fire. Only Moslem small catapults may fire during the Counter-Bombardment Segment, and such fire affects only Crusader giant catapults (see Case 8.2, Counter-Bombardment).

[12.34] Small catapults and ballistae have no Melee Strength or Movement Allowance. Catapults alone in a hex (or with a leader) that are melee attacked or moved through by an Enemy combat unit are destroyed (removed permanently from the game). Small catapults and ballistae may not be moved, except during the Strategic Movement Segment, when the Crusader Player may deploy his small catapults and ballistae anywhere between the fosst and the outerworks exclusively. In the Moslem Player may deploy his small catapults anywhere in Acre, including in any Wall/Tower hex.

[13.0] ENGINEERING

COMMENTARY:
The conduct of the siege of Acre necessitated engineering efforts critical to the taking and the defense of the city. The attacker attempted to dig tunnels to collapse walls while the defender counter-tunneld to disrupt the attacker's activity. Ditches dug as obstacles were systematically filled in by the attacker and just as systematically emptied by the defender. At the time of the siege of Acre, trained engineers were rare, and their loss in combat could cripple a siege or defensive effort.

GENERAL RULE:
The Crusader Player can utilize combat units to fill the fosst. He may also expend tunnel points to tunnel under the walls of Acre and collapse them, causing permanent breaches. Each Game-Turn, the Moslem Player receives a certain number of Engineer Points. These may be applied either to wall repair or counter-tunneling, which if successful, destroys Crusader tunnels and precipitates subterranean combat.

CASES:

[13.1] FILLING THE FOSSThe fosst, a large ditch running along the outside of the walls of Acre, was a serious defensive barrier. Among other things, its presence prevented the close approach of additional units and ladder assaults. During his Movement Segments of the Assault Phase, the Crusader Player may use his combat units to fill in sections of the foss with debris, stones, and fascines. Historically, the Moslem garrison disrupted the Crusader attempts to fill the foss.

[13.11] Any Crusader on-exactity combat unit that is not moved during a Crusader Assault Phase Movement Segment may be used to "fill" any one adjacent vacant Foss hex. Designate a Filled Foss hex by placing a spare blank counter in the hex, or noting it on a copy of the Mine Planning Sheet.

[13.12] During the Regrouping Segment of each Game-Turn, the Moslem Player rolls the die once for each filled Foss hex. On a roll of 1 through 4 inclusively, the Foss hex has been cleared (Moslem units from within Acre have removed the debris during the night), and the "filled" counter is removed, or the Mine Planning Sheet is erased. A die roll of 5 or 6 results in the hex remaining filled. There is no limit to the number of times any hex may be filled and then cleared.

[13.2] CRUSADER TUNNELING
During the Crusader Tunnel Segment, the Crusader Player expends his Tunnel Points as desired, rolling the die to determine the status of each new Tunnel hex and recording it secretly on his Mine Planning Sheet. It is possible that the construction of a new Tunnel may be blocked by rock or suffer a collapse (this is determined by the die roll). Furthermore, the Moslem Player may attempt to locate the tunnels and destroy them (see Case 13.3, Moslem Engineer Points). A tunnel that has been extended into a Wall/Tower hex that is not discovered by the Moslem Player may be caved in at the end of the Moslem Tunnel Discovery Segment, causing a permanent breach in that Wall hex.

[13.21] From the beginning of the game, the Crusader Player may expend four Tunnel Points each Game-Turn. This rate may never be increased, although it may be decreased due to subterranean combat (see Case 13.3). Construction of each new Tunnel hex requires the expenditure of one Tunnel Point. Construction of each Tunnel Base requires the expenditure of two Tunnel Points.

[13.22] Before the Crusader Player may construct any Tunnel hexes, he must construct four Tunnel Bases. A Tunnel Base is a hex which serves as the starting point for a tunnel. Each Tunnel Base must be built in a Clear terrain hex at least eight hexes from the nearest Wall or Tower hex (well out of small catapult range). The Crusader notes the location of the Tunnel Base counter on the Mine Planning Sheet and places a Tunnel Base in the hex to indicate the construction of a Tunnel Base. After the initial four Tunnel Bases are constructed, the Crusader Player may never construct any more Tunnel Bases. (The Crusaders built additional Tunnel bases during the siege; however, the Moslems knew through their spies exactly which Bases were active due to the acute shortage of timber.) Should any Moslem combat unit remain in a Tunnel Base hex for an entire Movement Segment during an Assault Phase. Then that Tunnel Base, along with all Tunnel hexes connected to it (see Case 13.26), are permanently destroyed. The
Tunnel hexes so destroyed are revealed to the Moslem Player.

[13.23] The location of Tunnel hexes (not Bases) is kept secret from the Moslem Player. During the Crusader Tunnel Segment. The Crusader Player notes the location of his tunnel construction on his Mine Tunnel Planning Sheet (extra copies should be made of this before the game). The locations of Tunnel hexes are revealed only when they are discovered by the opposing forces.

[13.24] Each time he expends a Tunnel Point, the Crusader Player rolls the die to determine if an "operative" Tunnel hex has been successfully constructed. On a roll of 6, the tunnel is considered to have struck rock or suffered a collapse in that particular hex. The Crusader Player places an "X" in the corresponding hex on his Mine Planning Sheet; that hex is now considered to be "operative," and no tunnel may ever proceed into, through, or out of that hex. On any roll other than 6, the hex is an "operative" Tunnel hex, and the tunnel has been extended successfully into that hex. The Moslem Player may see the die rolls, but of course, he would not know the location of any non-operative Tunnel hexes. Tunnels may be continued around "inoperative" Tunnel hexes.

[13.25] The Crusader Player may allocate his Tunnel Points to the construction of any tunnel or (tunnels) connected to any Tunnel Base (or combination of Tunnel Bases) at his option, assuming he has completed the construction of all Tunnel Bases. The Crusader Player must allocate all Tunnel Points before rolling to determine the success of each Point expenditure. If a Tunnel hex is determined "inoperative," all other Tunnel Points allocated to that Tunnel (beyond the inoperative hex) during that Game-Turn are lost as if no tunneling had taken place.

[13.26] In any tunnel, each tunnel hex must be connected either directly or by a path of contiguous tunnel hexes to a Tunnel Base. A tunnel may extend to any length the Crusader Player desires. If, as a result of subterranean combat, any Tunnel hex is no longer connected to a Tunnel Base, that Tunnel hex immediately ceases to exist. Any new construction in that hex must be rolled for to determine success.

[13.27] No single Tunnel hex may be adjacent to more than two other "operative" Tunnel hexes. This includes other Tunnel hexes from two tunnels extending from separate Tunnel Bases. That is, a tunnel must consist of one single mineshaft only and may not branch out. And two tunnels from two different Tunnel Bases may not cross through each other.

[13.28] If the Crusader Player extends a tunnel into a Wall or Tower hex during the Crusader Tunnel Segment, and if the immediately subsequent Moslem Tunnel Discovery Segment the Moslem Player fails to discover the Tunnel, the Crusader Player may announce the location of that Tunnel hex and collapse it. (This was accomplished by burning the wooden supports). The Wall or Tower hex will remain to have a Breach Damage Level of six for the remainder of the game (it cannot be repaired), and all Tunnel hexes of the collapsed tunnel back and including the Tunnel Base, become inoperative.

[13.29] The Crusader Player may never collapse more than one Tunnel from each Tunnel Base. Only one tunnel may be started from each Tunnel Base.

[13.3] MOSLEM ENGINEERING POINTS: Counter-Tunneling, Subterranean Combat, and Wall Repair

From the beginning of the Game, the Moslem Player may expend six Engineer Points per Game-Turn. This capacity can be reduced by losses incurred in subterranean combat; it can never be increased. During the Allocation Segment of each Planning Phase, the Moslem Player decides and records on paper how many Engineer Points will be allocated to counter-tunneling and how many will be applied to wall repair during the current Game-Turn. This allocation cannot be changed until the next Game-Turn.

[13.31] During the Moslem Tunnel Discovery Segment, the Moslem Player can search one hex for each Engineer Point allocated to counter-tunneling. The Moslem Player calls out the number of any hex within three hexes of a Moslem-controlled Wall or Tower hex and the Crusader Player must inform him if that hex is an operative Tunnel hex. If it is, then the Players immediately consult the Subterranean Combat Table (13.4), a die is rolled, and the result is applied.

[13.32] A loss for the Moslem Player on the Subterranean Combat Table results in the permanent loss of one of his four Tunnel Points. However, the Moslem Player may never be reduced to fewer than one Tunnel Point. If tunnel hexes are "closed" by a result on the Subterranean Combat Table, all such hexes become inoperative Tunnel hexes (see Case 13.24).

[13.33] Engineer Points allocated for wall repair are utilized during the Moslem Damage Repair Segment of the Bombardment Phase—if there is a Bombardment Phase. (If there is no Bombardment Phase, Engineer Points allocated to wall repair are lost.)

[13.4] SUBTERRANEAN COMBAT TABLE (see map)

[14.0] LEADERS: COMMENTARY:
The leader counter allots the most charismatic of the highly ranked officers at the time. The effects of leaders on the morale of their men cannot be over-emphasized; medieval kings and generals routinely led their men into battle, and frequently the battle was decided by the presence of an inspiring leader and his standard at a critical moment. By the same token, the death of a leader could cause an entire army to lose heart.

GENERAL RULE:
Counts representing individual historical leaders of the Crusader and Moslem armies have been provided with the game. These leaders are the historical leaders of the various contingents within the Crusader army and of individual faylags within the separate Moslem armies. Leaders influence both morale and movement. Leaders have three characteristics: A Leadership Morale Rating which can affect the die roll of a melee combat; a Command Radius which is the effective "range" of both the Morale Rating and the ability of the leader to affect movement; and a Leadership Combat Bonus which can be used to augment the Melee Strength of a particular unit. Each combat unit in the game also belongs to a particular contingent or faylag. In order for a leader to influence the movement or affect the combat ability of any unit or units, leader and units must belong to the same contingent or faylag.

CASES:

[14.1] COMMAND RADIUS OF A LEADER
A leader's Command Radius is the maximum distance in hexes between that leader and a unit of that leader's contingent or faylag for the unit to benefit in movement or combat from the leader's presence. When calculating a Command radius, the hex containing the unit to which the radius is traced is counted, but the hex containing the leader is not counted.

[14.11] A Command Radius must be traced through a path of contiguous hexes between the leader and the particular unit. This path of hexes must be free of Enemy combat units and their Zones of Control. Exception: For the purpose of tracking Command Rads, Friendly combat units negate Enemy Zones of Control.

[14.12] To be moved to its full Movement Point Allowance, a combat unit must be within a number of hexes of its leader equal to twice the leader's Command Radius. If this condition is not met, the unit may be moved up to half of its Movement Point Allowance, with any fractions dropped. Exception: Cavalry units are never subject to this restriction and may always be moved up to their full Movement Point Allowance, unless their leader has been killed (see Case 15.15. Restrictions on Cavalry).

[14.13] For a leader's Morale Rating to affect a particular combat, at least one of the Friendly combat units involved must be within the Command Radius of the leader. See Case 14.2 for other restrictions on the application of leadership Morale Ratings to melee combat.

[14.2] LEADERSHIP MORALE RATINGS
The Morale Rating of a leader may affect the outcome of a melee combat both for the offense and the defense.

[14.21] If and only if all the units involved in a melee attack belong to the same contingent or faylag, the attacking Player may apply that unit's leader's Morale Rating to the attack, if the condition of Case 14.1 is observed.

[14.22] If the unit which is the object of a melee attack is within the Command Radius of its leader in accordance with Case 14.1, then the Morale Rating of that leader may be used to affect that melee attack in the favor of the defending unit.

[14.23] If a Player applies the Morale Rating of a leader to an attack, he may add the leader's Morale Rating to the die roll. If a Player applies the Morale Rating of one of his leaders to a combat in which one of his units is defending, he may subtract that Morale Rating from the die roll. It is possible for both Players to apply Morale Ratings to the same combat, and thus for an addition and a subtraction to be made to and from the die roll (possibly even canceling out). Example: If the Crusader Player applied the Morale Rating of a leader whose Morale Rating is 3 to an attack against a Moslem army unit, and the Moslem Player applied a leader Morale Rating of 2 to the same counter-attack, the die roll for that combat would be 5 (4 plus 3 for the Crusader leader and minus 2 for the Moslem leader).

[14.24] There is no limit to the number of times a particular leader's Morale Rating can be applied to different melee combats in the same Game-Turn. However, a Player may apply more than one leader's Morale Rating to any one melee combat.

[14.3] LEADERSHIP COMBAT BONUS
If a unit is in the same hex as the leader of its contingent or faylag, it may benefit from the leader Combat Bonus.

[14.31] A unit may benefit from a leader Combat Bonus whenever involved in a melee combat, either on attack or defense.
[14.32] The effect of the Combat Bonus is to increase the Melee Strength of the unit by an amount equal to the leader Combat Bonus. However, the Melee Strength of a unit may never be more than doubled as a result of a leader Combat Bonus.

[14.33] A Player may never apply a leader’s Combat Bonus for a leader’s own defense. A leader alone in a hex that is the subject of a melee attack is automatically eliminated.

[14.34] A Player may apply the leader Morale Rating and the leader Combat Bonus of the same leader to the same (or different) combat at the same time. A Player may also apply any number of leader Combat Bonuses to the same attack. Note that any attack to which more than one leader Combat Bonus is applied is ineligible for any leader Morale Rating bonus, as units from more than one contingent or paylag would be involved in the attack.

[14.4] LOSS OF LEADERS

A leader unit in the same hex as a combat unit is not affected per se by any combat results affecting the combat unit. If the unit is retreated, the leader may be retreated along with the unit; if the unit is eliminated, however, the Player must perform the leader loss procedure to determine the fate of the leader.

[14.41] To perform the leader loss procedure, the Player rolls the die for each affected leader. A roll of 1 through 5 allows the Player to place the leader in any hex containing a Friendly combat unit. A roll of 6 results in the leader being wounded. In this case, the Player must roll the die a second time. A roll of 5 or 6 (on a second die roll) results in the death of the leader (elimination). A roll of 1 through 4 means that the leader is wounded and temporarily removed from the game. A wounded Moslem leader would be out of play for a number of Game-Turns equal to the second die roll (i.e., one to four Game-Turns); a wounded Crusader leader is out of play for a number of Game-Turns equal to twice the die roll (i.e., two to eight Game-Turns). Example: If on Game-Turn Two the Moslem Player had to roll for a leader and obtained rolls of 6/2 (the second roll being necessitated by the 6 rolled on the first roll), then the Moslem leader would be removed from the game until the end of Game-Turn Four.

[14.42] Wounded leaders are returned to play in the Allocation Segment of the appropriate Game-Turn. Returned Crusader leaders may be placed in Camp hexes; Moslem garrison leaders may be placed anywhere in Acre; Moslem Army leaders are placed off-map along with other Moslem Army units.

[15.0] CAVALRY AND THE NAPHTHA GRENADE

CASES:

[15.1] RESTRICTIONS ON CAVALRY

[15.11] Cavalry units may not occupy Wall or Tower hexes at the end of a Friendly Movement Segment, although they may be moved through such hexes if they are Friendly-controlled. (There were frequent sally ports and gates in the walls.)

[15.12] Cavalry units may not be used to fill Foss hexes.

[15.13] Cavalry units may not perform ladder assaults.

[15.14] Cavalry units may not be moved into Marsh hexes. Cavalry units may also not be placed in the same hex as Friendly siege units, although they may be moved through such hexes.

[15.15] Cavalry units need not trace a leader Command Radius for movement purposes (see Case 14.12). However, if their leader is killed, they may move at a maximum of only one half their Movement Point Allowance for the remainder of the game.

[15.2] CRUSADER CAVALRY CHARGE

Because the Crusader knights used couched lances (lances which were cradled against their shoulders for added impact), each Crusader cavalry unit may charge once per Assault Phase (in any Assault Impulse).

[15.21] To have one of his cavalry knight units perform a charge, the Crusader Player must move the unit through at least four Clear terrain hexes “in a straight line” and end its movement adjacent to the Moslem unit that is the object of the charge during a Crusader Movement Segment of the Assault Phase (see diagram). In the Crusader Melee Segment of that Assault Impulse, the Crusader unit performs a melee attack against the Moslem unit with a Melee Attack Strength double its normal strength. After the melee attack has been resolved, the Crusader unit is automatically disrupted.

[15.22] The Crusader Player must verbally announce during his Movement Segment that a particular unit is charging. Merely moving a unit in accordance with Case 15.21 without making such an announcement does not constitute a charge.

[15.23] A charging cavalry unit may not be the object of a fire attack in the Assault Impulse in which it is charging.

[15.24] Moslem cavalry units may never charge.

[15.3] THE NAPHTHA GRENADE

The Moslem Naphtha Grenadiers may melee-attack with incendiary naphtha grenades up to four times per game. The effect is to automatically make the defending unit retreat. No other unit may make grenade attacks.

[16.0] CONRAD OF MONTFERRAT

(Optional Rule)

COMMENTARY:

Conrad was one of the finest leaders of the war. When Guy led the Eastern Knights to disaster at Hattin in 1187, allowing Saladin to reconquer much of the Holy Land, only Conrad's brilliance kept the great port of Tyre from falling. Conrad bid for the crown, marrying princess Isabel of Jerusalem. But Guy had been banished and, despite Philippe's support, Conrad did not become King until after the siege. This was unfortunate, since Guy's men remembered how another army had been wiped out at Hattin and were not encouraged. This rule shows the possible effect if Conrad had led at Acre.

GENERAL RULE:

The French leader Conrad is considered king of Jerusalem for all purposes. Guy is removed from the game. Jacques takes direct command of Conrad's Breton units. Note that the counter representing Guy is backprinted with Conrad and the counter representing Conrad is backprinted with Jacques.

[17.0] INITIAL SET-UP

The Crusader Player places all of his units anywhere between the outerworks and the foss but not within four hexes of a foss hex. The Moslem Player then places the units of the Acre garrison in any of the Wall or Tower hexes (including the harbor tower in hex 1951) or within the city. All units must begin the game within double the Command Radius of their leader; a unit in 1951 is exempted.

CRUSADERS:

- Bretons under Conrad
- Anjou under King Philippe

Moslem:

- Foss at Acre
- Acre garrison in Moslem units

[Diagram of possible target hexes shown]
Crusaders have two small catapults and two ballistae and a tunneling capability of four hoes per Game Turn.

**MOSEMS**

**MOSLEM GARRISON**
- Garrison under Mashhur and Qaraqish
- Plas six engineer Points and two small catapults.

The following units are available off-map for intervention.

**ARMY OF SIJAN**
- Fayjag #1 under Taqi
- Fayjag #2 under Zain
- Fayjag #3 under Isa
- Fayjag #4 (Saladin’s Guard) under Saladin

**ARMY OF EGYPT**
- Fayjag #1 under Saif
- Fayjag #2 under Quib
- Fayjag #3 under Hassam

**ARMY OF MOSUL**
- Fayjag #1 under A1a
- Fayjag #2 under Zahir

[18.0] VICTORY

**CASES:**
- [18.1] CRUSADER VICTORY
  - If, at the end of an Assault Phase, 10 Crusader Combat units plus one leader occupy hexes within Acre (not including Wall or Tower hexes), the game ends in a Crusader victory.
  - If, at the end of an Assault Phase Saladin has been killed, the game ends in a Crusader victory.

**[18.2] MOSLEM VICTORY**
- If, at the end of any Assault Phase, Moslem units occupy any 12 Crusader camp hexes, the game ends in a Moslem victory.
- If, at the end of an Assault Phase King Richard the Lionhearted and King Philippe of France have both been killed, the game ends in a Moslem victory.
- If neither of the Crusader victory conditions is met by Game-Turn Sixteen the game ends in a Moslem victory.

**[18.3] DRAW**
- If two opposing victory conditions are met simultaneously at the end of an Assault Phase, the game ends in a draw.

**HISTORICAL NOTES**

On July 4, 1187, Guy de Lusignan, King of Jerusalem, led 20,000 infantry and 1500 knights and cavalry into battle at Hattin near the Sea of Galilee. Guy had stripped all of the Holy Land’s cities and fortresses to field the army; they had marched for days in armor under a broiling sun to reach the battleground. They had not drunk for over a day when Saladin, Sultan of Eastern Islam, attacked with perhaps 30,000 men, mostly cavalry. As the Christians seemed about to win the day, they stumbled across Saladin’s baggage camp and harem. The undisguised Christians broke formation to plunder both. Saladin counterattacked in the center with infantry, forcing King Guy and the Hospitallers back toward the city. The Christian reserve force ran to the rescue—abandoning their watch on the city garrison, which saluted forth to hit the Templars in the rear. By nightfall, the Crusaders had hacked their way through the Moslem infantry paylages and reached the safety of the camp. The Battle of Acre ended. Fifteen hundred Moslems died; Seven thousand Crusaders perished in the fruitless attack.

After that slaughter, both sides settled down to wait for reinforcements—the Crusaders from Europe, the Moslems from Egypt and Iraq. It was a hard winter. Disease took thousands of lives on both sides. Supplies reached the Crusaders only erratically by sea, the Moslim garrison was bad off at the desultory Christian sea blockade continued. Even Saladin’s army had supply trouble. The surrounding countryside could not feed the whole army, and many farmers from other areas had missed harvest because they were fighting at Acre. The Crusaders spent the winter building an outerwork around their camp. Saladin continued keeping his army from going home. (The Crusaders had no desertion problem; there was nowhere to go.)

Meanwhile, the main body of the European Crusaders was delayed and disrupted. Barbarossa’s Germans advanced through the Balkans and Turkey, suffering heavy attrition from clashes with the Christian and Moslem inhabitants and from desertion. The greatest blow came on June 10, 1190 when Barbarossa fell from his horse and drowned while crossing the River (Caicadus) in Turkey; his armor pulled him to the bottom. Without his stern hand, the demoralized German army collapsed. Many returned home, many more fell in skirmishes. Only a few thousand men under Leopold of Swabia reached Syria — where a Moslem army scattered them. A hundred of tired, sick, demoralized soldiers — with almost no horses left — stumbled down the coast to Acre.

Richard diverted his army to Cyprus, realm of King Isaac Ducas Comnenus, to spend the winter. Though Cyprus was a Christian land, Richard saw no reason not to bleed his troops with a quick campaign; he overran the island quickly. (In later years, Cyprus would be an irreplaceable haven to Christian refugees retreating from the Holy Land.) Philippe, as well, diverted his fleet to Cyprus; he was understandably more worried about leaving Richard alone to go campaigning than of leaving Guy alone a little longer. It provided an opportunity for Richard and Philippe to argue their positions on the Kingdom of Jerusalem. Philippe supported Conrad of Montferrat, hero of the defense of Tyre, over the disgraced Guy. Conrad had recently married a relative of Guy’s to establish a claim to the throne. Richard was wary of installing a King of Jerusalem who would be as active an ally of Philippe as Conrad would; he preferred to leave Guy on the throne — though his men had little confidence in him, he could be easily controlled. Eventually, Richard and Guy won out. Thus the winter passed on Cyprus, with the nobles at each other’s throats and the men busy enjoying the fruits of the island and building great wooden siege engines to be used at Acre.

In Spring, with the French and English contingents reasonably peaceful, the armies (minus a small Cyprus garrison) sailed to the Holy Land. The main body of the French arrived on April 30, 1191, the English on June 8, 1191. They were greeted with feasts and prayers by the exhausted men of
Guy and the advance contingents from Europe. Now, with huge siege engines unloaded and assembled, and enough men to assault the city and defend against Saladin's relief attempts, the final siege of Acre began.

Catapults and trebuchets battered the walls of the city. Mining under the walls was begun in earnest. The Templars and Hospitallers, the most zealously religious of the Crusaders, fought with an elan that historians of both sides marvelled at. On 14 June Philippe ordered a general assault against the wishes of Richard who was down sick. It failed. Another assault on 17 June made no more headway, though the battering was beginning to take effect as the tired Moslem garrison struggled to repair the gaps. The Cat, a French saw with a drill at the tip, tried to bore into the walls with little success. Greek fire launched by small catapults on the walls kept the siege towers from closing.

Every morning Saladin sent thousands of troops against the Outerwork. *Fayyag* after *fayyag* tried to break through to the city. Cavalry troops stumbled up the trench or the steep sided ravines of the River Behus. Horse archers skirmished, but had little effect on the Crusader infantry behind the Outerwork's parapet. But the assaults on the Outerwork had the desired effect; they kept the English and French from massing together on the walls. The attrition was fierce. No Crusader records exist with reliable data, but certainly thousands died in June. Saladin's losses were comparable. About 1000 men of the garrison were lost in this time, mostly in savage struggles to repulse ladder assaults. Several times the French attacked in late afternoon, hoping to secure a section of the wall by dusk to be reinforced during the night. Each time they were repulsed. The garrison sent out salutary parties at night, occasionally gaining some trivial victory over sentries or even raiding the Crusader camps. But this had no lasting effect on the siege and bled the garrison further. Gradually Crusader work parties managed to fill in the fosses despite bow fire from the walls. As the Acre garrison tried to stop the tunnelling, desperate skirmishes were fought in the dark passages with pick and spade and dagger. It was not decisive warfare. It was slow, agonizing attrition, with losses rising steadily as the walls began to crumble.

On 3 July the Crusaders burned the wooden foundation they had emplaced under the walls near the Accursed Tower Malecdictum. A wide section collapsed into dust and rubble. This more than any other moment in the long siege was decisive, for no longer did the Crusaders have to use their wood and cleft assault ladders which sometimes collapsed under the weight of armor; now it was a matter of forcing through the determined spearmen and bowmen standing in the rubble. The next day the garrison commanders Masstub and Qarashq offered to trade the city for their men's lives; they were refused. On 5 July another breach was made in the walls.

Now Richard, Philippe, and Guy put additional troops on the walls, stripping the outerworks in an effort to conclude the siege quickly. Saladin continued to attack. Each time a Crusader assault began, horns were blown from the tower of Malecdictum; Saladin would order yet another attack on the outerwork. This tedious pattern of assault and counter-assault went on for another week, until the Crusaders achieved a major lodgement in the city on 11 July. A final counter-thrust by the hoarded cavalry reserve in the city failed. A final major assault by Saladin's depleted, discouraged army failed. On 12 July, 1191 Acre surrendered. In August Richard ordered the 9000 prisoners killed.

The conclusion of the siege had far-reaching effects. Saladin dismantled coastal forts to keep Richard from using them and poured resources into Jerusalem. Richard decided to return to France with most of his army—enraging Richard, who understandably feared that Philippe might attack English holdings in Europe. With this thought gnawing at him, Richard was loath to take heavy casualties afterward. Eventually, after another year of battle on the path to Jerusalem, Richard and Saladin negotiated a great peace that lasted almost a century, dividing the Holy Land between Christianity and Islam. Perhaps, if Philippe had not abandoned the Crusade, a military victory would have been possible. In any case, the battle for Acre strengthened the Crusaders position and allowed a truce; otherwise Saladin would have continued the *jihad* until Palestine was free of Christians. In the wake of the peace treaty, both sides prospered—indeed, a heavy trade sprang up between the sworn enemies, who were readjustments for all. They had largely been bled of their idealism.

In the 1280's the truce broke down as another holy war was launched. Acre was the last city in Palestine to fall. On 18 May, 1291, after a two-week siege by perhaps 50,000 troops (200,000 according to Moslem historians), Acre fell. The last outposts, a handful of Templars, did not relinquish their hold on the Templar Tower of Acre for another 10 days. A few survivors from Acre managed to reach Cyprus. The Kingdom of Jerusalem no longer existed. Like the Crusades in toto, the first siege of Acre had proved futile and pointless in the long run.

**MOSLEM ORGANIZATION & TACTICS**

The basic Moslem infantry unit was the *fayyag*, a division of about 5000 men. The *fayyag* was fifty percent spearmen, fifty percent bowmen. The spearmen (who were also armed with scimitars, daggers, and a variety of stabbing weapons) deployed several lines deep in the center of the formation. During the approach to the enemy, the bowmen would march at the ends of the line to protect the flanks. As the *fayyag* drew near to the enemy (slowly, in good order) the bowmen would retire behind the safety of the spearmen while still protecting the spearmen's flanks. The infantry of the *fayyag* were very lightly armored (usually no metal at all, only leather or cloth armor). The *fayyag* commander would ride up and down the line exhorting his men.

There were several types of cavalry *fayyag*, each with about three thousand men. The light horse archers were unarmed and avoided melee combat; they had swords for defensive use. Their main weapon was a short bow they fired from the saddle. The heavy cavalry would ride parallel to the enemy, firing to disrupt and panic enemy formations rather than to decisively defeat them. Heavier cavalry and infantry would then deliver the coup de grace with a melee attack. Frequently the horse archers would try to draw the enemy out of their formations by feigning retreat. The archers would retire, and the overextended enemy troops would be cut up by the other units. This tactic was most successfully used at Hattin in 1187, where Guy's encircled infantry bled itself to death piecemeal hopelessly chasing horse archers on foot. On those occasions that horse archers were surrounded by enemy cavalry or even infantry, they were in trouble—lacking melee training and armor. They were usually quickly wiped out in these cases.

A heavy cavalry *fayyag* was heavy only by Moslem standards, for the men and horses lacked armor.
Armed with swords and lances, the cavalry charged at high speed in loose formation. When the faylag met the defending enemy, it would break up and the battle would be decided by individual duels. Officers would maintain unit integrity by drum and bugle orders. Sometimes a faylag would dismount after making the first charge with the lance, draw five thousand scimitars, and fight as infantry. Remounting was difficult so this was seldom done if a need to retreat was anticipated. On the defensive, the faylag would run until a time of its choosing, then try to outflank and crush its pursuers.

In addition to these divisions, there was a faylag known as Saladin’s Guard, containing specialist units. A heavy, armored infantry contingent fought with a longer spear and sword and shield; it was basically a copy of the Christian infantry it faced. There was also a heavy cavalry unit. Like the Christian knights, both men and horses in this unit were heavily armored. Thus the Guard cavalry was somewhat slower than regular cavalry, proceeding at a trot rather than a gallop in a charge. It was correspondingly more powerful, though it did not fight dismounted. The Archers of the Eyes, so called because of their accuracy, and a contingent of skirmishers trained in throwing naphtha-filled hand grenades, rounded out the Guard. These two units were trained to retreat by “leapfrogging” and could hold off most infantry they faced, giving ground slowly. The Guard, as with most Guards throughout history, were saved for the last big push—the charge that would win or lose the battle. Their morale and training were the best in the army. In peacetime the Guard stayed in arms, maintaining order and watching the borders, as well as guaranteeing the Sultan’s power. The rest of the army was a militia, raised as needed and (if possible) returned home at harvest time. Unlike most European militias of the time, the faylugs trained intensively before going into battle.

CRUSADER ORGANIZATION & TACTICS

The Crusaders had a less rigid, less disciplined view of infantry formation. At Acre, the ratio of crossbowmen to melee troops varied between 1:1 to 1:3. In any case, the swordsmen or (infrequently) spearmen would advance in a ragged line, hacking and slashing while the crossbowmen would fire over their heads, advancing steadily with them. In contrast to the faylag, the Crusader infantry was apt to advance out of ranks and get cut off. Discipline was poor, and there was little officer control. Flank security was also a problem, though the Moslem practice of placing bowmen on the flank was generally used by the Crusaders. There was no set number of men in an infantry force. In the polyglot army at Acre, a contingent from one nation or area would fight as a body.

Crusader infantry was armored in mail and some partial-plates. Thus they were slower and more easily tired than Moslem infantry (especially on a hot summer day) but tougher in a fight. Some contingents carried spears, but most used swords and shields. The German infantry at Acre, mostly knights who had lost their chargers, used huge two-handed broadswords and carried no shields—a problem when the knights were fired at by bowmen. The Crusader infantry were typical of Medieval European infantry, though better armored, armored, and trained than a duke’s militia. Their weakest trait was their lack of discipline; their weaponry and skill were equal to those of the faylag.

Crusader cavalry was similarly organized as a loose aggregation. With both horse and man heavily armored, armed with lance and sword, the heavy cavalry was potent indeed—and slow. Crusader cavalry could never hope to ride down light Moslem cavalry, but a Crusader charge against a faylag was a devastating thing. Trotting, closely packed, gleaming in the sun, hundreds of lances would strike in unison. This would generally rout the defenders. With the energy of the charge spent, the knights would drop their formation and fight individually. Christian knights in the Middle Ages were wont to get carried away, charging everything in sight and not realizing when they were getting in too deep. Combined with the beloved feigned withdrawal tactics of the Moslems, this led frequently to Crusader cavalry being cut off far in advance of Crusader infantry. By 1191, though, most of the knights outside Acre had learned to control themselves. Those who had not were mostly dead.

One factor that cannot be stressed too much is morale. The sort of closely fought “soldier’s battle” seen at Acre, where planning deteriorated and melee decided battles, depended more on the soldiers’ confidence than on their equipment or skill. The best soldier at Acre was only as good as he felt, only as strong as his confidence in his leaders—King or Sultan, God or Allah.

DESIGNER’S NOTES

The Crusades have been ignored by wargame designers. I don’t know why. The period included many battles and campaigns on land and sea that match any conflict in history for drama, excitement, and color. The scope of the wars collectively called the Crusades is vast. Vast alliances—Islam and Christendom—clashed over a period of centuries for the same land. Seldom in history has a grudge been held so long. Yet despite all that is going for them, no games have appeared on the Crusades until now.

Acre fits in well with the other games in the SPI siege series, illuminating a fascinating situation and showing the mechanics of a Medieval siege and assault in some detail. The strategic situation at Acre in the Summer of 1191 is rare, perhaps unique. Caesar’s better-known battle at Alesia was similar, but Caesar was not faced with the headachef of assaulting the town; he needed only to defend against attacks from within and without. At Acre, both Moslems and Christians had to defend against attacks from within and assault prepared positions.

The great fun in Acre, the game, is in the unusual weapons and unit types. How often do you run across naptha grenades, ballistae, catapults, different types of bowmen, cavalry with distinct tactical roles, even picks and shovels (in Subterranean Combat)? Some rules changed a great deal in development. A fire combat system was developed which cut odds calculation out of the procedure and smoothly integrates range attenuation. The siege of Acre was a two-year-long affair, but the action really started when the English arrived, just before Game-Turn 1.

DESIGN CREDITS

Game Design: Phil Kosnett
Physical Systems and Graphic Design: Redmond A. Simonsen
QuadriGame and Game Development: Dave Werden
Editing: Brad Hessel
Playtesting: Michael George, Matt Heneghan, Tom Hamilton, Randall Myhowich, John Butterfield, Steve Brody, Tony Rittman
Blindtesting: Larry Sage, Richard Bigelow
Production: Karen Cantor, Robert A. Degni, Andrew Grossman, Kate Higgins, Ted Koller, Manfred F. Milhahn, Bob Rijer, Karen Tully
MINE PLANNING SHEET

Players should make photocopies of the Mine Planning Sheet prior to playing the game for the first time.
SEVASTOPOL
Game-Turn Record Track
The Engineer initiative is 4, as per Case 9.23, when an asterisk is indicated on the Game-Turn Record Track.

Rules
3.30 (correction) Major Terrain Types (correction) All references, in the rule to the Terrain Effects Chart, shall be to the Construction Points Cost Chart (9.6).
6.33 (correction) The Russian unit Grand Duke Michael enters during Game-turn 8 (March). This is not noted on the Turn Record Track.
7.14 (correction) "For Game-Turns 8 and 13" should be "Game-Turns 8 through 18."
8.98 (correction) "May destroy" should be "must destroy."
8.99 (clarification) After "Asterisk = delete the words 'chance of,'"
9.23 (addition) The presence of Engineer Initiative is indicated on the Game-Turn Record Track by the presence of an asterisk next to a nationality's construction points.
10.32 (correction) There are 10 Bastion Positions at the Mast Bastion, not 8. In addition, the Russian Engineer does not count as a unit for purposes of deployment.
10.5 (clarification) This section refers to undamaged parallels.

LILLE
Counters
(correction) All French combat units should not be backprinted.
Map
There are 10 incorrect Star Bastion Positions on the map which should only be Bastion Positions. These incorrect Star Bastion Positions may be recognized by three characteristics: 1) They are not adjacent to the inner city of Lille, 2) each is connected to 5 other Star Bastion Positions, and 3) they are not within the Citadelle.

Rules
3.5, Repair (correction) Bastion Positions may only be repaired to a Bastion Strength level of 3.
5.11 (clarification) All results are listed in terms of Cavalry Squadrons and Infantry Battalions.
6.24 (correction) The case reference should be Case 5.11, not 5.21.
10.5 (clarification) This section refers to undamaged parallels. Forwardmost parallels are defined as the parallels which are closest to any French Bastion Position using the rangefinder to sight from the ranging points.
10.6 (addition) Routed French units within Lille may be counted towards the garrison requirement.
11.1 (addition) If an Assault is initiated, all English units which are currently garrisoning a French Bastion Position must be activated first. English units which are garrisoning French Bastion Positions may be replaced before the beginning of an Assault Phase by other Allied units which are in covering boxes, or behind the Allied Start-Line. Since English units may only be activated for an assault twice, if the English have been used to Assault twice, the Allies may not initiate an Assault until there are no English units garrisoning French Bastion Positions (since all garrisoning units must be activated in an Assault).
12.0 (correction) Procedures: "up to two Bastion Positions" should read "up to three Bastion Positions;" Case 12.32 is correct.

ACRE
[4.3] (correction) The Assault, Repair and Regrouping Phase should read the Assault and Regrouping Phase.
[5.27] (correction) There should be no filled fog hex listed on the Terrain Key. There are no filled fog hexes at the beginning of the game. [correction] Non-Enemy-Controlled Wall/Tower hex should be listed as Friendly Occupied Wall/Tower hex.
[8.3] (addition) If more than one engineer point is allocated to wall repair, and the damage level is reduced, all later engineer points use the new (repaired) damage level column on the wall repair table.
[9.23] (clarification) If a unit is disrupted by fire combat and then disrupted again in the Melee Segment it is retreated. In addition, since all fire combat is simultaneous, the statement "Disrupted units cannot engage in fire combat" is not applicable.
[9.24] (addition) All units which are retreated are disrupted at the end of the retreat.
[10.34] (addition) Ladder assaults may be made from inside the city (in an Acre street pattern hex) out onto the walls.
[10.72] (addition) Leaders may not advance after combat unless they are stacked with a combat unit which participated in the attack.
[12.2] (clarification) A wall with a damage level of 6 from giant catapults may be repaired.
[13.12] (correction) The Regrouping Segment occurs at the end of every Game-Turn for purposes of fog unfilling during both the Planning and Assault Phases.
[17.6] (correction) The harbor tower hex is hex 2104 not 1951.
### Terrain Effects Chart

#### Terrain

- Wall/Light Tower
- River
- Bathroom
- Field
- Bombardment

#### Effect on Target

1. No Effect
2. 1/6 Effect
3. 1/3 Effect
4. 1/2 Effect
5. Full Effect

#### Notes
- River/Sea: effects of terrain are halved in strength.
- Wall/Light Tower: no effect.
- Bathroom: no effect.
- Field: no effect.
- Bombardment: effects of terrain are doubled in strength.

### Bombardment Table

<table>
<thead>
<tr>
<th>Distance (in hexes)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Target</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

### Fire Combat Range Table

<table>
<thead>
<tr>
<th>Distance (in hexes)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Target</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

### Fire Combat Table

<table>
<thead>
<tr>
<th>Distance (in hexes)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Target</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

### Fire Combat Combat Table

<table>
<thead>
<tr>
<th>Distance (in hexes)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on Target</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>
## 10.8 MELEE COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>DIE</th>
<th>1-2</th>
<th>1-1</th>
<th>2-1</th>
<th>3-1</th>
<th>4-1</th>
<th>5-1</th>
<th>6-1</th>
<th>7-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R E</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>E</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>E</td>
</tr>
</tbody>
</table>

Results indicate effect on defending unit. D = Disrupted; R = Retreat; E = Eliminated; = No effect. Attacks at less than 1-2 have no effect. Attacks at greater than 7-1 are resolved at 7-1. Modified die rolls of greater than 6 are resolved as die rolls of 6; modified die rolls of less than 1 are resolved as 1.

### Morale Effects:

Morale effects are cumulative and effect both Melee and attack and defense for the remainder of the game. An army's Morale Rating is applied only once for each melee.

#### Moslem Army Morale

Add 1 if an off-map Moslem unit enters Acre (including a Wall or Tower hex). Subtract 1 if 30 off-map Moslem units are eliminated (placed in the Regrouping Box).

#### Crusader Army Morale

Subtract 1 if a King or a German Leader is killed (affects individual nationality only).

### Melee Die Modification Determination:

Subtract the defending contingent/faylag Leader Morale Rating from the attacking contingent/faylag Leader Morale Rating. Add or subtract applicable Army Morale Ratings. Apply the resulting number to the melee resolution die roll.

## 13.4 SUBTERRANEAN COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>Moslem Engineer Points Lost/Hexes Closed</th>
<th>Crusader Tunnel Points Lost/Hexes Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/3 1/3</td>
<td>1/3</td>
</tr>
<tr>
<td>1/3 2/1</td>
<td>2/1</td>
</tr>
<tr>
<td>0/3 0/3</td>
<td>3/0</td>
</tr>
<tr>
<td>0/1 0/4</td>
<td>4/0</td>
</tr>
<tr>
<td>thru 6</td>
<td></td>
</tr>
</tbody>
</table>

On a die roll of (1), (2), or (3), the Tunnel hex in which the subterranean combat occurs is closed and the Tunnel is permanently closed for a distance of 1 hex in both directions from that hex. On a die roll of 4, 5, or 6, only the Tunnel hex in which the combat occurs is permanently closed.

## ABBREVIATED SEQUENCE OF PLAY

1. **PLANNING PHASE**
   - A. Allocation Segment
   - B. Strategic Movement Segment
   - C. Crusader Tunnel Segment
   - D. Moslem Tunnel Discovery Segment

2. **BOMBARDMENT AND REPAIR PHASE**

The Crusader Player may bombard only if he has not planned an assault for this Game-Turn; if he has, or if the Moslem Player has chosen the "Saladin Attacks" Intervention counter, the Players skip this Phase and proceed immediately to the Assault Phase.

   - A. Crusader Bombardment Segment
   - B. Moslem Counter-Bombardment Segment
   - C. Moslem Damage Repair Segment

3. **ASSAULT, REPAIR, AND REGROUPING PHASE**

If the Crusader Player has chosen to bombard, and the Moslem Player has not chosen the "Saladin Attacks" Intervention counter, the Assault Phase is omitted in the current Game-Turn and play proceeds to a new Game-Turn.

#### Assault Impulse

Segments A through H; ten Impulses maximum

   - A. Crusader Movement Segment
   - B. Moslem Movement Segment
   - C. Simultaneous Fire Combat Segment
   - D. Crusader Foss Filling Segment
   - E. Moslem Garrison Melee Segment
   - F. Crusader Melee Segment
   - G. Moslem Army Melee Segment
   - H. Simultaneous Disruption Removal Segment
   - I. Regrouping Segment

## GAME-TURN INDICATION
**Terrain Effects Chart**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Terrain Point Chart**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Terrain Point Values**

- Field of Fire: 0
- Walled or Lined: 1
- Camp: 2
- Marsh: 3
- Reservoir/Bay: 4

**Bombardment Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bombardment Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fire Combat Results Table**

<table>
<thead>
<tr>
<th>Effect on Target</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walled or Lined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir/Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE ART OF SIEGE Lille
The Classic Vauban Siege, 1708
RULES OF PLAY

1.0 INTRODUCTION

2.0 HOW TO PLAY THE GAME

3.0 GAME EQUIPMENT
   3.1 The Game Map
   3.2 The Playing Pieces
   3.3 Initial Set-Up
   3.4 Game Charts and Tables
   3.5 Glossary of Game Terms
   3.6 Parts Inventory
   3.7 Rules Questions

4.0 SEQUENCE OF PLAY

5.0 FRENCH FIELD ARMY INTERVENTION
   5.1 Vendome’s Intervention Attempt
   5.2 Luxembourg’s Intervention Attempt

6.0 REPLACEMENTS
   6.1 Deployment of Replacements
   6.2 Replacement Rate

7.0 ATTRITION
   7.1 How Attrition Is Applied
   7.2 Attrition Table

8.0 SIEGE BATTERY SUPPLY AND FIRE
   8.1 Ammunition Supply
   8.2 When a Siege-Battery Unit is in Supply
   8.3 Which Siege Batteries Are Eligible to Fire
   8.4 Which Targets May be Fired Upon
   8.5 How to Use the Rangefinder for Artillery
   8.6 Effects of Range on Siege Battery Fire
   8.7 Siege Battery Fire Table and its Effects

9.0 SIEGEWORK CONSTRUCTION
   9.1 Allied Construction Points
       and Construction Costs
   9.2 Allied Engineer Initiative Bonus
       and Engineers’ Effects on Siegework
       Construction
   9.3 Restrictions on Construction and Repair
       of Siegework Positions
   9.4 Bastion Repair

9.5 Construction of the First Line
9.6 Construction Point Costs Chart

10.0 OPERATIONAL MOVEMENT
   10.1 How to Move Allied Units
   10.2 Allied Operational Movement Between
       Siege Areas and Covering Boxes
   10.3 Restrictions on French Operational
       Movement
   10.4 Movement of Leaders
   10.5 Garrison of Parallels

11.0 THE ASSAULT PHASE
   11.1 Activation of Allied Units
   11.2 How an Assault Ends
   11.3 Capture of a Bastion and Its Effects

12.0 TACTICAL MOVEMENT
   12.1 Open Field Movement
   12.2 Parallel Line to Parallel Line Movement
   12.3 Intra-Bastion Position Movement

13.0 FRENCH FIELD BATTERY FIRE

14.0 MELEE
   14.1 Which Units May Attack and Which
       Units May Be Attacked
   14.2 The Melee Combat Results Table
   14.3 The Morale Effects Table
   14.4 Morale Effects
   14.5 Retreat of Infantry Units
   14.6 Advance After Combat

15.0 FRENCH SORTIES
   15.1 Procedure for Sortie
   15.2 Sortie Table

16.0 LEADERS
   16.1 Allied Leaders and Their Effects
   16.2 French Leaders and Their Effects
   16.3 Leader Loss

17.0 COUNTER-MINES

18.0 LIMITED INTELLIGENCE

19.0 ENFILADE FIRE

20.0 VICTORY CONDITIONS
[1.0] INTRODUCTION

Siege of Lille is a battalion level simulation of the Dutch-Anglo-Allied siege of Lille, the capital of French Flanders, during the War of Spanish Succession, 1708. The city of Lille and its defenses were constructed by the Duke of Marlborough's covering force, Lille fell to the Dutch-Anglo-Allied force at a cost of over 16,000 casualties.

[2.0] HOW TO PLAY THE GAME

The Players Set-up their Units. After it has been decided who will play the French and who will play the Allies, the Players set-up the pieces ("counters") representing their infantry and artillery units on the map. Each unit is deployed within Lille; Allied units are set-up outside the city in Covering and Cavalry Foraging Boxes and behind the Allied Start Line. At the start of the game, none of the one-inch long siege works are deployed on the map.

The Players Resolve Siege Battery Fire. Both Players possess a number of siege battery units. From Turn to Turn, each Player must keep track of his available ammunition, measured in "rounds". Each Game-Turn, after the Planning Phase, each Player may have his siege battery fire up to the limit of his available rounds. Generally, the Allied Player will use siege battery fire to weaken the strength of Bastion Positions that he intends to assault and to eliminate French units deployed in Bastion Positions. The French Player will use siege battery fire to damage key sections of the Allied siegework system and to eliminate Allied units involved in its construction or repair. Siege battery-caused damage can be repaired. Players may occasionally find it useful to save up ammunition for a concentrated effort.

The Allied Player Executes Siegework Construction and Repair. The Allied Player must devise a strategy that permits him to successfully assault Bastion Positions within the French fortifications. Because of the effectiveness of French field artillery, he cannot simply launch an assault from one of the Allied Start Lines; his troops would be annihilated prior to reaching the walls. Allied troops are less vulnerable to artillery fire when in the siegeworks, and so the Allied Player must build a siegework system that reduces the open ground that must be traversed during an assault.

The Allied Player builds a siegework system composed of zig-zag approaches (saps) and wide trenches parallel to the enemy fortifications (parallels). When doing so he uses Construction Points available from Cavalry Foraging for material, plus possible bonus points provided by engineers. Experience had shown that siegeworks had to be built according to strict precepts if the besieger wished to avoid excessive casualties. The axioms and theorems of the "art of fortification" are reflected in the rules regulating how siegework counters are arranged for the purposes of play. The Allied Player may both construct new siegeworks and repair any damaged by French siege battery fire.

The Allied Player Conducts Operational Movement. "Operational Movement" consists of troop movements within the limits of the siegework systems (movement network). The Allied "movement network" consists of the Allied Start Line, Covering and Forage Boxes, and any siegework counters that are connected to the Allied Start Line, either directly, or indirectly by means of other intervening siegework counters. In conducting operational movement, the Allied Player redeploy any units within his movement network as he pleases. Operational movement may be used to deploy artillery units at a closer range to Lille and to deploy infantry units in positions from which an assault is possible. This Phase is omitted from the first Game-Turn.

The Allied Player May Conduct Assaults. Assaults are rare, because it takes a long time for the Allied Player to construct a siegework system close enough to the city to make success likely. Eventually, however, the Allied Player must assault; siege battery fire and siegework construction alone would never lead to the capture of the city. In this game, the dynamics of assault are simulated in a series of "turns-within-a-turn". In any turn in which the Allied Player determines he is ready, he announces an assault. The normal course of the Game-Turn is interrupted and the Allied assault is resolved on a tactical level. The Allied Player initiates an assault by moving units out of theforalling areas and, with the aid of the Range Finder, through "open terrain," towards the French fortifications. The French Player responds by attempting to destroy or rout Allied units through his Field Battery artillery fire. Allied units that have succeeded in reaching an Assault Position immediately adjacent to a French Bastion Position may be used to conduct Melee attacks against French units in that Bastion Position. Successful attacks allow the Allied Player to advance his units into the Bastion Position. The French Player may then conduct Melee attacks against Allied units. In turn, each Player has five opportunities to conduct Melee attacks, after which the assault is considered to have ended.

The French Player Conducts Operational Movement. The French Player re-deploys his infantry and/or artillery units anywhere within his movement network. The French movement network consists of all Bastion Positions and the French Sortie Box.

The French Player Executes Siegework Construction and Repair. The French siegeworks consist of the connected Bastion Positions of Lille. The French Player must strive to keep his Bastion Positions sufficiently fit to repel any Allied storming attempts. With the aid of his engineers, the French Player can repair damage from Allied siege guns on Bastion Positions up to their original strength. The French repair rate is determined by the availability of French engineers.

The French Player Conducts Sorties. The French Player may utilize infantry units and Leaders deployed in the French Sortie Box to sortie against Allied units within an Allied Covering Box.

The Game-Turn Ends. The actions described above constitute a complete Game-Turn. The Players proceed to conduct as many more Game-Turns as required until either Player wins.

[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

The 22" x 34" mapsheet displays a detailed period engraving of Lille and the surrounding areas at the time of the siege. The map has been reproduced to the scale of 100 yards to the inch. The following features have been added to the original map to regulate play of Siege of Lille.

Allied Start Line: This line portrays the original siege lines which were constructed prior to the "active" siege of Lille. Allied units are placed behind this line at the beginning of the game.

Assault Position: An Assault Position is a dot outside Lille which is connected to a Bastion Position within Lille (see Terrain Key on map). Assault Positions have only one line attached to them.

Bastion Position: The defensive perimeter of Lille comprised a number of Bastion Positions (dots and stars on the map). Each Bastion Position is connected to other Bastion Positions within Lille and Assault Positions outside Lille (see Terrain Key on map).

Major Terrain Types: There are a number of terrain types on the map outside Lille which are signified by color.

Sieve Areas: The Allies have two Sieve Areas behind the Allied Start Lines to the left of the Dyle River and to the right of the Dyle River.

Covering Boxes: There are four Covering Boxes on the map which represent the off-map lines of Circumvention which the Allies used to surround Lille. Allied Infantry and Cavalry Units may be placed in these Boxes, cutting Lille off from Supply.

Cavalry Foraging Box: This Box is utilized to display the number of Allied Cavalry units employed in Foraging for Material for siegework construction.

French Sortie Box: French units are placed in the French Sortie Box for use in Sorties against the Allied Units in Covering Boxes.

Star Bastion Positions: Star Bastion Positions are considered Bastion Positions for all purposes except for movement to and from the French Sortie Box and for Victory Conditions.

[3.2] THE PLAYING PIECES

The playing pieces (or units) represent the infantry battalions, squadrons of cavalry, the artillery batteries, and the historically important leaders who participated in the siege. The numbers and symbols on the pieces are the type of unit represented by the piece, the number of men and Morale level for the Infantry, and the number of Squadrons for the Cavalry. These playing pieces are referred to as units. There are also several informational markers such as Bastion Strength Markers, Ammunition Supply markers, and double-sized Siege Construction Markers.

[3.2] How to Read the Units

ALLIED INFANTRY UNIT (Front)

HISTORICAL DESIGNATION

A NOTE

COMBAT STRENGTH

(MANPOWER)

MORALE LEVEL

PROTECTION

ALLIED INFANTRY UNIT (Back)
FRENCH INFANTRY UNIT (Front)

Disregard construction mode inadvertently back-printed on French infantry units (see Case 9.4).

ALLIED CAVALRY UNIT (Front)

FRENCH ARTILLERY LEADER (Front)

BRIGADE LEADER (Front)

Unit designations are the actual historical names of each unit. Allied unit designations are Battalion names. In addition, French unit designations show the brigade that the unit is a part of. Artillery units are merely numbered.

[3.32] Unit Values

Combat Strength: The relative value of a unit when attacking or defending.

Morale Level: The relative ability of a unit to withstand the rigors of combat, taking into account both training and elan. "A" level units are guards or the equivalent; "B" are first line units; "C" are second line units.

[3.33] Sample Units

Duke of Marlborough + (3)

French Engineer

Siege Battery

Bonard (Dgr.), Elst (Dngr.), Westerlo, Anspraet, Athlon, Schilpenbach, Erbach.


German Confederation:

Infantry: Exter, Aurox, Boisset, Tastien 1, Tastien 2, Baden 1, Baden 2, Palitz Garde Grenadier 1, Palitz Garde Grenadier 2, Stolbueche, Luebeck, Fchenbach 1, Fchenbach 2, 1st Guard Hesse 1, 1st Guard Hesse 2, 2nd Guard Hesse 1, 2nd Guard Hesse 2, 3rd Guard Hesse 1, 3rd Guard Hesse 2, Voeckershöffen, Sax Mining 1, Sax Mining 2, Spiegel, Fusiliers, Grenadiers, Freudenberg, Sechendorf, E. Prinz Hessen 1, E. Prinz Hessen 2, Anhalt-Zerzb., Deinhoff, Sall, Prussian Royal, Prussian Gd., Hessen Gd. Cavalry: Aurox, Reysing (Dgrn.), Palzy, Prince Cassel (Dgrn.), Wittgenstein (Dgrn.), Feiniger, Spiegel, Wurttemburg, 1st Feltz (Dgrn.), 2nd Feltz (Dgrn.), Kollnitz (Dgrn.), Prussian Royal, Prussian Lieb, Hess-Homberg, Homburg, Hessen, Hatzfeld, Falken, Oer, Artillery: Siege Battery 1-9, Mortar 1-2. Leaders: Prince Eugene, Lt.-Gen. Sturms, Lt.-Gen. Holtscheeck, Du May.

[3.32] French At-Start Set-Up


[3.4] Game Charts and Tables

Various visual aids are provided to simplify and illustrate certain game functions. These aids include the Intervention Attempt Tables, Attrition Table, Ammunition Determination Chart, Terrain Effects Chart, Melee Combat Results Table, Siege Battery Fire Table, and Morale Effects Table.

[3.5] Glossary of Game Terms

Allied Movement Network: The Allied Movement Network consists of the Covering and Cavalry Forge Boxy and any portion of the game map which is behind the Allied Start Line. In addition, the Allied Movement Network extends out from the Allied Start-Line through contiguous segway counters which are constructed by the Allied Player.

Parallel Line: A Parallel Line is one parallel counter or more which has been placed "in line" with front corners touching and adjacent to one another.

Repair: If a French Bastion Position is damaged it may be rebuilt up to and including a Bastion Position Strength Level of 4. All Bastion Positions with no Bastion Damage Level Marker present are considered to have an intrinsic Bastion Position Strength Level of 1.

French Movement Network: The French Movement Network consists of all the interconnected Bastion Positions within Lille and the French Sorted Boxy.
Rangefinder: The Rangefinder is used for calculating ranges for Artillery fire. The Rangefinder is printed on the base of the counter sheet and must be cut out before play.

Siegework Battery: Siegework Battery is a term which is used to refer to mortar, and Siege Gun Artillery units as a group.

Siegework Position: Siegework Position is a term which is used to refer to saps, parallel or gun gallery counters.

Communications Trench: A Communications Trench is one or two sap counters placed end to end which connect one parallel line to another.

Stacked (with): If more than one unit is placed on top of another it is "stacked" with that unit (see Case 10.36).

PARTS INVENTORY
A complete game of Lille contains:
One rules booklet
One 22" × 34" game map
200 die-cut single-size and 100 die-cut double-size counters
One sheet charts and tables
One plastic dice
One game box assembly
If any of the above parts are damaged or missing, write:
Customer Service
Simulations Publications, Inc.
44 East 23rd Street
New York, N.Y. 10010

RULES QUESTIONS
Questions concerning the rules for Siege of Lille will be answered if phrased in such a way that a simple yes or no reply will suffice and if the questions are accompanied by a stamped, self-addressed envelope. Mark the envelope "Rules Questions: Siege of Lille."

SEQUENCE OF PLAY

GENERAL RULE:
Siege of Lille is played in sequenced Turns called Game-Turns, each of which represents a period of six days. There are 12 Game-Turns in a complete game. Each Game-Turn is composed of six separate Phases. Each of these Phases is broken down into a number of Segments. All action must take place in the following sequence of Phases and Segments.

SEQUENCE OUTLINE
1. PLANNING PHASE
A. French Field Army Intervention Segment: During certain Game-Turns, the French Player attempts to relieve Lille. Refer to Field Army Intervention (Section 5.0).
B. Replacement Segment: Both Players determine what Replacements are available and place them on the map (Section 6.0).
C. Attrition Segment: During certain Game-Turns (as indicated on the Game-Turn Record/ Reinforcement Track), each Player must roll the die to determine losses from weather and disease, as outlined in the Attrition Rules (Section 7.0).
2. SIEGE BATTERY PHASE
A. Ammunition Supply Segment: Both Players determine how much ammunition is available for their siege gun and mortar units.
B. Siege Battery Fire Segment: The Players may now fire their siege batteries (Section 8.0).

3. ALLIED SIEGE CONSTRUCTION AND OPERATIONAL MOVEMENT PHASE
A. Allied Siege Construction Segment: First, the Allied Player "flies" any of his units which were used for construction during the previous Game-Turn. Then the Allied Player may have his units construct or repair any number of saps, parallels, or gun galleries up to the limit of his available Construction Points (Section 9.0).
B. Allied Operational Movement Segment: The Allied Player may move all, some, or none of his units utilizing operational movement, providing that each unit moved was not used to construct or repair siege works in the preceding Segment. This segment is skipped during Game-Turn One (Section 10.0).

ASSAULT PHASE
The Assault Phase occurs only if the Allied Player wishes to conduct assaults during the current Game-Turn. If he does not wish to do so, the Assault Phase is omitted. An Assault Phase consists of up to five assault impulses, each of which may be considered a "turn within a turn."

ASSAULT IMPULSE OUTLINE
A. Initiative Segment: The Allied Player determines the number of Allied units which may assault by determining the initiative of each Allied commander-in-chief (Section 11.0).
B. Allied Tactical Movement Segment: Utilizing Tactical Movement assaulting units in the forward parallels may be advanced out of the trenches. Units assaulting in rear parallels may be moved forward one parallel. Units in a Bastion Position may be moved using intra-Bastion Position movement (Section 12.0).
C. French Field Battery Segment: The French Player resolves field artillery against the assaulting units (Section 13.0).
D. French Tactical Movement Segment: The French Player may now move his units.
E. Allied Melee Segment: Allied units deployed in Bastion and/or assault Positions may melee (attack) French units in adjacent Bastion Positions. Melee assault results are applied immediately (Section 14.0).
F. French Melee Phase: French units may melee (attack) adjacent units. Results are applied immediately.

The Players execute Segments "A" through "F" once and then Segments "B" through "F" up to four more times; each time through constitutes one Assault Impulse.

5. FRENCH OPERATIONAL MOVEMENT AND SIEGE CONSTRUCTION PHASE
A. French Operational Movement Segment: The French Player may move all, some, or none of his units.
B. French Siege Construction Segment: The French Player may have his engineer units repair Bastion Positions (see Section 9.0).
C. French Sortie Segment: French units within the French Sortie Box may sortie against Allied Units in an Allied Covering Box (see Section 15.0).
6. GAME-TURN INDICATION PHASE
The Game-Turn Marker is advanced one space on the Game-Turn Record Track to signal the passage of one Game-Turn, unless the Allied Player has fulfilled his victory criteria, in which case the game is over.

FRENCH FIELD ARMY INTERVENTION

GENERAL RULE:
During the French Field Army Intervention segments of Game-Turns 3 and 8, the French Player resolves intervention by his off-map Field Army.

PROCEDURE:
On Game-Turn 3 the French Player resolves Vendome's Intervention Attempt (see Case 5.2). The French Player throws two dice and cross-references the result with Column I on the table. Depending upon the die roll the Allied Player applies a strict Historical Result, or proceeds to Column II or Column III on the Vendome Intervention Table. If the Historical result does not occur, the French Player rolls two dice again and cross-references the number rolled with the appropriate column on the table. The result obtained indicates the number of squadrons of Cavalry and Battalions of Infantry the Allied Player must remove from the map, and the number of turns these units must remain off-map.

On Game-Turn 8 the French Player resolves Luxembourg's Intervention Attempt (see Case 5.2). The French Player determines which of his squadrons are successful in entering Lille (with Gunpowder and Replacements) one by one, in the order listed on the chart. The French Player throws two dice for each unit. If that number equals the number listed on the Susception Column for that Squadron, all subsequent Squadrons on the table are suspected. If the number rolled for a subsequent (suspected) Squadron is the number listed under the Susception Column for that unit then that Squadron and all remaining Squadrons on the Table are detected.

VENDOME'S INTERVENTION ATTEMPT

Throughout the entire siege of Lille, Vendome's defeated army was positioned astride Marlsborough and Eugene's line of operations. In early September Vendome, spurred on by the orders and threats of Louis XIV, marched on Marlborough's army. For three days the hostile armies faced each other and battle appeared imminent. Marlborough withdrew a substantial force from Eugene's operations. Seventy-two squadrons of cavalry and twenty-six battalions of infantry marched to join Marlborough. The French lost heart and withdrew.

Vendome's Intervention Attempt Table

<table>
<thead>
<tr>
<th>DIE</th>
<th>Column I</th>
<th>Column II</th>
<th>Column III</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Proceed</td>
<td>30/00/1</td>
<td>50/16/1</td>
</tr>
<tr>
<td>3</td>
<td>to</td>
<td>30/15/1</td>
<td>57/21/1</td>
</tr>
<tr>
<td>4</td>
<td>Column II</td>
<td>40/16/1</td>
<td>64/23/1</td>
</tr>
<tr>
<td>5</td>
<td>45/16/1</td>
<td>72/26/1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>52/20/1</td>
<td>74/28/1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Historical</td>
<td>58/22/1</td>
<td>76/30/1</td>
</tr>
<tr>
<td>8</td>
<td>Results</td>
<td>66/24/1</td>
<td>80/36/1</td>
</tr>
<tr>
<td>9</td>
<td>72/26/1</td>
<td>80/40/1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Proceed</td>
<td>78/28/1</td>
<td>72/26/2</td>
</tr>
<tr>
<td>11</td>
<td>to</td>
<td>72/26/2</td>
<td>80/32/2</td>
</tr>
<tr>
<td>12</td>
<td>Column III</td>
<td>80/32/2</td>
<td>84/40/2</td>
</tr>
</tbody>
</table>

EXPLANATION OF RESULTS

Historical Results: The Allied Player must remove 72 squadrons of cavalry and 26 battalions of in-
PROCEDURE: Using each Replacement Box, the Players determine what replacements are due and deploy all such units to the map. The number of replacement units that must be removed from the map is determined by the number of replacement units that are available. The number of units to be removed is determined by the number of replacement units that are available.

CASES:

[6.1] DEPLOYMENT OF REPLACEMENTS

[6.11] Allied reinforcements and replacements are placed behind the Allied Start Line or in a Covering Box.

[6.12] French replacements may be placed anywhere within the French movement network.

[6.13] Only destroyed infantry units of the appropriate nationality can be utilized as replacements. Replacements are not transferable between the German and Anglo-Dutch armies.

[6.2] REPLACEMENT RATE

Each nationality's replacement rate indicates the number of infantry units of that nationality which may be replaced per Game-Turn.

[6.21] At the start of the game, the French Player receives one replacement unit on each Game-Turn.

[6.22] The Allied Player receives one German replacement unit each Game-Turn.

[6.23] The Allied Player receives one English or Dutch replacement (Allied Player's choice of nationality) each Game-Turn.

[6.24] If there are no eliminated units of a given nationality available as replacements, those replacements are lost (they may not be accumulated from Game-Turn to Game-Turn). Exception: French Field Army Intervention Table (5.21).

[7.0] ATTRITION

GENERAL RULE:

Attrition is determined by the Attrition Segment of the Game-Turn, which reflects the combined effects of attrition, disease, and seasonal inclement weather.

PROCEDURE:

During the Attrition Segment, the die must be rolled once for each nationality, and the result is compared with the appropriate column in the Attrition Table (7.2). Results are applied immediately.

CASES:

[7.1] HOW ATTRITION IS APPLIED

[7.11] The die is rolled separately for the French, the German States, and the Dutch (English Army) units (if any). The result is converted to the appropriate column in the Attrition Table (7.2). Results are applied immediately.

[7.2] ATTRACTION TABLE

(see chart sheet)
[8.6] EFFECTS OF RANGE ON SIEGE BATTERY FIRE

[8.6.1] Mortar fire only effects Infantry units. It has no effect on Siegeworks or Bastion Positions.

[8.6.2] The maximum range of mortar units is 300 yards, with the effectiveness of the fire decreasing as the range is increased.

[8.6.3] The maximum range of siege guns is 700 yards, with the effectiveness of the fire decreasing as the range is increased.

[8.7] SIEGE BATTERY FIRE TABLE AND ITS EFFECTS

Each result on the Siege Battery Fire Table is composed of two numbers. The first number indicates damage to the siegeworks, expressed in terms of Siegework Strength Levels destroyed (if the fire is directed at a Siegework count, a "D" result may occur indicating that it is damaged). The current Construction Strength of each bastion is always indicated with a Siegework Strength marker level (see Case 9.4). The second number indicates how many infantry units have been destroyed.

[8.7.1] The Strength level of a French Bastion Position may be reduced only by Allied fire, directed at that Bastion Position. French infantry units deployed in a Bastion Position may be destroyed by artillery fire. The level of a Bastion Position may never be reduced below zero.

[8.7.2] Leaders, engineers, and French artillery units are never affected by Allied siege battery fire.

[8.7.3] Only Allied units deployed in siegework positions may be destroyed by French siege battery fire.

[8.7.4] Allied siegeworks may be damaged by French siege battery fire. The counter representing the damaged siegework position is inverted in place on the map to indicate this status. Such siegeworks must be repaired before any new construction can take place within that Siege Area (see Case 9.3). No unit may be moved through a damaged Allied siegework position during Allied operational movement. Allied units may not be deployed in a parallel during operational movement if that parallel has been repaired during the preceding Allied Construction Segment. (A parallel which has been repaired during the preceding Allied Construction Segment is evidenced by the presence of an inverted unit.)

[8.7.5] Any Allied artillery unit deployed in a gun gallery which is subsequently damaged is placed behind the Allied Start Line. Allied artillery units can never be destroyed by French siege battery fire.

[8.7.6] Surviving Allied infantry units deployed in a siegework position damaged by siege battery fire must be placed in the nearest Allied siegeposition that satisfies the following two conditions:

- unoccupied by any Allied units.
- nearer to the Allied Start Line than to the damaged siegework positions.

Should no such siegework position exist, the units are placed behind the corresponding sector of the Allied Start Line.

[8.7.7] Siege Battery Fire Table (see chart sheet)

[9.0] SIEGEWORK CONSTRUCTION

COMMENTARY:

Siege works construction represents the actual digging of siege works and upping toward the French defense positions. Siege works are constructed in order to move combat units and artillery closer to Lille so that the casualties taken by the assaulting troops are reduced as the distance between the 'jump off' position and the Enemy defense position is reduced. Artillery was moved closer to be more effective in blinding breaches for friendly assault troops to enter. Siege construction also represents the repair by engineers of Bastion Positions weakened by Enemy fire.

GENERAL RULE:

Both Players have the capacity to construct and repair siege works. This capacity is measured in terms of Construction Points. The Allied Player expends Construction Points to build saps, parallels, and gun galleries and to repair those which have been damaged. The French Player seeks to repair his Bastion Positions. Construction and repair require, for the Allies, the presence of troops to do the digging, as well as Construction Points. French repair requires the presence of an engineer. Engineers may provide "bonus" Construction Points for the Allies. Allied construction is limited by the requirements that systematize the construction of siege works, and also by terrain considerations.

PROCEDURE:

During the Allied Siege Construction Segment, the Allied Player first "flips to the front side" any infantry unit counters which were utilized for construction during the previous Game-Turn. He then determines how many Construction Points he has due from cavalry foraging for material. He then rolls the die for each engineer officer to determine if his Construction Points are augmented by that engineer's Initiative Bonus. He then expends Construction Points as he chooses to repair any destroyed parallels, gun galleries, or saps. Then he may expend Construction Points to construct new saps, parallels, and gun galleries in accord with the restrictions of Case 9.3. As new sap, gun gallery, or parallel counters are placed on the map, the Allied Player must deploy two infantry units on the counter and flip them to their backside to indicate that they are engaged in construction. Units engaged in construction and repair (inverted to their backside) may not engage in operational movement or assault during the Game-Turn.

During the French Siege Construction Segment, the French Player may repair Bastion Positions in which engineer units are deployed.

CASES:

[9.1] ALLIED CONSTRUCTION POINTS AND CONSTRUCTION COSTS

[9.1.1] The expenditure of Construction Points is always optional. The Allied Player is never required to expend Construction Points. However, unused Construction Points may not be accumulated from Game-Turn to Game-Turn.

[9.1.2] Each Game-Turn, the Allied Player is limited to the number of Construction Points accrued through cavalry foraging (plus any engineer Initiative Bonuses; see Case 9.2). For every three cavalry squadrons which are in the Cavalry Foraging Box, the Allied Player receives one Construction Point (till fractions are lost). The Allied Player may never expend more Construction Points in any Game-Turn than are available to him.
[9.13] The basic cost to construct a sap or parallel siegework position is 2 Construction Points; the basic cost to construct a gun gallery is 4 Construction Points. The basic cost may be increased, depending upon the terrain (see Case 9.6, Construction Point Cost Chart). If any part of a siegework counter is placed in a terrain type other than "flat" the construction rates for the less advantageous terrain are used. There is a 1 Construction Point cost to repair a sap or parallel, and a 2 Construction Point cost to repair a gun gallery, regardless of terrain.

[9.14] A gun gallery Siegework Position may be constructed on the site of an existing undamaged parallel at a cost of 2 Construction Points. In this case, the parallel is removed and replaced with a gun gallery counter.

[9.2] ALLIED ENGINEER INITIATIVE BONUS AND ENGINEER’S EFFECTS ON SIEGEWORK CONSTRUCTION

The Allied Player has two engineers (one Dutch and one German). Each Game-Turn, a die is rolled once for each engineer to try to obtain the engineer’s “Initiative Bonus”.

[9.21] On a die roll of 1 through 4, the Allied Player may use the Du May Engineer’s 4 bonus Construction Points in the Siege Area in which the engineer is deployed (only). On a roll of 5 or 6, the bonus Construction Points may not be used.

[9.22] On a die roll of 1, 2, or 3 the Allied Player may use the Des Roques Engineer’s 3 bonus Construction Points in the Siege Area in which the engineer is deployed (only).

[9.3] RESTRICTIONS ON CONSTRUCTION AND REPAIR OF SIEGEWORK POSITIONS

Allied siegework positions are constructed in a series of lines joined to one another by perpendicular communication trenches. A parallel line consists of one or more contiguous parallel or gun gallery counters. A communication trench consists of one or two contiguous sap counters. Only the Allied Player may expend Construction Points to construct saps, gun galleries, and/or parallels. Before any new Allied construction may take place in a given Siege Area during the Allied Siege Construction Segment, all damaged siegework positions in that Siege Area must be repaired.

[9.31] Any number of saps may be constructed from the Allied Start Line (see Case 3.1). One end of each sap counter is placed parallel to the Start Line, such that the counter juts out from it at a 90° angle. See Example Below

[9.32] A sap may also be constructed from a line of three or more parallel or gun gallery counters, provided that there is a contiguous path of undamaged siegework counters between the line and the Allied Start Line. However, see Case 9.35. One additional sap (only) may be constructed directly end to end with a sap that is perpendicular and adjacent to a line. See Example Below

[9.33] One parallel and one gun gallery or two parallels or gun galleries may be constructed at the end of a sap counter. The parallel or gun gallery counter(s) are placed adjacent and at right angles to the sap counter. See Example Below

[9.34] A parallel or gun gallery may be constructed adjacent to another parallel or gun gallery counter. At least one front corner (furthest from the Allied Start Line) of each counter must touch the front corner of the adjacent counter. However, see Case 9.36. See examples to the right.
[9.35] Only one communication trench (one or two saps end to end) may be constructed from a given line for every three parallel or gun gallery counters in that line at the time of construction. That is, a minimum of three parallels or gun galleries must be constructed in one line before a sap can be constructed from that line; a line must consist of at least six parallels to allow the construction of two saps, and so forth. No more than six parallel counters may be constructed from any one communication trench. That is, for a line to consist of more than six parallels and/or gun galleries, it must be connected to at least two communication trenches. All such “supporting” communication trenches must be closer to the Allied Start Line than the line is.

[9.36] A parallel or gun gallery may not be constructed from (or adjacent to) the Allied Start Line. A sap may not be constructed adjacent to another sap counter (exception, see Case 9.32).

[9.37] In each siegework position (sap, gun gallery, and/or parallel) constructed during the Allied Siege Construction Segment, the Allied Player must deploy two infantry units (the unit counters inverted on the siegework counters). In each siegework position repaired, one infantry must be deployed inverted.

[9.38] Any Allied infantry unit on the map may be deployed to satisfy the requirements of Case 9.37 except units in any Covering Box. No unit used for construction and/or repair (inverted on a siegework counter) may be moved during the Operational or Tactical Movement Segments.

Note:
The Allied Player may utilize Siegework Positions newly constructed or repaired in a given Game-Turn to “build on” to the contiguous line which he must trace to the Allied Start Line (see Case 9.32). In other words, a Siegework counter may be built connecting to a Siegework counter which has just been placed on the Game-map during that turn, and in turn another Siegework counter may be connected to that Siegework counter once it is placed on the map.

VALID SIEGEWORK CONSTRUCTION

Communications Trench

START LINE

This line can consist of up to 12 Parallels and/or Gun Galleries.

This line can consist of up to 6 Parallels and/or Gun Galleries.

Correct

Correct

Incorrect

Incorrect

Less Than 90°

Incorrect
[9.4] BASTION REPAIR

The French Player may repair Bastion Positions by utilizing his engineer and engineer leaders. The current Strength Level of each Bastion Position is indicated with a Strength Level marker, which is placed on the game-map on that Bastion Position.

[9.41] All Bastion Positions begin the game with a siegework Strength Level of 4. If no Strength marker is present, the Bastion Position Strength is 4.

[9.42] If, during the French Siege Construction Segment, a French engineer unit is present in a Bastion Position with a strength of less than 3, the strength of that Bastion Position is increased by one. If an engineer officer is present with the engineer unit, the Bastion Position strength may be further increased by a number of levels equal to the rating of the engineer officer (see Case 9.44). Only one engineer officer or unit may contribute to the repair of one Bastion Position. An engineer officer has no effect if he is not in a Bastion Position with an engineer unit. Example: If the Pay-Vaubaun officer is assigned to a Bastion Position with an engineer unit, that Bastion Position could be repaired from a level of 0 Breach to 3 Partial Damage.

[9.43] Any engineer unit or engineer officer that has been moved into a Bastion Position during a previous Operational or Tactical Movement Segment may be used to satisfy the requirements of Case 9.44 for that Bastion Position only. Such units' movement in subsequent French Tactical or Operational Movement Segments is never restricted.

[9.44] No Bastion Position may be repaired to a Strength Level greater than 3.

[9.5] CONSTRUCTION OF THE FIRST LINE

No other siegework construction may be undertaken by the Allied Player until the First Line has been constructed. To construct the First Line, the Allied Player must extend 18 parallels end to end from point A to point B on the map. As part of the First Line, the parallels may be constructed attach to point A and point B. Once constructed, the First Line is considered an Allied First Line for purposes of siege construction (only). Parallels of the First Line may be damaged by French siege gun fire and may, if undamaged, be converted to siege gun galleries (see Case 9.14). This Case is an exception to Cases 9.25 and 9.36.

[9.6] CONSTRUCTION POINT COSTS CHART (see chart sheet)

[10.0] OPERATIONAL MOVEMENT

GENERAL RULE:

The Players may utilize Operational Movement to move infantry, mortars, siege guns, and (for the French) field gun units anywhere within their respective movement networks (see Case 3.5). Operational Movement occurs during the Operational Movement Segments (only) and is limited to the movement network — see Section 12.0, Tactical Movement, for an explanation of movement outside the network. Terrain has no effect. There are limits to the number of units that may be deployed in any one Bastion Position or siegework.

PROCEDURE:

During the Operational Movement Segment, each Player may move all, some, or none of his units deployed on the map that are eligible to move within his movement network. Unit by unit, he picks up each counter and places it on the map in the desired location.

CASES:

[10.1] HOW TO MOVE ALLIED UNITS

[10.11] The Allied Player may move any infantry units deployed in any of his Covering Boxes, behind the Allied Start Line, or deployed in any siegework position. Exception: Any infantry unit used to construct or repair siegeworks during the current Game-Turn (inverted) may not be moved.

[10.12] The Allied Player may move any siege gun or mortar units deployed behind the Allied Start Line or in any gun gallery. Artillery may be moved through, but not deployed in, parallels and saps.

[10.13] The Allied Player may move any cavalry unit from a Covering Box to the Forage Box and vice versa. Allied cavalry units may be moved from one Covering Box to another.

[10.14] No more than two infantry units may be deployed in any one parallel. No more than one infantry and one siege gun or mortar unit may be deployed in a gun gallery. It is possible to deploy only one infantry unit (or no units whatsoever) in a parallel. It is possible to deploy only one siege gun, mortar, or one infantry unit (or no units) in a gun gallery.

[10.15] No unit may be deployed in a completed sap. (Note that units constructing saps may not be moved and therefore must remain there during the Game-Turn the sap is constructed).

[10.16] The Allied Player must move units so that it is possible to trace a line of contiguous siegework counters and/or the Allied Start Line between the initial position of the unit (at the start of the Operational Movement Segment) and its new position. A unit cannot be moved to positions to which it is impossible to trace a line from the unit's initial position. Exception: See Case 10.21.

[10.2] ALLIED OPERATIONAL MOVEMENT BETWEEN SIEGE AREAS AND COVERING BOXES

[10.21] Allied units behind the Allied Start Line or deployed in siegework positions (to which a line of contiguous siegework counters may be traced from the start line) may be moved to any Allied Covering Box and vice versa. Exception: If the First Line has not been constructed (see Case 9.5), only Allied units deployed in the Left Siege Area at the beginning of the Operational Movement Segment may be moved to the Leonness and Mons en Barocul Covering Boxes, and only Allied units in the right Siege Area may be moved to the Lamber-sart and Chau du Moulin Covering Boxes and vice versa.

[10.22] There is no limit to the number of units which may be placed in a Covering Box.

[10.23] Allied Cavalry units may be moved during operational movement from any Covering Box to another Covering Box or from a Covering Box to the Cavalry Foraging Box and vice versa. Cavalry may only be deployed in Covering Boxes and Foraging Boxes. Cavalry may not be moved during the Operational Movement Segment of the Game-Turn in which Cavalry are returned to the map from Vendome's Intervention Attempt.

[10.3] RESTRICTIONS ON FRENCH OPERATIONAL MOVEMENT

French units (infantry, engineers, field batteries, siege guns, and mortars) deployed on the Game-Map may be moved through operational movement to any Bastion Position, or (for infantry) to the French Sortie Box, providing that:

A. Any Bastion Position moved to contains no Allied unit.

B. It is possible to trace a path of connected Bastion Positions from the unit (at the start of the Operational Movement Segment) to its new position which does not include a Bastion Position that is adjacent to a Bastion Position containing an Enemy unit.

C. There is no limit to the number of French infantry units that may be placed in the French Sortie Box.

D. Only one infantry or field artillery unit may be deployed in each Bastion Position (French units may attack into but never enter an assault position).

E. A French infantry unit which is in a Star Bastion Position or which can be moved to a Star Bastion Position during its operational movement may be used to command an Allied Bastion Position. A French infantry unit in the French Sortie Box may be moved to a Star Bastion Position (but not further) during its operational movement.

F. French siege gun and mortar units may be deployed in and moved through Bastion Positions during the French Operational Movement Segment. One siege gun or mortar unit may be deployed in a Bastion Position (in addition to one infantry or field battery unit).

G. French field battery, siege gun, and mortar units may be fired during the Game-Turn following operational movement.

H. One infantry or field battery unit, plus one mortar or siege gun unit, may be deployed in a Bastion Position. In addition, one Leader and/or one Engineer may be placed in that Bastion Position. This Case applies to Allied units as well.

I. MOVEMENT OF LEADERS

All Leaders and Engineers are treated exactly as infantry units of their respective countries for purposes of operational movement (however, see Case 10.36).

[10.5] GARRISON OF PARALLELS

At the end of the Allied Operational Movement Segment, and at the end of an Assault Phase (see Case 11.2), the Allied Player must garrison his six forwardmost parallel counters in each Siege Area. To garrison a parallel, at least one Allied infantry unit must occupy the parallel (units used to construct the parallel may be used). If the garrison requirements are not met in a given Siege Area for any reason at the end of the Operational Movement Segment or Assault Phase, four Allied infantry units are eliminated (Allied Player's choice of specific units) and the four forwardmost parallel counters in that Siege Area are damaged (simulating a French night sortie). This process could occur twice in a Game-Turn, once after Operational Movement and once at the conclusion of an Allied assault.

[10.6] GARRISON OF LILLE

At the end of the French Sortie Segment, the French Player must have 10 French (infantry units within Lille (positioned on Bastion Positions). If the French Player does not or cannot fulfill the garrison requirements, the Allied Player is considered to have captured Lille (see Section 20.0).

[11.0] THE ASSAULT PHASE

COMMENTS:

Siege of Lille employs two time scales. The first time scale concerns the operational "business" of
the siege, i.e., construction, siege battery fire, operational movement, ammunition supply, etc. These are activities which encompass the six-day periods of time shown on the Game-Track Record Track. However, major assaults were undertaken rarely as they required much preparation and resulted in many casualties. The other time scale represents the events of a day and is represented abstractly by the Assault Phase. The five Impulses which comprise the Assault Phase enable five successive waves of infantry or columns of infantry to move across the map to assault Enemy positions or to counter-attack such assaults.

GENERAL RULE: The Assault Phase consists of five Impulses, each of which is broken down into six segments (see the Sequence of Play, 4.9). Each Impulse may be considered a "turn within a turn". The Assault Phase is not mandatory and takes place only if the Allied Player announces that he wishes to conduct an Assault. During the Assault Phase the Allied Player may utilize Tactical Movement (Section 12.0) and Melee (Section 14.0) to move Activated Units (Case 11.1) out of the forwardmost parallel to capture (Case 11.2) one or more French Bastion Positions. In turn, the French Player uses Tactical Movement, Field Battery Fire (Section 13.0) and Melee to reinforce and defend his threatened Bastion Positions.

CASES:

[11.1] ACTIVATION OF ALLIED UNITS Whenever the Allied Player decides to conduct an Assault, he must determine how many of his units he can utilize for it. Depending upon which leaders are in command of the British, Dutch, and German Armies (see Section 16.0), a certain number of infantry units from each will be "activated" during the Initiative Segment of the first Impulse. The Allied Player may select any particular infantry units from among those on the map up to the limits listed in Section 16.0. Those units — and only those units — which are selected during the Initiative Segment may be utilized by the Allied Player during the Assault Phase. In addition, the English may be activated only twice per game.

[11.2] HOW AN ASSAULT ENDS

[11.21] At the end of the fifth Impulse of an Assault Phase all Allied units which are not used to garrison a captured Bastion Position are placed behind their respective Allied Start Lines. Then, as needed, Allied units are placed in the forwardmost parallels to satisfy garrison requirements. (Case 10.5).

[11.22] During the Allied Tactical Movement Segment the Allied Player may select to abort his Assault. If he selects this option he place the Allied units as per case 11.21.

[11.3] CAPTURE OF A BASTION POSITION AND ITS EFFECTS

[11.31] A Bastion Position is considered "captured" if at any time during the fifth Impulse of an Assault Phase it contains an Allied unit. If, at the end of the fifth Impulse of an Assault Phase, an Allied infantry unit is in a Bastion Position, that unit is placed behind the Allied Start Line as per Case 11.21.

[11.32] If at the end of an assault a Bastion Position is captured, that Bastion Position is considered a captured Bastion Position and will be used for all purposes. A captured Bastion Position may be fired upon by French siege battery units firing at −1 on the die roll using the Siege Battery Fire Table.
[14.0] MELEE GENERAL RULE:
During each Player’s Melee Segment, he may have Friendly infantry units attack Enemy units deployed in Bastion or Assault Positions. Units which are involved in Melee Combat may be eliminated, routed, or forced to retreat. When a unit is retreated or forced to retreat as a result of Melee Combat, the victorious Player may occupy the vacated Bastion Position with one of his units which was involved in the combat.

PROCEDURE:
The Player whose Melee Segment is in progress is termed the attacking Player. The attacking Player determines what attacks (combats) he will conduct and proceeds to resolve them, one-by-one, in any order he chooses. For each attack, the attacking Player totals the Strength Points of all his attacking units and compares it to the Strength Point value of the defending unit. This comparison is expressed as a mathematical ratio of attacker to defender. For example, if two units with a total combat Strength Point value of 800 attacked one unit with a combat Strength Point value of 400, the ratio would be 2:1. The ratio is then reduced to one of the simplified ratios found on the Melee Combat Results Table (14.25). For example, the 2:1 ratio would be reduced to 2:1; 16:4 would be reduced to 4:1. The attacking Player then rolls the die and adjusts the result if required (see Cases 14.21, 14.22, and 14.23). The die roll result (as adjusted) is cross referenced with the simplified ratio on the Melee Combat Results Table. The result will indicate whether either (or both) the attacking unit(s) and/or defending unit are subject to incurring an adverse morale effect as a result of the combat. For each unit subject to an adverse morale result, the owning Player rolls the die once for each such unit and refers to the appropriate column(s) of the Morale Effects Table (depending on the unit’s Morale Class, see 3.22), adjusting the die roll for Cases 14.32 through 14.34. Any elimination, rout, and/or retreat effects are applied immediately, and victorious units may then be advanced. All such effects must be applied, and any advances conducted prior to the resolution of the next combat.

CASES:

[14.1] WHICH UNITS MAY ATTACK AND WHICH UNITS MAY BE ATTACKED

[14.11] During a given Player’s Melee Segment, only Friendly infantry units in Bastion or Assault Positions may attack.

[14.12] A Player may have one of his units attack an Enemy unit if and only if his unit is deployed in a Bastion Position or Assault Position directly connected to the Bastion or Assault Position in which the Enemy unit is deployed.

[14.13] A Player may combine any number of units in an attack against an Enemy unit so long as each attacking unit is deployed in a directly connected Bastion or Assault Position in accordance with Case 14.12. Remember that only one unit may be deployed in any one Bastion Position or Assault Position at any one time.

[14.14] No more than one Enemy unit may be attacked in any one combat.

[14.15] No unit may attack, nor may any unit be attacked more than once in any one Melee Segment.

[14.16] Melee combat is voluntary for the attacking Player. During his Melee Segment, a Player is never required to conduct Melee attacks. He conducts as many attacks as he desires in accordance with all the restrictions listed in this Section.

[14.17] French field battle units deployed in Bastion Positions may be attacked by Allied infantry units and defends at a strength of 100. Such units cannot perform melee attacks. See Case 14.25 for the effects of Melee combat on field artillery units.

[14.18] An Engineer or Leader stacked with a field battery or infantry unit suffers the same combat result as the unit with which it is stacked (see Case 12.34). A French siege or mortar unit stacked with a field battery or infantry unit suffers a retreat is eliminated.

[14.2] THE MELEE COMBAT RESULTS TABLE

[14.21] One is added to the die roll result for any melee attack made against an Allied unit in an Assault Position.

[14.22] One is subtracted from the die roll result for any melee attack made against a French unit with a Bastion Position Strength level of 2 or greater.

[14.23] Whenever an infantry unit is the object of an attack and receives a result, the Morale Effects Table (14.35) is consulted in accordance with this Section’s Procedure.

[14.24] Whenever a French field battery unit is the object of an attack and receives a result, the unit is removed from the map and returned during the next Planning Phase. Note that field battery units may be fired during the French Field Battery Segment utilizing the 2-1 column of the Melee Combat Results Table; see Section 13.0.

[14.25] Melee Combat Results Table

[14.3] THE MORALE EFFECTS TABLE

[14.31] There are four columns on the Morale Effects Table, each corresponding to a Morale Class (see 3.22). The die roll for each affected unit is cross referenced with the column representing the unit’s Morale Class.

[14.32] If a unit is defending in a Bastion Position, that Bastion Positions’ Strength level is added to the morale die roll if that unit is Melee Attacked.

[14.33] One is subtracted from any morale die roll result which applies to a unit that has been retreated once previously in that Assault Phase. (Players must note on a separate sheet of paper which units have been routed or retreated.)

[14.34] Additions and/or subtractions made to a die roll result for Morale Effects are cumulative. Thus, for example, 3 would be subtracted from the morale die roll result for a previously retreated French unit defending in a Bastion Position with a Bastion Position Strength level of 4.

[14.35] Morale Effects Table

[14.4] MORALE EFFECTS

Possible morale effects include E, R, 1, 2, and C. Note that only infantry units are subject to morale effects; see Case 14.24 for the effects of Melee combat on field artillery units.

[14.41] An E result in the permanent elimination of the unit in question for the remainder of the game. It is removed from the map. Note that an advance may be possible. See Case 14.12.

[14.42] A R result in a unit being rendered useless for the duration of the current Assault Phase. Routed French infantry units are removed from the map and automatically returned during the Placement Segment of the next Game Turn. These units do not count towards the replacement rate. Routed Allied units are placed behind the Allied Start Line and may not be moved again until the next Assault Phase. Note that an advance may be possible.

[14.43] A 1 or 2 result in the compulsory retreat of the affected unit (see Case 14.5). An advance may be possible. Note that unlike routed units, retreat effects may be moved and attack during subsequent Taktik Movement and Melee Segments of the current Assault Phase.

[14.44] A C result in the unit in question cowering under fire. When a unit receives a C result, the die is rolled again on the Morale Effects Table, subtracting one (in addition to the usual modifiers) from the die. If the unit receives a C result on this second die roll, it is eliminated. Any other result on the second die roll is immediately applied to the affected unit.

[14.5] RETREAT OF INFANTRY UNITS

A unit incurring a 1 or 2 effect must be retreated by the owning Player to either an unoccupied Bastion Position (or Assault Position for Allied units only) or to the nearest unoccupied parallel (Allied units only).

[14.51] A unit may never be retreated into (or through) a Bastion or Assault Position if that position is occupied and/or directly connected to a position occupied by an Enemy infantry or field battery unit.

[14.52] A French unit to which a 1 effect applies must be retreated to a Bastion Position directly connected to the position it is deployed in.

[14.53] A French unit to which a 2 effect applies must be first retreated one position in accordance with Case 14.52. If the unit is retreated to a second Bastion Position, it must once again be retreated to a third Bastion Position, again in accordance with Case 14.52. The third (final) Bastion Position may not be directly connected to the unit’s original position. If the unit cannot be so retreated, it is eliminated.

[14.54] An Allied unit to which a 1 effect applies must be retreated to a Bastion or Assault Position directly connected to the position it is deployed in. If, alternately, if the unit is deployed in an Assault
Position, it may be retreated to the nearest unoccupied (or occupied with one unit) parallel. If the unit cannot be so retreated within the restrictions of Case 14.51, it is instead eliminated.

[14.55] An Allied unit to which a 2 effect applies must first be retreated in accordance with Case 14.54. If the unit is retreated to a parallel, its retreat is considered completed. However, if the unit is retreated to an unoccupied position, it must then be retreated to the nearest unoccupied (or occupied with one unit) parallel. Or, finally, if the unit is retreated to a second Assault Position, it must then once again be retreated to a third position, as in Case 14.53. The unit is eliminated if such a retreat is not possible.

[14.6] ADVANCE AFTER COMBAT

In any Melee combat in which one Player’s unit(s) is eliminated, routed, or retreated and the other Player’s unit is not affected, the second Player’s victorious unit may be advanced into the vacated position of the eliminated, routed, or retreated unit.

[14.61] Units may only be advanced into Bastion Positions.

[14.62] The victorious Player has the option of advancing any one victorious attacking unit in the event that more than one is eligible to occupy a vacated Bastion Position.

[14.63] If a unit suffers a 2 result, the victorious Player has the option of Advancing a unit which participated in the attack into the second Bastion Position vacated and another unit which participated in the attack into the first Bastion Position Vacated. An advancing unit may advance into or through a Bastion Position which is directly connected to a position occupied by an Enemy unit.

[14.64] An Allied unit may never be advanced into the French Sortie Box.

[14.65] A French unit may never be advanced into an Assault Position.

[14.66] If, at the end of the Allied Movement Segment, an Allied unit occupies an Assault Position which is connected to an unoccupied Bastion Position, that Allied unit may be advanced into that Bastion Position.

[15.0] FRENCH SORTIES

GENERAL RULE:

During the French Sortie Segment, the French Player may utilize infantry units and leaders deployed in the French Sortie Box to Sortie against (attack) Allied units deployed in one of the four Covering Boxes. The sortie process is resolved off-map utilizing the Sortie Table (15.1).

[15.1] PROCEDURE FOR SORTIE

During the French Sortie Segment, the French Player declares if he wishes to sortie, and the Allied Covering Box he wishes his units to sortie against. If a sortie is undertaken, the Players resolve the Sortie in the following steps:

1. Off-map, the rule book (or a sheet of paper) is held up to the Players for use as a screen by both Players. The Player takes all the units and Leaders from the Covering Box and places them behind the screen. He then deploys all of his infantry units side by side from left to right directly behind the screen and tells the French Player how many infantry there are.

2. If there are any Allied Leaders present, the Leader with the highest Leader rating becomes the Strategic Leader and is placed a few inches behind his infantry units. If there are any additional leaders (Tactical Leaders) each Leader may be assigned to lead any two infantry units of his nationality which are adjacent to each other in the line (this is noted by placing the Leader counter directly behind the units with the Leader counter touching both units). All Allied cavalry units are placed in a reserve behind the line.

3. The French Player places all the units and Leaders to use from the Sortie Box behind his side of the screen. First, he makes a line of infantry with an equal number of units as the Allied Player (if he has that many units) directly behind his side of the screen. Then he deploys any additional infantry in a second line 6 inches behind the first line.

4. If there are any French Leaders present, the Leader with the highest Leader rating becomes the Strategic Leader and is placed a few inches behind the first line. If there are any additional Leaders (Tactical Leaders) each Leader may be assigned to lead any two infantry units in either line which are adjacent to each other and of the same Brigade as the Leader. If the Leader has no Brigade rating he may be assigned to any two adjacent units.

5. The screen is then removed and the sortie is resolved. The French first line with its Leaders is moved directly adjacent the Allied Line. For each three squadrons of cavalry or two squadrons of Dragon cav a the Allied Player may screen off (place back in the French Sortie Box) any French units in the second line. If there is no second line or the Allied cavalry screens off the entire second line and still has additional cavalry units, may be screened from the French first line. If an Allied infantry unit is not faced by a French unit or vice versa, that unit is placed 6 inches behind the line. At this point the Allied cavalry are returned to the Covering Box and the sortie is resolved.

6. For each infantry unit in the front line two dice are rolled using the French Sortie Table to determine if the Enemy unit to which it is adjacent is eliminated. This combat is considered to be simultaneous.

7. Once the first line combat is completed, any infantry units which are in a second line may attack using the Flanking segment of the Sortie Table. If a unit is successful the defending Player must eliminate a friendly infantry unit of his choice.

[15.2] SORTIE TABLE

(see chart sheet)

[16.0] LEADERS

GENERAL RULE:

Leader counters representing individual historical leaders have been provided with the game. Each Leader has a leader rating which may affect sortie combat, melee combat, activation of units for assault, bastion strength repair, and artillery fire. Some Leaders may have only one effect (i.e., only Artillery fire), and some Leaders may have more than one effect.

CASES:

[16.1] ALLIED LEADERS AND THEIR EFFECTS

[16.11] Allied Leaders may be placed in a Covering Box and utilized as Strategic or Tactical Leaders during French Sorties (see Section 15.0). All Allied Leaders may be placed in Covering Boxes. Allied Leaders with a parenthesized (*) rating may be deployed in the French Sortie Boxes.

[16.12] During the Allied Initiative Segment of the Assault Phase, the Allied Player may activate five infantry battalions deployed in siegeworks or behind the Start-Line for each point of the single highest Leader’s rating deployed behind the Allied Start-Line or in a siegework. For example, Prince Eugene, with a rating of 3, is the highest rating of any Allied Leader and is deployed in a siegework. He may activate 15 infantry units for an Assault Phase. Only Activated units may be utilized for an assault.

[16.13] During the Assault Phase, each Allied Leader may be stacked with an infantry unit of his nationality. During melee combat, that Leader’s rating may be added to the die roll on the Melee Combat Results Table (if attacking) or subtracted from the die roll (if defending).

[16.2] FRENCH LEADERS AND THEIR EFFECTS

[16.21] French Leaders may be placed in the French Sortie Box and utilized as Strategic or Tactical Leaders during French Sorties (see Section 15.0). French Artillery and Engineer Leaders may not be utilized for this purpose.

[16.22] During the Assault Phase, each French Leader which is within two Bastion Positions (free of Enemy units) of an Infantry unit that shares the same brigade may contribute aid to melee combat conducted by that unit. His Leadership rating is added to the die roll on the Melee Combat Results Table (if the unit is attacking) or subtracted from the die roll (if the unit is defending). Artillery and Engineer Leaders may not be utilized for this purpose. French Leaders with no Brigade designation use their Leadership rating to modify any melee combat die roll involving a Friendly unit within two Bastion Positions (free of Enemy units).

[16.23] The French Artillery Leader may subtract his rating from the die roll each time that a siege or mortar unit is stacked with fired.


[16.3] LEADER LOSS

If at any time during melee combat (during the Assault Phase) the die is rolled for a melee in which a unit is receiving leadership from a Leader (Allied or French) and a natural 6 is rolled (die roll modifications do not apply) that Leader (or Leaders) is injured. If this occurs, the die is rolled again and halved (fractions being dropped), and the Leader is removed from play for that number of Game-Turns.

If at any time during a French sortie a natural 12 is rolled the Strategic Leader for the side rolling the dice is eliminated. One die is rolled as normal for combat. Leader losses and halved, with the Leader being removed for the specified number of Game-Turns at the end of the Sortie Segment.

[17.0] COUNTER-MINES

The French Player has two miner units. During the French Operational Movement Segment, they may be placed on any Assault Position. Once placed, they are considered completed and may not be moved. At the end of any Allied Tactical Movement Segment, completed mines may be exploded. If an Allied unit is present in the Assault Position when the mine is exploded, the Allied Unit Covers (see 14.44) and any leader present is placed behind the Start-Line. Once exploded the Miner unit is removed from play for the remainder of the game.
[18.0] LIMITED INTELLIGENCE
The Allied Player may place units (or one unit on top of a stack of units) face down in Covering and Foraging Boxes. The French Player may know the number of units in a Covering or Foraging Box but not the specific composition of the units in the box.

[19.0] ENFILED FIRE
The Parallel siegework is so named because the trench is built parallel to the enemy position, thus guarding from enfilade fire. If a trench was built such that the enemy artillery could fire along its length, the "bowling alley" effect would destroy everything in the siegework.

If, at the end of any Allied Siege Construction Segment, the French Player can trace a line from any point within the parallel lines printed on the parallel counter and out the other side of the counter, and the entire parallel is within 700 yards of that point, the parallel counter and the units constructing it are destroyed (removed from the map) with no siege battery ammunition expenditure. (It would take very few rounds to destroy the parallel.) Saps are immune to enfilade fire.

[20.0] VICTORY CONDITIONS
GENERAL RULE:
As in any siege, victory rests on the besieger's success in capturing the enemy fortress. In order to procure victory, the Allied Player must capture one Star Bastion Position before the end of the game. The French Player wins if the Allied Player has failed to capture a Star Bastion Position by the end of the game.

HISTORICAL NOTES
The Strategic Situation
The Duke of Marlborough and Eugene, the Prince of Savoy, by an unexpected victory over the French at Oudenarde, July 11, 1708, had gained a strategic domination of Flanders. The French army under the Duc de Vendome, forced to retire behind the maze of canal works linking Bruges with Ghent, was in an enviable position. The victorious Allied army now stood between the French army and its homeland.

Sensing that the French will to fight was finally destroyed, Marlborough sought desperately to administer the coup de grace that would end the war. Marlborough proffered a plan that would guarantee a successful conclusion of the war with the necessary rather than an unnecessary campaign. The Allied army was to march into the heart of France, ignoring the border fortresses, to Abbeville where it was to be joined by General Erle and his 6,000 men from the Isle of Wight. On this occasion Eugene, Marlborough's trusted and talented colleague did not sanction the Duke's plan. Eugene reasoned that Marlborough's plan would not be feasible until one of the border fortresses was captured. The captured fortress would serve as a place d'armes, protecting the "line of operations" of any invading Allied army. Marlborough deferred to his colleague's opinion.

Mons, Lille and Tournai were all suitable fortresses, from the Allied point of view. Mons and Tournai had the advantage of being more easily accessible to a besieging army. Lille was considered by all military authorities to be the most awesome of Vauban's fortresses. Vauban had poured all his energy and genius into converting the prosperous former Dutch town of Rijsen into Lille, the keystone of the French defensive fortress network along the Northern frontier. Eugene and Marlborough finally selected Lille as the site of the projected operations. Both believed that a stroke at the strongest link in the chain would be the action least expected by the French command.

To Eugene fell the task of commanding the actual siege operations. Under his command were 51 battalions of infantry and 90 squadrons of horse amounting to approximately 40,000 men. This figure does not include the thousands of laborers that were hired in the months to come. Marlborough's relations with the Dutch deputies who accompanied the military operations was at a low point. Consequently, Marlborough out of necessity took upon himself the task of commanding the "covering" army comprising 69 battalions and 140 squadrons, a force exceeding 55,000 men.

Both Marlborough and Eugene adhered to Vauban's theories on how to conduct a siege. The earlier Italian school of thought argued that the entire army of the besieger should remain between the lines of circumvallation and counterbatteries much like the siege of Acre. A relieving army would have to attack the besieging army defended by ditches, pits and earthworks out of which the line of counterbatteries was composed. As excellent as this appeared in theory, the numerous Spanish defeats of the mid-seventeenth century convinced Vauban of the folly of continuing this practice. Vauban advocated dividing the besieging army into two unequal parts: the larger of the two, the "covering army", was given the duty of intercepting and defeating any army sent to relieve the fortress under siege. In the case of the siege of Lille, Marlborough and Eugene had to observe the motions of Vendome's remnant army and an army that had just recently arrived in the Flanders theatre of war. This army, though much smaller in size, was led by the capable and wily Duc de Berwick. In the coming months Marlborough would have to use all his ingenuity to foil the stratagems of Berwick and Vendome.

Lille was protected by six hornworks while the citadel was an ideal five-bastion fortress replete with numerous ravelins, tanneaux, wet ditches and all the other defensive engineering aids seventeenth-century genius could devise. When designing Lille, Vauban had indicated that 9,000 men and a spirited commander would be required for its defense. Louis François Duc de Boufflers, Maréchal de France, beguiled Louis XIV for the privilege of guarding the city. Boufflers, the hero of Namur and destined to become Marlborough's nemesis at Malplaquet, was more than ready to meet the challenge. Spending money from his own purse, he worked ceaselessly to bring the city to the proper state of readiness. Finding men in diverse quarters, including rounding up stragglers from Vendome's army, Boufflers just barely managed to gather up the required establishment.

In retrospect, it is probably fair to say that Boufflers outwitted Marlborough and Eugene. When all others believed Mons to be the target of attack, Boufflers, a septuagenarian, sped towards Lille in the days following the ignominious French defeat at Oudenarde. Boufflers, Allied intentions. Boufflers realized that Lille was like a hypnotic gem. Marlborough and Eugene would buy that gem, but Boufflers determined that they would be penniless afterwards. Probably Boufflers alone understood the significance of the imminent siege. If Lille fell during the summer months, neither army nor defensive network remained to oppose an Allied march on Paris. Only if Lille held out till late in the campaigning season when the elements by themselves would prohibit the movement of any hostile army would France be given a chance to recoup its forces during the winter months. If only Lille could hold out, France might yet escape paying dearly for the Vendome's folly during the 1708 campaign.

The Course of the Siege
The Allied commanders anticipated a brief siege lasting no longer than two weeks. All evidence suggests that both commanders felt that the city would fall quickly to escalade or "general assault." With this end in mind, nearly one hundred artillery pieces of assorted types were amassed and positioned in front of the La Madeleine and Saint Andre hornworks.

On the afternoon of the 27th of August, the Allied artillery commenced firing. An estimated seven thousand projectiles were fired at the besieged city and by evening, two breaches were made in the fortifications. However, the engineers and Eugene had gravely miscalculated. The Allied artillery display was premature. The Allied siegeworks were insufficiently advanced to permit a general assault.

Learning from their mistake, the Allies spent the next ten days extending their siegeworks. Every night saw frenzied activity in both camps. Ten to 12 Allied battalions led by a Lieutenant-General would enter the trenches and fervently push forward about 100 yards every night. The French in turn would sortie and attempt to destroy the most advanced siegeworks.

By the close of the first week in September, the siegeworks reached the extremities of the fortifications. Eugene intended to take the city's fortifications by general assault. Activity by Berwick and Vendome forced Eugene to turn his attention to the safety of Marlborough and the covering army. Twenty-six battalions and seventy-two squadrons were stripped from the besieging army and sent to
Marlborough bringing his total effective force up to about 80,000 men. To entice the French army into a general battle, Marlborough allowed the French to deploy on an open plain with easy access to the Allied army. But the French, rent with bitterness and confusion among the highest ranks and defeated in the former battle, had no desire to fight and, two days later (September 8th), they retreated from the general vicinity of Lille.

On September 7, Eugene was able to mount a general assault. By launching an all-out attack, he hoped to be the master of the entire countercoup between Saint Andre to La Madeleine. Allied battalions maintained a continuous fire between 3 and 7 p.m. At 3:30, when two columns of assault made their way out of the trench, they spread wide, enfilading each of the hornworks. The French, however, were in high spirits and were very ready for any hand-to-hand fighting that might be necessary to protect their city. The defenders set off 14 miles and brought the fire of no less than forty-five cannon down upon the assailants. A fierce manounced along the countercoup for three hours, but in the end the Allies were for the most part thwarted. Only lodgments in the outermost salients of each of the hornworks were held. In return, the Allies suffered 6,766 casualties, over ten percent of the entire besieging army.

A second general assault delivered on the 21st met with about the same degree of success. Some additional lodgments along the outer countercoup were gained. The Allies lost a further 2,000 men. The French suffered comparatively little; 400 casualties were sustained in the vigorous defense. The most significant casualty was Eugene himself. Always found in the van of any assault he commanded, Eugene was frequently exposed to the greatest dangers. On this occasion, he was shot in the forehead and forced to retire. For several days it was uncertain whether he would live and the Allies had the greatest anxieties about the continuation of the siege.

The next day, in an effort to raise the morale of the troops, Marlborough led a third assault. The Duke hoped to surprise the enemy during a heavy rainstorm. Though the defenders were well prepared for the attack, the Allies were able to occupy a substantial part of the outer fortifications. The Allies found themselves in a difficult situation. The stout resistance of the French had cost the Allies most of their ammunition. To make matters worse, the regular autumn rains were expected. Should it rain before additional supplies were received, the siege would have to be raised. This course of action was already being advocated by the Dutch deputies attached to the Allied army. Only with the greatest difficulty did Marlborough convince the equivocating deputies to agree to a continuation of the siege.

The French were facing similar problems. By the closing days of September, Boufflers and his garrison had neither time nor resources to man the fronts. On one particular day in October, they were forced to rely on the resources of the local populace. The men, a few hundred of them, had to carry the supplies of food and ammunition from the town to the castle.

The siege of Lille was one of the most significant events of the War of the Spanish Succession. The French army, under the command of the Duke of Burgundy, had been forced to retreat after suffering heavy losses in the Battle of Fleurus. The Allies, led by the Duke of Marlborough and the Duke of Burgundy, had occupied the town and were determined to hold it.

On September 8, the Allies' army under the command of Eugene had launched a general assault on the city. The French were caught off guard and were forced to retreat. The Allies suffered many casualties, but they were able to make significant gains.

Eugene was a skilled tactician and strategist, and he quickly adapted to the changing circumstances. He realized that the French were not prepared to fight a protracted siege, and he ordered his forces to continue the assault. The Allies' success in capturing Lille was a significant victory for Marlborough and his allies, and it demonstrated their superior military capabilities.

The capture of Lille was a turning point in the War of the Spanish Succession. It marked the end of the first phase of the war and set the stage for the next phase, which would be characterized by a series of battles and campaigns.

LEADERS
John Churchill, Duke of Marlborough: Tutored under the great Marechals, Luxembourg and Vauban, Marlborough developed into the greatest military strategist of his time. A great statesman, Marlborough's political acumen was as large as his military genius. His ability to keep the Anglo-Dutch alliance intact as he did to developing strategies to defeat the French. Marlborough was cold and calculating in diplomatic and strategic matters; however, he was bold to the degree of rashness on the battlefield. His tacts proved him as one of France's unheralded heroes. Twice during the war of Spanish Succession it appears that he alone stood between Marlborough and decisive Allied victory.

Pay Vauban: Leader of the Engineers, and a nephew of the designer of the Lille defenses. Pay Vauban distinguished himself both in the French war council and in the busy repair of the threatened breaches.

Prince Eugene of Savoy: An exiled Frenchman, despised by Louis' court, the infirm and frail Eugene, fled Paris to seek his fortunes against the Turks. Upon learning of Eugene's departure, Louis participated in one of the great ironies of the time when he facetiously remarked "How many victories will the petit abbe deprive us of?" Despised because of his personal deformity, Eugene devoted his energy and talent towards military science. Completely adopting Austria as his new home, Eugene became its greatest military leader. The continuation of the Hapsburg Empire during the next century was probably due in great part to the relentless exertions of this one man.

Marquis Frezzelara: Marshal of the French Army, the Marquis was released from prison (where he was being held by a local official for debauchery) by Boufflers to direct the artillery within Lille.

Colonel Sandreski: A gentleman of Silesian extraction he is noted for the coolness with which he handled the Dutch sentries during Luxembourg's daring entry into Lille, Sept. 28, 1708.

Augustus the Strong, Elector of Saxony, King of Poland: Father of Augustus the Weak, his only legitimate child, and three hundred and sixty-four illegitimate children, the legendary Augustus was...
famous for the manner in which he courted women (he would bend a horseshoe with his right hand while holding a large purse of golden ducats with his left). Although he participated in the Allied War council before Lille, he did not participate in the military aspects of the siege.

FRENCH ORDER OF BATTLE AT THE SIEGE OF LILLE

**Garrison Command**
- Marshal de Bousflers
- Lieutenant General de Luxembourg
- Lieutenant General Surville

**Senior Brigadier General**
- Major General de Tournin

**1st Brigade**
- Brigadier de Chouly
- Regiment de Touraine (2 bns)
- Regiment Chateauneuf (1 bn)
- Regiment du Thil (1 bn)
- Regiment de Coetquen (2 bns)

**3rd Brigade**
- Brigadier Massol
- Regiment de Perigord (1 bn)
- Swiss Battalion, Villars-Greder
- Swiss Battalion, Pfiffer

**Spanish Regiment, de Pratamento (1 bn)**
- Spanish Fusiliers (1 bn)

**4th Brigade**
- Brigadier de Mesmes
- Regiment d'Angennes (1 bn)
- Regiment de Razilly (1 bn)
- Regiment de Foix (2 bns)

**Dragoon Brigade**
- Brigadier de Rannes
- Dragoon Rannes Regiment
- Dragoons de Belle-Isle (Col. Fouquet)
- Dragoons of Flanders (Col. d'Aubusson)

**Independent Units**
- Regiment de la Fonds-La-Ferte (1 bn)
- Regiment de Poyannes (1 bn)
- Regiment de Brancas (1 bn)
- Regiment de Caraman (1 bn)
- Invalids Battalion

**Artillery**
- Marshal of Artillery Marquis Frezelières
- King's Artillery
- Royal Artillery
- Naval Artillery
- de Malard Artillery

**Engineers**
- Lieutenant General Puy-Vauban
- Brigadier de Valory
- Robelin Engineer Company
- de Freville Engineer Company
- Aubry Engineer Company

Foulon Engineer Company
Mainbert Engineer Company
Rousseau Miner Company
Mesgrigny Miner Company

DESIGN CREDITS

**Game Design:** David Werden
**Physical Systems and Graphics:** Redmond A. Simonsen
**Game Development:** Brent Nosworthy
**Quadrigame and Game Development:**
- David Werden
- Playtesting: Ken Mativier, Tom Hamilton, Leon Magdziński, Frank Radford, Montreal Wargamers Association
**Rules Editor:** Brad Hessel
**French Translation:** David Isby
**Dutch and German Translation:**
- Anthony Bucelin
**Research Assistance:** Royal Dutch Army War College, Arthur Pigg
**Map Research:** John Butterfield
**Production:** Karen Cantor, Robert A. Degni, Andrew Grosman, Kate Higgins, Ted Koller, Manfred F. Milkuhn, Bob Ryer
### [7.2] ATTRITION TABLE

Number of Units Lost

<table>
<thead>
<tr>
<th>DIE</th>
<th>French</th>
<th>German Confederation</th>
<th>Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### [8.14] AMMUNITION DETERMINATION CHART

<table>
<thead>
<tr>
<th>Game-Turn</th>
<th>Allies Siege Guns</th>
<th>Allies Mortars</th>
<th>French Siege Guns</th>
<th>French Mortars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 12-17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug 18-23</td>
<td>35</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug 24-29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug 30-Sep 4</td>
<td>18</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 5-10</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 11-16</td>
<td>16</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 17-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 23-28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 29-Oct 4</td>
<td>42</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 5-10</td>
<td>11</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 11-16</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 17-22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Numbers represent the number of rounds available to unit types of specified nationalities.

### [8.77] SIEGE BATTERY FIRE RESULTS TABLE

<table>
<thead>
<tr>
<th>Siege Batteries Die</th>
<th>Parallel, Sap Gun Brewery</th>
<th>Bastion Strength of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>MORTARS DIE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- 
- Effect on siegeworks and Bastion Positions/infantry battalions eliminated: D = Damaged; 1 = one battalion eliminated; 2 = two battalions eliminated; n = not applicable. Mortar fire has no effect on siegeworks — only on infantry units positioned in siegeworks.
[9.6] CONSTRUCTION POINT COSTS CHART

<table>
<thead>
<tr>
<th>Terrain</th>
<th>Cost for Parallels and Saps</th>
<th>Cost for Gun Galleries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water outside</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Lille/Rough/Marsh</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Construction of parallels, saps, and gun galleries is prohibited in Lille fortifications, Allied Start Line, parallels, saps, gun galleries, Assault Positions and Bastion Positions.

[14.25] MELEE COMBAT RESULT TABLE

<table>
<thead>
<tr>
<th>Combat Ratio</th>
<th>1-1</th>
<th>2-1</th>
<th>3-1</th>
<th>4-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>0</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>7</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

A = Attacker affected; D = Defender affected; B = Both Attacker and Defender affected. Affected Player must roll die on Morale Hit Table (14.37). Note: Field batteries fire on the 2-1 column; no Defender results apply in field battery fire.

[15.1] SORTIE TABLE

First-line to First-line Combat

Basic Dice Roll Range to Eliminate Opposing Enemy Unit:
2-4

Modifiers:
Add 1 if the Morale Rating of the sortying unit is one level higher than the Enemy (i.e., an A morale against a B morale would roll with a dice range of 2-5).
Add 2 if the Morale Rating of the sortying unit is two levels higher than the Enemy (i.e., an A morale against a C morale would roll with a dice range of 2-3).
Subtract 1 if the Morale Rating of the sortying unit is one level lower than the Enemy.
Subtract 2 if the Morale Rating of the sortying unit is two levels lower than the Enemy.

Compare Friendly unit's Strategic Leader rating to Enemy Strategic Leader rating and apply that number (positive or negative) to the dice roll range for elimination.

Compare Friendly unit's Tactical Leader rating to Enemy Tactical Leader rating and apply that number to the dice roll range for elimination.

Flanking Combat

Basic Dice Roll Range to Eliminate Enemy Unit of Opposing Player's Choice:

<table>
<thead>
<tr>
<th>Morale Rating of Sorting Unit</th>
<th>Dice Roll Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2-7</td>
</tr>
<tr>
<td>B</td>
<td>2-6</td>
</tr>
<tr>
<td>C</td>
<td>2-5</td>
</tr>
</tbody>
</table>

Modifiers:
Compare Friendly unit's Strategic Leader rating to Enemy Strategic Leader rating and apply that number (positive or negative) to dice roll range for elimination.

Add Tactical Leader rating (if any) to dice roll range for elimination.

[14.36] MORALE EFFECTS TABLE

<table>
<thead>
<tr>
<th>Morale Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>C</td>
<td>E</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>C</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>R</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E = unit eliminated; R = unit routed; C = unit cowers; 1,2 = retreat (see Case 14.5); - = no effect.
SEVASTOPOL
Game-Turn Record Track
The Engineer initiative is 4, as per Case 9.23, when an asterisk is indicated on the Game-Turn Record Track.

Rules
[3.0. Major Terrain Types] All references, in the rule to (he Terrain Effects Chart, should be to the Construction Points Cost Chart (9.6).
[6.33] The Russian unit Grand Duke Michael enters during Game-turn 8 (March). This is not noted on the Turn Record Track.
[7.18] “For Game-Turns 8 and 13” should be “Game-Turns 8 through 18.”
[8.99] “May destroy” should be “must destroy.”
[8.99] After “Asterisk =” delete the words “chance of.”
[9.23] The presence of Engineer Initiative is indicated on the Game-Turn Record Track by the presence of an asterisk next to a nation’s construction points.
[10.32] There are 10 Bastion Positions at the Mast Bastion, not 8. In addition, the Russian Engineer does not count as a unit for purposes of deployment.
[10.5] This section refers to undamaged parallels.

LILLE
Counters
All French combat units should not be backprinted.

Map
There are 10 incorrect Star Bastion Positions on the map which should only be Bastion Positions. These incorrect Star Bastion Positions may be recognized by three characteristics: 1) They are not adjacent to the inner city of Lille, 2) each is connected to 5 other Star Bastion Positions, and 3) they are not within the Citadelle.

Rules
[3.5. Repair] Bastion Positions may only be repaired to a Bastion Strength level of 3.
[5.11] All results are listed in terms of Cavalry Squadrons and Infantry Battalions.
[6.24] The case reference should be to Case 5.11, not 5.21.
[10.5] This section refers to undamaged parallels. Forwardmost parallels are defined as the parallels which are closest to any French Bastion Position using the rangeliner to sight from the ranging points.
[10.6] Routed French units within Lille may be counted towards thearrison requirement.
[11.1] If an Assault is initiated, all English units which are currently garrisoning a French Bastion Position must be activated first. English units which are garrisoning French Bastion Positions may be replaced before the beginning of an Assault Phase by other Allied units which are in covering boxes, or behind the Allied Start-Line. Since English units may only be activated for an assault twice, if the English have been used to Assault twice, the Allies may not initiate an Assault until there are no English units garrisoning French Bastion Positions (since all garrisoning units must be activated in an Assault).
[12.0] Procedures: “up two to Bastion Positions” should read “up to three Bastion Positions;” Case 12.32 is correct.
SEQUENCE OF PLAY

1. PLANNING PHASE

2. CASE ARTILLERY PHASE

3. ALLIED SECOND FRONT OPERATIONAL MOVEMENT PHASE

A. Allied Second Front Operational Movement Segment

B. Allied Battery Segment

C. Allied Field Army Segment

D. Allied Tactical Movement Segment

E. Initial Air Support

IMPULSE OUTLINE

within a unit.

4. ASSAULT PHASE

A. Allied Operational Movement Segment

B. French Field Army Segment

C. French Tactical Movement Segment

D. French Field Battery Segment

E. French Air Support

5. FRENCH SECOND FRONT OPERATIONAL MOVEMENT PHASE

A. French Second Front Operational Movement Segment

B. French Battery Segment

C. French Field Army Segment

D. French Tactical Movement Segment

E. French Air Support

6. GAME-TURN INDICATION PHASE

C. French Field Army Segment

B. French Siege Construction Segment

A. French Operational Movement Segment

AND SIEGE CONSTRUCTION PHASE

...
THE ART OF SIEGE

Sevastopol
The First Modern Siege, 1854-55

RULES OF PLAY


1.0 INTRODUCTION
2.0 HOW TO PLAY THE GAME
3.0 GAME EQUIPMENT
   3.1 The Game Map
   3.2 The Playing Pieces
   3.3 Initial Set-Up
   3.4 Game Charts and Tables
   3.5 Glossary of Game Terms
   3.6 Parts Inventory
   3.7 Rules Questions
4.0 SEQUENCE OF PLAY
5.0 RUSSIAN FIELD ARMY INTERVENTION
   5.1 Selection of Battles
   5.2 Effects of Field Army Intervention
   5.3 Field Army Intervention Table
6.0 REINFORCEMENTS AND REPLACEMENTS
   6.1 Deployment of Reinforcements and Replacements
   6.2 Replacement Rate
   6.3 Reinforcement Schedule
7.0 ATTRITION
   7.1 How Attrition Is Applied
   7.2 Attrition Table
8.0 SIEGE BATTERY SUPPLY AND FIRE
   8.1 Ammunition Supply
   8.2 When a Siege Battery Unit is in Supply
   8.3 Which Siege Batteries Are Eligible to Fire
   8.4 Which Targets May be Fired Upon
   8.5 How to Use the Rangefinder for Artillery
   8.6 Effects of Range on Siege Battery Fire
   8.7 Mortars and the Lancaster Battery
   8.8 The Mamelon
   8.9 Siege Battery Fire Table and Its Effects
9.0 SIEGECRAFT CONSTRUCTION
   9.1 Construction Points and Construction Costs
   9.2 Engineer Initiative Bonus and Engineer Effects on Siegework Construction
   9.3 Restrictions on Construction and Repair of Saps and Parallel Siegework Positions
   9.4 Restrictions on Repair and Upgrade of Bastions
   9.5 Construction Between Allied Siege Areas
   9.6 Construction Point Cost Chart
10.0 OPERATIONAL MOVEMENT
   10.1 How to Move Allied Units
   10.2 Allied Operational Movement Between Siege Areas and Supply Boxes
   10.3 Restrictions on Russian Operational Movement
   10.4 Movement of Leaders
11.0 THE ASSAULT PHASE
   11.1 Activation of Allied Units
   11.2 How an Assault Ends
   11.3 Capture of a Bastion and Its Effects
12.0 TACTICAL MOVEMENT
   12.1 Open Field Movement
   12.2 Parallel Line to Parallel Line Movement
   12.3 Intra-Bastion Position Movement
   12.4 Bastion Reserve Position and Transit Box Movement
13.0 RUSSIAN FIELD BATTERY FIRE
14.0 MELEE
   14.1 Which Units May Attack and Which Units May Be Attacked
   14.2 The Melee Combat Results Table
   14.3 The Morale Effects Table
   14.4 Morale Effects
   14.5 Retreat of Infantry Units
   14.6 Advance After Combat
15.0 WINTER
16.0 LEADERS
   16.1 Allied At Start Commanders
   16.2 Replacement of Lord Raglan
   16.3 Replacement of Canrobert
17.0 RUSSIAN MARINE FIELD BATTERIES
18.0 ENFILADE FIRE
19.0 VICTORY CONDITIONS
[2.0] HOW TO PLAY THE GAME

The Players Set-up their Units. After it has been decided who will play the Russians and who will play the Allies, the Players set-up the pieces ("counters") representing their infantry and artillery units on the map. Russian units are deployed within Sevastopol; Allied units are set-up outside the city behind the Allied Start Line. At the start of the game, none of the one-inch long siege work counters are deployed on the map.

The Players Resolve Siege Battery Fire. Both Players possess a number of siege battery units. From Turn to Turn, each player must keep track of his available ammunition, measured in "rounds". Each Turn, after the Planning Phase, each Player may have his siege battery unit fire up to the limit of his available rounds. Generally, the Allied Player will use siege battery fire to weaken the strength of bastions that he intends to assault and to eliminate Russian units deployed in bastions. The Russian Player will use siege battery fire to damage key sections of the Allied siege work system or to eliminate Allied units used in its construction or repair. Since siege battery-caused damage can be repaired, Players will occasionally find it useful to save up ammunition for a concentrated effort.

The Allied Player Executes Siegework Construction and Repair. The Allied Player must devise a strategy which permits him to successfully assault two bastions in the Repair Phase. Repair Phase, because of the effectiveness of Russian field artillery, he cannot simply launch an assault from one of the Allied Start Lines; his troops would be annihilated prior to reaching the walls. Allied troops are less vulnerable to artillery fire when in the siege work. The Allied Player must first construct a siege work system that reduces the open ground that must be traversed during an assault.

The Allied Player builds a siege work system composed of zig-zag approaches (saps) and wide trenches parallel to the enemy fortifications (parallel). When doing so he uses Construction Points which are available to the Players at an historical rate. Experience had shown that siege works had to be built according to strict precepts if the besieger wished to avoid excessive casualties. The axioms and theorems of the "art of fortification" are reflected in the rules regulating how siege work counters are arranged for the purposes of play. The Allied Player may both construct new siege works and repair any damaged by Russian siege battery fire.

The Allied Player Conducts Operational Movement. "Operational Movement" consists of troop movements within the limits of the siege work systems (movement network). The Allied "movement network" consists of the Allied Start Line, the Supply Boxes, and any siege work counters that are connected to it, either directly, or indirectly by means of other intervening siege work counters. In conducting operational movement, the Allied Player redeploys any units within his movement network as he pleases. Operational movement may be used to deploy artillery units at a closer range to Sevastopol and to deploy infantry units in positions from which an assault is possible.

The Allied Player May Conduct Assaults. Assaults may not be conducted for a long time for the Allied Player to construct a siege work system close enough to the city to make success likely. Eventually, however, the Allied Player must assault; siege battery fire and siege work construction alone would never lead to the capture of the city. In this game, the mechanics of assault are simulated in a series of "turns-within-a-turn." In any turn in which the Allied Player determines that he is ready, he announces an assault. The normal course of the Turn is interrupted and the Allied assault is resolved on a tactical level. The Allied Player initiates an assault by moving units out of the parallels and, with the aid of the Range Finder, through "open terrain," towards the Russian fortifications. The Russian Player responds by attempting to destroy or rout Allied units through his Field Battery artillery fire. Allied units that have succeeded in reaching an Assault Position immediately adjacent to a Russian bastion may be used to conduct Melee attacks against Russian units in that bastion. Successful attacks allow the Allied Player to advance his units into the bastion. The Russian Player may then conduct Melee attacks against Allied units. In turn, each Player has five opportunities to conduct Melee attacks, after which the assault is considered to have ended and its success or failure is determined.

The Russian Player Conducts Operational Movement. The Russian Player redeploys his infantry and/or field battery units anywhere within his movement network. The Russian movement network consists of all bastions, "in-transit" Boxes, and Reserve Boxes within Sevastopol plus the Russian Supply Box and the Mamelon bastion.

The Russian Player Executes Siegework Construction and Repair. The Russian siege works consist of the seven bastions of Sevastopol proper plus the Mamelon bastion. The Russian Player must strive to keep his bastions sufficiently fit to repel any Allied storming attempts. With the aid of his Siege Gun and Melee attacks, the Russian Player can damage from Allied siege guns and even upgrade a bastion's capacity to resist an assault beyond its original strength. He also uses Construction Points which are available according to an historically determined rate.

The Actions described above constitute a complete Game-Turn. The Players proceed to conduct as many more Game-Turns as required until either Player wins.

[3.0] GAME EQUIPMENT

[3.1] THE GAME MAP

The 22 1/2" x 34" map sheet displays a detailed period engraving of Sevastopol and the surrounding areas at the time of the siege. The map has been reproduced to the scale of 150 yards to the inch. The following features have been added to the original map to regulate play of Siege of Sevastopol.

Allied Start Line: This line portrays the original siege lines which were constructed prior to the "active" siege of Sevastopol. Allied units are placed behind this line at the beginning of the game.

Allied Start Line Activation Date: Printed on the Map behind the French Right Siege Areas are activation dates. Allied units may not be moved to or placed in these Siege Areas before the Date printed on the map.

Assault Position: An Assault Position is a dot outside a bastion which is connected to a Bastion Position within a Bastion.

Bastion Position: A Bastion Position is a dot within a Bastion.

Bastions: The defensive perimeter of Sevastopol comprises a number of bastions. Each bastion is made up of interconnecting dots (bastion positions). Assault Positions outside the bastion for assaulting Allied units, and a Bastion Reserve Box for placing units in reserve "under-cover" and for transporting Russian units to and from other bastions.

Mamelon 'In-Transit and Reserve Boxes: These boxes are a normal part of the movement network. However, they are located within Sevastopol so that they do not interfere with the map around the outer position of the Mamelon.

Supply Boxes: There are three Supply Boxes: the Kannetch Supply Box for the French; the Balaklava Supply Box for the British; and the North Shore Supply Box for the Russians. Units must be deployed in these boxes to insure the supply of ammunition.

Major Terrain Types: The terrain types are indicated by color (see Terrain Key on map). Their effect on play is shown on the Terrain Effects Chart (see Chart Sheet).
[3.3] INITIAL SET-UP

At the start of play, all Russian at-start combat units and field battery units are placed anywhere on the map within the Russian Movement Network. Bastion Strength Level 3 markers are placed next to each Bastion. For the Allies, the French at-start combat units and siege guns are placed on the map behind the French Left Siege Area Start Line, and the British at-start combat units and siege guns are placed behind the British Siege Area Start Line. The Russian Player then places their mortar and siege gun units in a Russian Firing Box (labeled M or S) of the appropriate nationality. The Allied Player then places their mortar and Lancaster battery unit in Allied Firing Boxes. Finally, both players place their Engineer Officers and the Allied Commander in Chief (behind the Start Line or within Sevastopol) in the Siege Area of their choice. All units which are not noted on the counter as reinforcements are placed on the map; the following is included for reference purposes.

[3.3.1] British At-Start Set-Up

Gren/GD/1 (Grenadier Guards), SF/GD/1 (Scots Fusiliers), CS/GD/1 (Coldstream Guards), 42/HD/1 (Blackwatch), 79/HD/1 (Cameron), 93/HD/1 (Sutherland), 41/R/2, 47/R/2, 49/R/2, 30/L/2, 55/L/2, 95/L/1, 1/4 (Derbyshire), 1/4/R/3, 4/R/3, 28/R/3, 38/R/3, 44/L/3, 50/L/3, 60/L/3, 68/L/3, 20/R/4, 21/R/4, 63/R/4, 46/L/4, 56/L/4, 1RF/L/4 (Rifle), 7/R/LT (Royal Fusiliers), 23/R/LT (Royal Welsh Fusiliers), 33/R/LT (Duke of Wellington), 19/L/LT (Green Howards), 77/L/LT (Second-Middlessex), 88/L/LT (Cannaburg Rangers), Naval 1, Naval 2, Siege Batt 1, Mortar 1, Batt. Lance., Commander-in-chief Lord Raglan, Engineer Officer Burgoyne.

[3.3.2] French At-Start Set-Up

7/1/1, 120V/1/1, LEG/1/1, 20/2/1, 27/2/1, 50/1, 320V/1/2, 1TIR/1/2, 7LEG/2/2, 6/2/2, 220V/1/3, 3MAR/1/3, 20LEG/2/3, 22LEG/2/3, 19/1/4, 26/1/4, 39/2/4, 74/2/4, Siege Batt. 1, Mortar 1, Commander-In-Chief Canrobert, Engineer Officer Bizot.

[3.3.3] Russian At-Start Set-Up

Marine batt 1, Marine batt 2, Marine batt 3, Marine batt 4, Marines 1, Marines 2, Marines 3, Marines 4, Gar 1, Gar 2, Gar 3, Gar 4, Siege Batt. 1, Siege Batt. 2, Siege Batt. 3, Siege Batt. 4, Mortar 1, Field Batt. 1, Field Batt. 2, Field Batt. 3, Field Batt. 4, Engineer Officer Todleben.

[3.4] GAME CHARTS AND TABLES

Various visual aids are provided to simplify and illustrate certain game functions. These aids include the Russian Field Army Intervention Table, Ammunition Determination Chart, Ammunition Supply Track, Siege Battery Fire Table, Terrain Effects Chart, Melee Combat Results Table, Morale Effects Table, and Impulse and Game-Turn Record Tracks.

[3.5] GLOSSARY OF GAME TERMS

**Allied Movement Network:** The Allied Movement Network consists of the off-map supply boxes and any portion of the game map which is behind an activated Allied Start Line. In addition, the Allied Movement Network extends out from any activated Allied Start Line through contiguous siegegough counters which are controlled by the Allied Player. Parallel Line: A Parallel Line is one parallel counter or more which has been placed “in line” with front corners touching and adjacent to one another.

**Repair Upgrade:** If a Russian Bastion is constructed to a higher Bastion Strength Level than 3, it is considered Upgraded. If a Russian Bastion is damaged and is rebuilt up to and including a Bastion Strength Level of 3, it is considered Repaired.

**Russian Movement Network:** The Russian Movement Network consists of the Bastion Positions within each Bastion, the Bastion Reserve Boxes that are connected to each Bastion, the In Transit Boxes which connect some Bastion Reserve Boxes to one another, and the Russian Supply Box.

**Rangefinder:** The Rangefinder is used for calculating ranges for Artillery fire. The Rangefinder is printed on the base of the counter sheet and must be cut out before play.

**Siege Battery:** Siege Battery is a term which is used to refer to mortar, siege gun, and Lancaster gun artillery units as a group.

**Siegework Position:** Siegework Position is a term which is used to refer to saps and parallel counters.

**Limbered and Unlimbered:** Allied siege gun units may be fired if in supply and unlimbered (face up). If an Allied siege gun is moved, it is inverted to show that it is limbered and unable to fire. If a limbered siege gun remains in place during the Allied Operational Movement Phase, it may be unlimbered.

[3.6] PARTS INVENTORY

A complete game of Sevastopol contains:

- One rules booklet
- One 22” x 34” game map
- 200 die-cut single-size and 100 die-cut double-size counters
- One sheet charts and tables
- One plastic die
- One game box assembly

If any of the above parts are damaged or missing, write:

Customer Service
Simulations Publications, Inc.
44 East 23rd Street
New York, N.Y. 10010

[3.7] RULES QUESTIONS

Questions concerning the rules for Siege of Sevastopol will be answered if phrased in such a way that a simple yes or no reply will suffice and if the questions are accompanied by a stamped, self-addressed envelope. Mark the envelope “Rules Questions: Siege of Sevastopol.”

[4.0] SEQUENCE OF PLAY

**GENERAL RULE:** Siege of Sevastopol is played in sequenced Turns called Game-Turns, each of which represents a
period of two or four weeks. There are 18 Game-Turns in a complete game. Each Game-Turn is composed of six separate Phases. Each of these Phases is broken down into a number of Segments. All action must take place in the following sequence of Phases and Segments.

**SEQUENCE OUTLINE**

1. **PLANNING PHASE**

   A. **Russian Field Army Intervention Segment:** During certain Game-Turns, the Russian Player has the option of announcing an attempt to relieve Sevastopol. Refer to Field Army Intervention (Section 5.0).

2. **Reinforcement/Replacement Segment:** Both Players determine what Reinforcements and/or Replacements (if any) are available and place them on the map (Section 6.0).

3. **Attrition Segment:** During certain Game-Turns (as indicated on the Game-Turn Record/Reinforcement Track), each Player must roll the die to determine losses from weather and disease, as outlined in the Attrition Rules (Section 7.0).

2. **SIEGE BATTERY PHASE**

   A. **Ammunition Supply Segment:** Both Players determine how much ammunition is available for their siege gun, mortars, and Lancaster gun units.

   B. **Siege Battery Fire Segment:** The Players may now fire their siege batteries (Section 8.0).

3. **ALLIED SIEGE CONSTRUCTION AND OPERATIONAL MOVEMENT PHASE**

   A. **Allied Siege Construction Segment:** First, the Allied Player “flies” any of his units which were used for construction during the previous Game-Turn. Then the Allied Player may have his units construct or repair any number of saps or parallels up to the limit of his available Construction Points (Section 9.0).

   B. **Allied Operational Movement Segment:** The Allied Player may move all, some, or none of his units utilizing operational movement, providing that each unit moved was not used to construct or repair siege works in the preceding Segment. He may either move or unload any siege gun unit (Section 10.0).

4. **ASSAULT PHASE**

   The Assault Phase occurs only if the Allied Player wishes to conduct assaults during the current Game-Turn. If he does not wish to do so, the Assault Phase is omitted. An Assault Phase consists of up to five assault impulses, each of which may be considered a “turn within a turn.”

**ASSAULT IMPULSE OUTLINE**

A. **Initiative Segment:** The Allied Player determines the number of French and British units which may assault by determining the initiative of each Allied commander-in-chief (Section 11.0).

B. **Allied Tactical Movement Segment:** Utilizing Tactical Movement assaulting units in the forward parallels may be advanced out of the trenches. Units in open terrain may be moved forward (Section 12.0).

C. **Russian Field Battery Segment:** The Russian Player resolves field artillery attacks against the assaulting units (Section 13.0).

D. **Allied Melee Segment:** Allied units deployed in Bastion and/or assault Positions may melee (attack) Russian units in adjacent Bastion Positions. Melee assault results are applied immediately (Section 14.0).

E. **Russian Tactical Movement Segment:** The Russian Player may now move his units.

F. **Russian Melee Phase:** Russian units may melee (attack) adjacent units. Results are applied immediately.

   The Players execute Segments “A” through “F” once and then Segments “B” through “F” up to four more times; each time through constitutes one Assault Impulse.

5. **RUSSIAN OPERATIONAL MOVEMENT AND SIEGE CONSTRUCTION PHASE**

   A. **Russian Operational Movement Segment:** The Russian Player may move all, some, or none of his units.

   B. **Russian Siege Construction Segment:** The Russian Player may have his units construct or repair bastions up to the limit of his available Construction Points (see Section 9.0).

6. **GAME-TURN INDICATION PHASE**

   The Game-Turn Marker is advanced one space on the Game-Turn Record Track to signal the passage of one Game-Turn, unless the Allied Player has fulfilled his victory criteria, in which case the game is over.

[5.0] RUSSIAN FIELD ARMY INTERVENTION

**COMMENTARY:**

The Russian field army attacked the flanks of the Allied siege lines and their supply lines three times during the Crimean Campaign. The basic aim of all these battles (Balaklava, Inkerman, and Tchernaya) was to break the Allied siege of Sevastopol. Though all these attacks were ultimately unsuccessful, they succeeded in applying constant pressure upon the Allied command.

**GENERAL RULE:**

During the Russian Field Army Intervention Segment, the Russian Player has the option to initiate intervention by his off-map field armies. He may do so a maximum of three times per game. Russian success in any of these off-map battles can either render direct aid to the Russian Player or hinder the Allied Player.

**PROCEDURE:**

When the Russian Player announces his decision to resolve a field army intervention attempt during the current Game-Turn, the Field Army Intervention Table (5.3) is consulted, and the Russian Player selects any one of the three battles that he has not chosen earlier in the game. He then rolls the die and cross-indexes the result with the column on the Field Army Intervention Table corresponding to the selected battle to determine the results.

**CASES:**

[5.1] SETTING OF BATTLES

[5.11] The Russian Player may select each of the three battles once, opting for field army intervention a maximum of three times.

[5.12] The Russian Player is free to select the three battles in any order, so long as no more than one battle is selected in any one Game-Turn. Exception: The battle of Tchernaya may not be selected prior to the March 1855 Game-Turn.

[5.13] Field army intervention may not occur during Game-Turns indicated as winter on the Game-Turn Record Track.

[5.14] The Russian Player may not opt for field army intervention on two consecutive Game-Turns.

[5.2] EFFECTS OF FIELD ARMY INTERVENTION

[5.21] If the Russians are successful at Balaklava, British supply lines are interdicted, and the supply of English artillery ammunition is affected.

[5.22] If the Russians are successful at Inkerman, Allied troops must be diverted from the siege effort to counter the Russian advance.

[5.23] If the Russians are successful at Tchernaya, a Russian corridor to Sevastopol from the outside is created and the flow of Russian reinforcements into the city is increased (the specific effects of each battle are listed on the Russian Field Army Intervention Table, 5.3).

[5.3] RUSSIAN FIELD ARMY INTERVENTION TABLE

(see chart sheet)

[6.0] REINFORCEMENTS AND REPLACEMENTS

**GENERAL RULE:**

During the game, both Players receive additional infantry and/or artillery units as reinforcements as noted on the Game-Turn Record Track. A reinforcing unit’s Game-Turn of arrival is listed on the counter. Both Players are allotted, by nationality, a number of replacement units each Game-Turn. For each allotted replacement unit, the Player may return to play one infantry unit which, in a previous Game-Turn, was destroyed either by combat or attrition. The number of replacement units allotted each nationality depends on that nationality’s replacement rate.

**PROCEDURE:**

During each Reinforcement/Replacement Segment, the Players determine what reinforcements and/or replacements are due and deploy all such units either on the map or in an off-map Supply Box.

**CASES:**

[6.1] DEPLOYMENT OF REINFORCEMENTS AND REPLACEMENTS

[6.11] Allied reinforcements and replacements are placed behind the appropriate section of the Allied Start Line according to nationality (exception, see Case 6.12). Alternatively, British units may be placed in the Balaklava Supply Box and French units in the Kamiechi Supply Box. Mortar units must be placed directly in Mortar Firing boxes. Once deployed, mortar units may never be moved.

[6.12] French reinforcements/replacements may be placed in the French Right Siege Area only if it has been previously occupied by French units.

[6.13] Russian reinforcements/replacements may be placed anywhere within the Russian movement network except within an Enemy-occupied bastion or its Bastion Reserve Box. Alternately, Russian units may be placed in the North Shore Supply Box. Russian mortar and siege gun units must be placed in a Firing Box.


[6.15] Only destroyed infantry units of the appropriate nationality can be utilized as replacements. Russian marine may never be replaced once destroyed. Replacements are not transferable between the British and French armies.

[6.2] REPLACEMENT RATE

Each nationality’s replacement rate indicates the
number of infantry units of that nationality which may be replaced per Game-Turn.

[6.21] At the start of the game, the Russian Player receives one replacement unit each Game-Turn. The Russian replacement rate may be increased (see 5.3, Field Army Intervention Table).

[6.22] The Allied Player receives one French replacement unit each Game-Turn.

[6.23] Beginning with the March 1855 Game-Turn and continuing thereafter each Game-Turn, the Allied Player receives one British replacement unit.

[6.24] If there are no eliminated units of a given nationality available as replacements, those replacements are lost (they may not be accumulated from Game-Turn to Game-Turn).

[6.3] REINFORCEMENT SCHEDULE

[6.31] British Reinforcements

MARCH:
Siege Gun Batt. 2

FRENCH REINFORCEMENTS

OCT II:
21/1/5, 41/1/5, SLEG/2/5, 4ZOV/2/5,
4/LEG/BZ, 2/LEG/BZ, Siege Gun Batt. 2

DEC:
1/1/6, 2/1/6, 1/2/6, 2/2/6

JAN:
1/1/7, 1/2/7, 2/1/7, 2/2/7

FEB:
1/1/8, 2/1/8, 1/2/8, 2/2/8

APRIL I:
1/GRAND/GD, 2/GRAND/GD, 1/VOLT/GD,
2/VOLT/GD, 1/ZOVUE/GD, Moriar 2

JULY I:
Siege Gun Batt. 3

[6.32] French Reinforcements

OCT II:
MARCH II:
Grand Duke Michael

APRIL I:
Toleski, Ougliech, Tcherenigov, Vilno, Ymman-
strand, Vladmir, Tomsk, Volynia, Minsk,
Bialystok, Sudal, Kamchatka, Ekatierburg,
Kunz, Okhoski.

MAY I:
North Shore, Alexopol, Kremenouch, 11/Engi-
neer

JUNE:
Mouromsky, Penov, Praqo, Zemescz

JULY I:
Pollava, Lunbln, Zeblinski

[7.0] ATTRITION

COMMENTARY:
The Crimean War made Florence Nightingale famous, and not without reason. Poor logistical support combined with the generally hostile environment to render disease as deadly as siege guns.

GENERAL RULE:
During the Attrition Segment of Game-Turns 5, 6, 7, 8 and 13, infantry units may be lost through attrition, which reflects the combined effects of disease and seasonally inclement weather.

PROCEDURE:
During the Attrition Segment, the die must be rolled once for each nationality, and the result cross referenced with the appropriate column on the Attrition Table (7.2). Results are applied immediately.

CASES:

[7.1] HOW ATTRITION IS APPLIED

[7.11] The die is rolled separately for each na-
tionality to resolve attrition, and any resulting
losses are applied immediately against units of that
nationality (only).

[7.12] The owning Player selects which particular units are to be eliminated from among any in-
fantry units of the appropriate nationality currently deployed on the game-map or in a Supply Box. Note: Only infantry units may be eliminated by at-
trition.

[7.13] During Winter Game-Turns, 1 is added to all Attrition die roll results.

[7.14] For Game-Turns 8 and 13, 1 is subtracted from the British attrition die roll results. (Florence Nightingale had set up a field hospital in Turkey).

[7.15] For Game-Turn 13, 1 is added to the French die roll result.

[7.2] ATTRITION TABLE

(see chart sheet)

[8.0] SIEGE BATTERY SUPPLY AND FIRE

COMMENTARY:
At Sevastopol, artillery dictated the pace and nature of the struggle. To counter the cannon, shovels were more effective weapons than rifles. Cannon determined that men would be forced to live in the parallels and saps for months. If not for severe artillery ammunition supply limitations, the siege would not have continued a bloody stalemate for years.

GENERAL RULE:
There are three types of siege battery units: siege guns, mortars, and the Lancaster Battery. Each Game-Turn the players have the opportunity to stockpile a certain number of additional rounds of ammunition (as listed on the Ammunition Determination Chart, 8.18) for each type of siege bat-
tery unit. Any and all siege battery units which are in supply and deployed in firing position are eligi-
ble to fire. Targets must be in range (1200 yards) as measured by the range finder (exception: see Case 8.71). Generally, the shorter the range, the more effective the fire. Siege battery fire reduces the strength of bastions and damages siegeworks; siege battery fire may also destroy infantry units deployed in bastions and bastion reserve positions and in siegeworks. Such fire may also disrupt Allied artillery units deployed in siegeworks. Note: Field artillery units may not be fired during the Siege Battery Fire Segment.

PROCEDURE:
During the Ammunition Supply Segment, both Players check the Ammunition Supply Chart to determine whether sufficient units are deployed in their respective Supply Boxes to enable additional ammunition to be received (if any is due). Both Players' markers on the Ammunition Supply Track (8.19) are then adjusted to reflect any addi-
tional ammunition received. During the Siege Bat-
tery Fire Segment, both Players may fire all, some, or none of their eligible siege battery units. The Allied Player first has any of his eligible units fire rounds until he chooses to cease fire (or runs out of ammunition). Then the Russian Player has any of his eligible units fire rounds. The procedure for each individual round is as follows:

Step 1: The firing Player selects an eligible siege battery unit to fire and a target, using the Range Finder to determine the range.

Step 2: The firing Player rolls the die and modifies the result to account for range considerations.

Step 3: On the Siege Battery Fire Table (8.99) the horizontal line corresponding to the modified die roll result is cross referenced with the vertical col-
umn corresponding to the target's Siegework Strength Level to find the result (if any) of that round. Note: The horizontal line corresponding to a particular die roll on the Siege Fire Table varies depending on the type of the firing unit.

Step 4: All results are applied immediately.

Step 5: The firing Player adjusts the marker on his Ammunition Supply Track to reflect the expendi-
ture of one round of ammunition.

CASES:

[8.1] AMMUNITION SUPPLY

Ammunition Supply is measured in rounds and is kept track of separately by nationality for siege guns, mortars, and the Lancaster Battery. A round is expended each time a siege battery unit is fired; the number of currently available rounds is displayed on the Ammunition Supply Track.

[8.11] The Russian Player may receive additional siege battery unit ammunition during the Am-
munition Supply Segment if and only if sufficient Russian units are deployed in the North Shore Supply Box. The number of additional rounds available as well as the number of Russian units which must have been deployed (during the preceding Russian Operational Movement Segment) to receive the ammunition are listed on the Ammunition Supply Chart.

[8.12] The Allied Player may receive additional French and British siege battery unit ammunition if and only if sufficient units are deployed in the Kamitch and Balachava Supply Boxes, respective-
ly. See the Ammunition Supply Chart.

[8.13] If sufficient units are deployed in the Supply Box corresponding to a particular nationality, the markers on the Ammunition Supply Track are adjusted to reflect the addition of the indicated number of rounds (by type) for that nationality.

[8.14] If insufficient units are deployed in the Supply Box corresponding to a particular na-
tionality, any additional ammunition scheduled to become available that Game-Turn is lost instead.

[8.15] A maximum of two French units may be deployed in the Balachava Supply Box to help the British to satisfy the requirements of Case 8.12. British units may never be deployed in the Kamitch Supply Box.

[8.16] A siege battery unit may not fire unless one or more rounds are available (as displayed on the Ammunition Supply Track). Only rounds of the appropriate type and nationality may be fired (e.g., a British mortar unit may not fire if no British mortar rounds are available, regardless of French mortar round availability).

[8.17] Unused rounds may be accumulated from Game-Turn to Game-Turn indefinitely.

[8.18] Ammunition Determination Chart

(see chart sheet)

[8.19] Ammunition Supply Track

(see map)

[8.2] WHEN A SIEGE BATTERY UNIT IS IN SUPPLY

[8.21] A French or British siege gun unit is in sup-
ply if one or more French (or British) siege gun rounds are available and if a path of contiguous siegework counters (which are not damaged) can be traced between the parallel in which the siege gun unit is deployed and the Allied Start Line (or the siege gun itself is behind the Start Line).
**[8.22]** French (or British) mortar units, the Lancaster Battery, Russian siege gun units, and Russian mortar units are in supply if (respectively) one or more specially effective against infantry deployed behind field fortifications. The Lancaster gun was the first rifled cannon.

**[8.3]** WHICH SIEGE BATTERIES ARE ELIGIBLE TO FIRE

**[8.31]** Russian siege gun and mortar units must be deployed in the Mortar or Siege Gun Box of a bastion in order to fire.

**[8.32]** Only unlimbered (Case 3.5) Allied siege gun units which are deployed in parapets or behind the Start Line, are capable of firing.

**[8.33]** Allied mortar units and the Lancaster Battery unit may fire only if they are deployed respectively in Mortar Firing Boxes or the Lancaster Battery Firing Box.

**[8.34]** Only siege battery units that are in supply (see Case 8.2) may fire. Note: There is no limit on the number of available rounds any one siege battery unit may fire in any one Game-Turn.

**[8.4]** WHICH TARGETS MAY BE FIRED UPON

**[8.41]** Supplied Russian siege guns and mortar units may fire at Allied siegeworks (parallel and saps) which are within range.

**[8.42]** Supplied Allied siege guns, mortars, and the Lancaster Battery may fire at Russian bastions which are within range.

**[8.43]** Infantry units, artillery units, and leaders may never be fired upon by siege battery units. Only siegeworks, bastions, and Bastion Reserve Boxes may be fired upon. Note, however, that infantry and artillery units may be affected by siege battery fire (see Case 8.9, Siege Battery Fire Table and its effects).

**[8.5]** HOW TO USE THE RANGE FINDERS FOR ARTILLERY

The edge of the RangeFinder is placed against the map such that it touches both the Range Point of the sighting unit and the Range Point of the target. The "0 yards" indication is lined up with the Range Point of the firing unit. Players determine the point along the RangeFinder on which the target lies. The range is the next higher indicated value on the RangeFinder. Printed on the RangeFinder are segments which delineate the effects of Range on Artillery Fire (Siege and Field). These effects are represented in terms of modifications to the roll results. For example, any die roll result for a siege battery fire resolution at a range of 450 yards would be decreased by 1.

**[8.51]** When firing a siege gun or mortar unit deployed in a Firing Box of a Bastion, the Russian Player calculates the range from the Range Point of that bastion to the Range point of the target siegework counter.

**[8.52]** When firing a siege or mortar unit deployed in a parallel or Firing Box, the Allied Player calculates the range from the center of the firing siege battery unit to the Range Point of the target bastion.

**[8.6]** EFFECTS OF RANGE ON SIEGE BATTERY FIRE

**[8.61]** The range of the Lancaster Battery is unlimited. Range never affects the fire of the Lancaster Battery.

**[8.62]** The range of mortar units is unlimited. However, mortars are subject to the range considerations. If a mortar is firing at a range above 1200 yards, the range modifier used is the same as for 1200 yards.

**[8.63]** The maximum range of siege guns is 1200 yards, with the effectiveness of fire decreasing as the range is increased.

**[8.7]** MORTARS AND THE LANCASTER BATTERY

Due to the nearly vertical trajectory of their fire, mortars are more especially effective against infantry deployed behind field fortifications. The Lancaster gun was the first rifled cannon.

**[8.71]** There is no absolute range limitation on the fire of mortars or the Lancaster Battery. However, the effectiveness of mortar fire may be affected by range (see Case 8.6). The effectiveness of the Lancaster Battery is never affected by range.

**[8.72]** If no Russian infantry units are deployed in the Bastion Reserve Box, a bastion which is fired upon by an Allied mortar or Lancaster Battery, Russian infantry units in the Bastion's Reserve Box are used to satisfy losses inflicted by that fire.

**[8.8]** THE MAMELON

The Mamelon was a forward Russian position anchored by the Kamachaka Redoubt which was situated on the hill of the same name. The position was known as a "barbican" — a "breakwater" — upon which the advancing tide of the Allied assault would spend much energy.

**[8.81]** The Siegework Strength Level of the Mamelon is always lower than its actual Strength for purposes of resolving siege battery fire. Thus, the Siegework Strength level of the Mamelon may never be reduced below 2 for purposes of siege battery fire resolution.

**[8.82]** Should the Mamelon be captured, the bastion may be considered to be a free six parallel start line for purposes of French siegework construction. That is, two sap units may be constructed out from the Mamelon.

**[8.83]** The Mamelon in Transit and Reserve Boxes are located within Sevastopol to conserve space on the map. The two Bastion Positions of the Mamelon closest to Sevastopol are considered to be connected to the Mamelon Bastion Reserve Box for all purposes.

**[8.9]** SIEGE BATTERY FIRE TABLE AND ITS EFFECTS

Each result on the Siege Battery Fire Table is composed of three numbers. The first number indicates damage to the siegeworks, expressed in terms Siegework Strength levels destroyed (if the fire is directed at an Allied siegework counter, a "hit" is considered a "wound" indicating that it is damaged). The current Construction Strength of each bastion is always indicated with a Siegework Strength Level marker (see Case 9.4). The second number indicates how many infantry units have been destroyed.

**[8.91]** The Strength level of a Russian bastion may be reduced only by Allied fire directed at that bastion. Only Allied infantry units deployed in a Bastion Position (dots) may be destroyed by artillery fire only if it is directed at that bastion. The level of a bastion may never be reduced below zero.

**[8.92]** Russian units deployed in Bastion Reserve Boxes may be destroyed by fire directed at the bastion by Allied mortar units or the Lancaster Battery. If and only if the Siegework Strength level of a Russian bastion is zero, all Russian infantry units currently deployed in the corresponding Bastion Reserve Box are considered to be in the bastion for purposes of siege battery fire resolution. Consequently such units may be destroyed by siege gun fire directed at the corresponding bastion only if the Bastion Strength is zero.

**[8.93]** Leaders, heavy mortars, and Russian artillery units are never affected by Allied siege battery fire.

**[8.94]** Only Allied units deployed in siegework positions may be destroyed by Russian siege battery fire.

**[8.95]** Allied siegeworks may be damaged by Russian siegeworks. The counter representing the damaged siegework position is inverted on the map to indicate this status. Such siegeworks must be repaired before any new construction can take place within that Siege Area (see Case 9.3). No unit may be moved through a damaged siegework position during Allied operational movement. Allied units may not be deployed in a parallel during operational movement if that parallel has been repaired during the preceding Allied Construction Segment. (A parallel which has been repaired during the preceding Allied Construction Segment is evidenced by the presence of an inverted unit.)

**[8.96]** Any Allied artillery unit deployed in a parallel which is subsequently damaged is considered limbered and is placed behind the Allied Start Line. Allied fire may never be destroyed by Russian siege battery fire.

**[8.97]** Surviving Allied infantry units deployed in a siegework position damaged by siege battery fire must be placed in the nearest Allied siegework position that satisfies the following two conditions:

* unoccupied by any Allied unit
* nearer to the Allied Start Line than the damaged siegework position.

Should no such siegework position exist, the units are placed behind the corresponding sector of the Allied Start Line.

**[8.98]** Certain results on the Siege Battery Fire Table indicate an ammunition dump explosion. If this occurs, the firing Player may destroy two of his rounds (any type). The destroyed ammunition must correspond in nationality to the firing siege battery unit.

**[8.99]** Siege Battery Fire Results Table (see chart sheet)

**[9.0]** SIEGework CONSTRUCTION

**COMMENTARY:**

Siegework construction represents the actual digging of siegeworks and sapping toward the Russian defenses positions that were constructed in order to move combat units and artillery closer to the Russian bastions so that the casualties taken by the assaulting troops is reduced as the distance between the "jump off" position and the Enemy defense position is reduced. Artillery was moved closer to be more effective in blasting breaches for Friendly assault troops to enter. Siege construction also represents the interlocking defense bastions by engineers and the strengthening of those bastions against Enemy attacks.

**GENERAL RULE:**

Both Players have the capacity to construct and repair siegeworks. This capacity is measured in terms of Construction Points. The Allied Player expend Construction Points to build saps and parallels and to repair those which have been damaged. The Russian Player seeks to repair and upgrade the strength of his bastions. Construction, upgrade, and repair require the presence of troops (to do the digging) as well as Construction Points. Construction and upgrade (but not repair) require the presence of an engineer. Engineers may provide "bonus" Construction Points. Allied construction is limited by the requirements that systematize the construction of siegeworks, and also by terrain considerations.

**PROCEDURE:**

During the Allied Siege Construction Segment, the Allied Player first "flips to the front side" any ...
fantry unit counters which were utilized for construction during the previous Game-Turn. He then consults the Game-Turn Record Track (see game-map) to determine how many British and French Construction Points he is due. He then rolls the die for each nationality's engineer officer to determine if his Construction Points are augmented by that engineer's Initiative Bonus. He then expends each nationality's Construction Points as he chooses to repair any destroyed parallels or saps, and in Siege Areas in which an engineer is present, he may expend Construction Points of the corresponding nationality to construct new saps and/or parallels in accord with the restrictions of Case 9.3. As each new sap or parallel counter is placed on the map, the Allied Player must deploy two infantry units on the counter and flip them to their backside to indicate that they are engaged in construction. Units engaged in construction and repair (inverted to their backside) may not engage in operational movement or assault during that Game-Turn.

During the Russian Siege Construction Segment, the Russian Player determines how many Construction Points he is due. He then rolls the die to determine if his Construction Points are augmented by his engineer officer's Engineer Initiative Bonus. He may expend Construction Points to "repair" (up to a siegework strength value of 3) any bastions. In addition, in the Siege Area in which the Russian engineer is deployed, the Russian Player may expend Construction Points to "upgrade" the siegework strength of a bastion with a strength of 3 or greater. The Russian Player then changes the strength level number for any bastions that have been repaired or upgraded to reflect the increased strength level. Note: The Russian Player may not move any units during the Russian Siege Construction Segment.

CASES:

[9.1] CONSTRUCTION POINTS AND CONSTRUCTION COSTS

[9.11] The expenditure of Construction Points is always optional. A Player is never required to expend Construction Points. However, unused Construction Points may not be accumulated from Game-Turn to Game-Turn.

[9.12] Each Game-Turn, Players are limited to the number of Construction Points listed on the Game-Turn Record Track (plus any engineer Initiative Bonus; see 9.2). A Player may never expend more Construction Points in any Game-Turn than are available to him.

[9.13] British Construction Points may not be used to execute French siegework repair or construction, and French Construction Points may not be used to execute British construction or repair.

[9.14] The basic cost to construct a sap or parallel siegework position is 2 Construction Points. The basic cost may be increased, depending upon the terrain (see Case 9.6, Terrain Effects Chart). If any part of a siegework counter is placed in a terrain type other than "flat," the construction rates for the less advantageous terrain are used. There is a 1 Construction Point cost to repair a sap or parallel, regardless of terrain.

[9.15] Repair of a bastion costs 1 Construction Point per siegework Strength Level. Only bastions with a siegework Strength Level of between zero and 2 may be repaired, and only up to a level of 3.

[9.16] Upgrade of a bastion costs 2 Construction Points per siegework Strength Level. Only bastions with a siegework Strength Level of between 3 and 7 may be upgraded, and only up to a level of 8.

[9.17] Construction Points may never be expended during winter Game-Turns.

[9.2] ENGINEER INITIATIVE BONUS AND ENGINEER'S EFFECTS ON SIEGECREW CONSTRUCTION

The Russian Player has one engineer; the Allied Player has two (one French and one British). Each Game-Turn, the Players roll a die once for each engineer to try to obtain the engineer's "Initiative Bonus" of 2 Construction Points. An engineer must be present in a Siege Area for any construction or upgrading (not repair) to occur.

[9.21] On a die roll of 1 through 4, the Russian Player may use the Russian Engineer's 2 bonus Construction Points in the Siege Area in which the engineer is deployed (only). On a roll of 5 or 6, the bonus Construction Points may not be used.

[9.22] On a die roll of 1 or 2, the Allied Player may use the British Engineer's 2 bonus Construction Points in the British Siege Area. On a die roll of 1 through 3, the Allied Player may use the French Engineer's 2 bonus Construction Points in the Siege Area in which the engineer is deployed (only).

[9.23] As indicated on the Game-Turn Record Track, on certain Game-Turns, the engineer Initiative Bonus (if obtained) for a particular engineer is 4 Construction Points.

[9.24] An engineer must be deployed in a Siege Area for construction or upgrading to be executed (but not for repair).


[9.3] RESTRICTIONS ON CONSTRUCTION AND REPAIR OF SAPS AND PARALLEL SIEGECREW POSITIONS

Allied siegework positions are constructed in a series of lines of parallels joined to one another by perpendicular saps. A parallel line consists of one or more contiguous parallel counters. A sap consists of one sap counter. Only the Allied Player may expend Construction Points to construct saps and/or parallels. Before any new Allied construction may take place in a given siege area during the Allied Siege Construction Segment, all damaged siegework positions in that siege area must be repaired.

[9.31] Any number of saps may be constructed from activated sections of Allied Start Line (see Case 3.1). One end of each sap counter is placed parallel to the Start Line, such that the counter juts out from it at a 90 degree angle.

See Example Below
[9.33] One or two parallels may be constructed at the end of a sap counter. The parallel counter(s) is placed adjacent and at right angles to the sap counter.

Correct

Correct

Incorrect

Incorrect

Incorrect

Incorrect

Incorrect

[9.34] A parallel may be constructed adjacent to another parallel counter. At least one front corner (furthest from the Allied Start Line) of each counter must touch the front corner of the adjacent counter. The counters may not be placed so that a front angle is less than 90°. However, see Case 9.36. See Example Below

Correct

Incorrect

Less than 90°

Incorrect

[9.35] Only one sap may be constructed from a given line for every three parallel counters in that line at the time of construction. That is, a minimum of three parallels must be constructed in one line before a sap can be constructed from that line; a line must consist of at least six parallels to allow the construction of two saps, and so forth. No more than three parallel counters may be constructed from any one sap. That is, for a line to consist of more than three parallels, it must be connected to at least two saps. All such “supporting” saps must be closer to the Allied Start Line than the line is. Note above example.

Correct

Correct

Incorrect

[9.36] A parallel may not be constructed from (or adjacent to) the Allied Start Line. A sap may not be constructed adjacent to another sap counter (exception, see Section 9.5). In each siegework position (sap and parallel) constructed during the Allied Siege Construction Segment, the Allied Player must deploy two infantry units (the unit counters inverted on the siegework counters). In each siegework position repaired, one infantry must be deployed inverted. Only French units may be deployed in French-constructed siegeworks. Only British units

SEVASTOPOL

Start Line

SEVASTOPOL

To Start Line
may be deployed in British-constructed siegeworks (see Case 9.39).

[9.38] Any Allied infantry unit on the map (of the proper nationality) may be deployed to satisfy the requirements of Case 9.37 except units in either Supply Box, the British and French guards division, and the British 1st Division. No unit used for construction and/or repair (inverted on a siegework counter) may be moved during the Operational or Tactical Movement Segments.

[9.39] A siegework is "British" if it is within the British Siege Area. A siegework is "French" if it is within a French Siege Area.

Note: The Allied Player may utilize Siegework Positions newly constructed or repaired in a given Game-Turn to "build on" to the contiguous line which he must trace to the Allied Start Line (see Case 9.32).

In other words, a Siegework counter may be built connecting to a Siegework counter which has just been placed on the Game-map during that turn, and in turn another Siegework counter may be connected to that Siegework counter once it is placed on the map.

[9.4] RESTRICTIONS ON REPAIR AND UPGRADE OF BASTIONS

Only the Russian Player may expend Construction Points to repair and/or upgrade bastions. The current siegework Strength Level of each bastion is indicated with a Strength Level marker, which is placed on the game map next to that Bastion.

[9.41] All bastions begin the game with a siegework Strength Level of 3. This is indicated by placing a 3 Siegework marker next to each Bastion.

[9.42] For each Construction Point expended on the repair or upgrading of a bastion in a Game-Turn, the Russian Player must have deployed one infantry unit in that bastion during a preceding Operational Movement Segment (see Cases 9.15 and 9.16).

[9.43] Any Russian infantry unit that has been moved into a bastion during a previous Operational or Tactical Movement Segment may be used to satisfy the requirements of Case 9.42 for that bastion only. Such units' movement in subsequent Russian Tactical or Operational Movement Segments is never restricted.

[9.44] No bastion may have a siegework Strength Level greater than 3.

[9.5] CONSTRUCTION BETWEEN ALLIED SIEGEE AREAS

The Allied Start Line is divided into three distinct sections delineating Siege Areas (see Case 3.1). This division is due to the presence of major ravines. The British center is considered to be one Siege Area, even though it is separated by a minor ravine. The different sections may be connected by the construction of saps. (This facilitates operational movement; see Case 10.1).

[9.51] Sap counters are required to connect the French Left Siege Area with the British Siege Area. Either British or French units and Construction Points may be used to construct these saps, at the Allied Player's option.

[9.52] Sap counters are required to connect the British Siege Area with the French Right Siege Area. Only British troops and Construction Points may be utilized to construct these saps.

[9.53] Saps constructed between sections of the Allied Start Line are placed end-to-end between the ends of the sections of the line, linking them. This type of construction is the sole exception to Case 9.36.

[9.6] CONSTRUCTION POINT COST CHART (see chart sheet)

[10.0] OPERATIONAL MOVEMENT

GENERAL RULE:
The Players may utilize Operational Movement to move infantry, (or the Allies) siege guns, and (for the Russians) field gun units anywhere within their respective movement networks (see Case 3.5). Operational Movement occurs during the Operational Movement Segment (only) and is limited to the movement network — see Section 12.0, Tactical Movement, for an explanation of movement outside the network. Terrain has no effect. There are limits to the number of units that may be deployed in any one bastion or siegework. Once deployed, mortars, the Lancaster battery, and Russian siege batteries may never be moved.

PROCEDURE:
At the start of his Operational Movement Segment, the Allied Player flips any limbered siege gun counters over to indicate they are unlimbered. During his Operational Movement Segment, each Player may move all, some, or none of his units deployed on the map that are eligible to move within his movement network. Unit by unit, he plans each movement and replaces it on the map in the desired location. All siege gun units moved are considered limbered.

[10.1] HOW TO MOVE ALLIED UNITS

[10.11] The Allied Player may move any infantry units deployed in either of his Supply Boxes, behind the Allied Start Line, or deployed in any siegework position. EXCEPTION: Any infantry unit used to construct or repair siegeworks during the current Game-Turn (inverted) may not be moved.

[10.12] The Allied Player may move any siege gun units deployed behind the Allied Start Line or in any siegework position. All siege gun units moved are considered limbered (see Case 3.5).

[10.13] No more than two infantry units or one infantry and one siege gun unit may be deployed in any one parallel. It is possible to deploy only one siege gun or one infantry unit (or no units whatsoever) in a parallel.

[10.14] No unit may be deployed in a completed sap. (Note that units constructing saps may not be moved and therefore must remain there during the Game-Turn the sap is constructed).

[10.15] The Allied Player must move units so that it is possible to trace a line of contiguous siegework counters and/or the Allied Start Line between the initial position of the unit (at the start of the Operational Movement Segment) and its new position. A unit cannot be moved to positions to which it is impossible to trace a line from the unit's initial position. EXCEPTION: See Cases 10.21 and 10.22.

[10.16] French units may be moved through but not deployed in a British siegework and vice versa (see Case 9.39).

[10.2] ALLIED OPERATIONAL MOVEMENT BETWEEN SIEGE AREAS AND SUPPLY BOXES

French units may be moved to and from the Allied Supply Boxes and the French Left and Right Siege Areas (once the French Right Siege Area is activated — see Case 3.1). British units may be moved to and from the British Supply Box.

[10.21] French units behind the Allied Start Line or deployed in siegework positions (to which a line of contiguous siegework counters may be traced from the start line) may be moved to either Allied Supply Box and vice versa. EXCEPTION: If sap connecting the French Left and Right Siege Areas with the British Siege Areas have not been constructed (see Case 9.5), only French units deployed in the French Left Siege Area at the beginning of the Operational Movement Segment may be moved to a Supply Box and vice versa.

[10.22] British units behind the Allied Start Line or deployed in siegework positions (to which a line of contiguous siegework counters may be traced from the Start Line) may be moved to the British Supply Box, and vice versa.

[10.23] There is no limit to the number of units which may be placed in a Supply Box (see Case 8.1).

[10.24] If and only if saps connect the French Left and Right Siege Areas with the British Siege Area, French units may be moved between those areas during the Operational Movement Segment in accordance with Case 10.15.

[10.25] If saps connecting only one French Siege Area with the British Siege Area have been constructed, French units may be moved between the French Siege Areas, but such movement takes a full Game-Turn to complete. Any unit so moved is removed from the game map for one Operational Movement Segment and returned and deployed in its destination Siege Area during the next Game-Turn's Operational Movement Segment. Note: If a unit is so moved to the French Right Siege Area, it must be deployed behind the Allied Start Line in its Turn of arrival. This restriction does not apply to units moved to the French Left Siege Area.

[10.26] If neither French Siege Area is connected to the British Siege Area, movement of French units between the French Siege Areas takes two full Game-Turns. Units deployed to the French Right Siege Area must be deployed behind the Start Line on the Turn they arrive. For example, if the Allied Player decided to move a French unit from the Left Siege Area to the Right Siege Area during the Operational Movement Segment of Game-Turn 7, he would move the unit from the map, and in the Allied Operational Movement Segment of Game-Turn 9, he would return the unit to the map and could deploy it behind the Start Line in the French Right Siege Area. The Allied Player should note the destination and Game-Turn of arrival of any French units being moved between Siege Areas to avoid confusion.

[10.27] No French units may be moved to the French Right Siege Area under any circumstances until it has been activated (see Case 3.5).

[10.3] RESTRICTIONS ON RUSSIAN OPERATIONAL MOVEMENT

Russian units deployed on the Game-Map may be moved through Operational Movement to any bastion, Reserve Box, In-Transit Boxes and Bastion Positions, or to the Russian Supply Box, providing that:
A. Any bastion or bastion reserve box moved to has not been captured (see Case 1.1.2), and
B. It is possible to trace a path of connected In-Transit Boxes and Bastion Reserve Boxes and/or Bastion Positions from the unit (at the start of the Operational Movement Segment) to its new position which does not include a captured Reserve Box.

[10.31] There is no limit to the number of Russian infantry and/or field artillery units that may be placed in the Russian Supply Box, any In-Transit Box, or any Bastion Reserve Box. EXCEPTION: Only two units maximum may be deployed in the Mamelon In-Transit Box.
[10.32] Only one infantry or field artillery unit may be deployed in each Bastion Position (Russian units may attack into but never enter an assault position). Thus the number of units which may be deployed in any one bastion is limited by the total number of positions — e.g., 8 in the Mast bastion.

[10.33] Russian siege battery units once deployed in bastion Siege Gun or Mortar Boxes may never be moved.

[10.34] Russian field, and marine field artillery units are never considered “timbered”, even if they are deployed.

[10.4] MOVEMENT OF LEADERS
All Commanders-in-Chief and Engineer Officers are treated exactly as infantry units of their respective nationalities for purposes of operational movement.

[10.5] GARRISON OF PARALLELS
At the end of the Allied Operational Movement Segment, and at the end of an Assault Phase (see Case 11.2), the Allied Player must garrison his four forwardmost parallel counters in each Siege Area. To garrison a parallel, at least one Allied infantry unit (Russia occupies the parallel if unused) must be assigned to construct the parallel may be used). If the garrison requirements are not met in a given Siege Area for any reason at the end of the Operational Movement Segment or Assault Phase, four Allied units of that Siege Area’s nationality are eliminated (Allied Player’s choice of specific units) and the four forwardmost parallel counters in that Siege Area are damaged (simulating a Russian night sortie). This process could occur twice in a Game-Turn, once after Operational Movement and once at the conclusion of an Assault.

[11.0] THE ASSAULT PHASE

COMMENTARY:
Siege of Sevastopol employs two time scales. The first time scale concerns the operational “business” of the siege; i.e., construction, siege battery fire, Operational Movement, ammunition supply, etc. These are activities which encompass the period of time shown on the Game-Turn Record/Reinforcement Track. However, major assaults were undertaken rarely as they required much preparation and resulted in many casualties. The other time scale represents the events of a day and is represented abstractly by the Assault Phase. The five Impulses which comprise the Assault Phase enable five successive waves of infantry or columns of infantry to move across the map to assault Enemy positions or to counter-attack such assaults.

GENERAL RULE:
The Assault Phase consists of five Impulses, each of which is broken down into six segments (see the Sequence of Play, 4.01). Each Impulse may be considered a “turn within a turn”. The Assault Phase is not mandatory and takes place only if the Allied Player announces that he wishes to conduct an Assault. During the Assault Phase, the Allied Player may utilize Tactical Movement (Section 12.0) and Melee (Section 14.0) to move Activated Units (Case 11.1) out of the forwardmost parallel to capture (Case 11.2) one or more Russian bastions. In turn, the Russian Player uses Tactical Movement, Field Battery Fire (Section 13.0) and Melee to reinforce and defend his threatened bastions.

[11.1] ACTIVATION OF ALLIED UNITS
Whenever the Allied Player decides to conduct an Assault, he must determine how many of his units he can utilize for it. Depending upon which leaders are in command of the British and French Armies (see Section 16.0), a certain number of Brigades from each will be “Activated” during the Initiative Segment of the first Impulse.

The Allied Player may select any particular Brigades from among those on the map up to the limits listed in Section 16.0. Those units — and only those units — which are part of the specific Brigades selected during the Initiative Segment may be utilized by the Allied Player during the Assault Phase. Note: Eliminated units may not be replaced by other units not part of that Brigade. In addition, the British may activate any part of the Guards Division only once per game and the two British independent Naval units (Marines) may be activated for free during any assault.

[11.2] HOW AN ASSAULT ENDS

[11.21] At the end of the fifth Impulse of an Assault Phase all Allied units which are not used to garrison a captured bastion are placed behind their respective Allied Start Lines. Then as needed, Allied units are placed in the forwardmost parallels to satisfy garrison requirements. (Case 10.5).

[11.22] If at the end of the Fifth Impulse of an Assault Phase a Russian bastion is captured, three Allied units which are within that bastion must remain there for garrison. If a unit is specified as a garrison unit for a captured bastion it remains in that bastion as long as the bastion is in a Russian-controlled game state.

[11.23] During the Allied Tactical Movement Segment the Allied Player may select to abort his Assault. If he selects this option place the Allied units as per case 11.21.

[11.3] CAPTURE OF A BASTION

AND ITS EFFECTS

[11.31] A bastion is considered “Captured” if at the end of the fifth Impulse of an Assault Phase there are no Russian units in any Bastion Position of that bastion and at least three Allied units in Bastion Positions of that bastion. If within a bastion both these conditions are not met at the end of the fifth Impulse of an Assault Phase the bastion is not captured and all Allied units in that bastion are placed behind the Allied Start Line as per Case 11.21.

[11.32] If at the end of an Assault a bastion is captured by the Allied Player, that bastion’s Reserve Box is considered captured. Any Russian units which are within that bastion’s “Reserve Box” are immediately deployed in an adjacent Bastion Reserve Box or In-Transit Box (see Case 10.3A).

[12.0] TACTICAL MOVEMENT

GENERAL RULE:
During his Tactical Movement Segment, the Allied Player may move infantry units (only) out of parallels and across the open field utilizing the Rangefinder. He may also move infantry units utilizing parallel line (Case 3.5) to parallel line movement. And he may move infantry units that are deployed in Bastion Positions, subject to limitations imposed by the presence of Russian units.

During his Tactical Movement Segment, the Russian Player may move infantry units only (field Batteries may not be moved) that are deployed in Bastion Positions to other Bastion Positions, subject to the limitations imposed by the presence of Allied units. He may also move infantry units in Bastion Reserve Boxes and/or units in Transit Boxes; such units may be moved from the box they are in to a second box directly connected to the first, or from a bastion Reserve Box to a connected unoccupied Bastion Position.

PROCEDURE:
Each unit is moved individually. To move a unit across the open field, the Allied Player lines the “0 yards” marker on the range finder with the forward edge of the unit to be moved and advances the unit such that the edge is lined up with the “150 yards” mark. To move a unit deployed in a bastion, the owning Player moves the unit from the position along the lines connecting them until the unit is deployed satisfactorily (or has to stop due to the presence of an Enemy unit). To move a unit deployed in a rear parallel line, the Allied Player moves it forward to any parallel counter within the next parallel line. To move a unit in a Transit Box or Bastion Reserve Box the Russian Player moves the unit from one box to another or from a Bastion Reserve Box to a connecting Bastion Position.

CASES:

[12.1] OPEN FIELD MOVEMENT

(Allied Units Only)

[12.11] Only Allied units activated for an assault (see Cases 11.1) may be moved by Open Field Movement.

[12.12] Activated Allied units deployed in a Parallel (even a rear Parallel), plus any units already sent over the top in the current Assault Impulse, may be moved by Open Field Movement. However, once a unit has utilized open field movement during an Assault Impulse that unit may not be moved using Parallel Line to Parallel Line movement during the rest of that Assault Impulse.

[12.13] In any Tactical Movement Segment in which an Allied unit is moved such that its counter or any part of it is deployed on an Assault Position, the unit is immediately coned on that Assault position.

[12.14] Terrain lines have no effect on Open Field Movement.

[12.15] Units may be moved only 50 yards each Tactical Movement Segment.

[12.16] Russian units may never be moved by Open Field Movement.

[12.17] No Allied infantry unit may ever be placed on top of another Allied infantry unit during Open Field Movement.

[12.2] PARALLEL LINE TO PARALLEL LINE

MOVEMENT (Allied Units Only)

[12.21] During the Allied Tactical Movement Segment, units in bastions which are in a Parallel counter of a rear Parallel (further away from the enemy) or behind the Allied Start Line may be moved forward into any Parallel counter of next forward Parallel Line.

[12.22] Units may be moved forward one Parallel Line each Tactical Movement Segment.

[12.23] When moving a unit utilizing Parallel Line to Parallel Line Movement the Allied Player must trace a line of undamaged Parallels and/or Saps between the unit’s counter and the Parallel the unit is moved to.

[12.24] All units which are in a Parallel counter of a Parallel Line may be moved to a Parallel counter within the same Parallel Line during the Allied Tactical Movement Segment (subject to Case 12.23).

[12.25] The limitations on the number of units which may be deployed in one siegework position (see Case 10.13) must be observed during the Tactical Movement Segment.
[12.3] **INTRA-BASTION POSITION MOVEMENT**

[12.31] Only infantry units which begin the Tactical Movement Segment deployed in a Bastion Position which is not connected to a Bastion Position in which an Enemy unit is deployed may be moved from one Bastion Position to another (exception: see Case 12.34).

[12.32] Movement units must be from one Bastion Position to another directly connected Bastion Position. There is no limit on the number of Bastion Positions through which a unit may move in one Tactical Movement Segment, so long as each Bastion Position is directly connected to the last.

[12.33] Russian units (only) which begin the Russian Tactical Movement Segment in a Bastion Position which is connected to the Bastion Reserve Box directly or through other Bastion Positions which are not in violation of Case 12.35 may be moved into that Bastion Reserve Box during the Russian Tactical Movement Segment.

[12.34] Russian units (only) which begin the Russian Tactical Movement Segment in a Bastion Reserve Box may be moved into a Bastion Position which is connected to that Bastion Reserve Box. Once in that Bastion Position the Russian unit may continue moving subject to Cases 12.31, 12.32, and 12.35.

[12.35] A unit moved to a Bastion Position directly connected to a Bastion Position occupied by an Enemy unit must stop and may be moved no further that Tactical Movement Segment.

[12.36] The one-unit-per-Bastion-Position Limitation remains in effect during the Tactical Movement Segment. Consequently, no unit may be moved to or through a Bastion Position occupied by another unit.

[12.4] **BASTION RESERVE POSITION AND TRANSIT BOX MOVEMENT (Russian Units Only)**

[12.41] Only infantry units deployed in Bastion Reserve Positions or Transit Boxes may be moved to other Bastion Reserve Boxes or Transit Boxes during the Russian Tactical Movement Segment. Only units in the Bastion Reserve Box may be moved to connecting Bastion Positions.

[12.42] A unit may be moved from one Transit Box or Bastion Reserve Box to one other directly connected Transit Box or bastion Reserve Box per Game-Turn.

[12.43] A unit may not be moved to an Allied-captured bastion Reserve Box during the Tactical Movement Segment (or any other time either).

---

**[13.0] RUSSIAN FIELD BATTERY FIRE**

**GENERAL RULE:**
The Russian Player has a number of field batteries which may be utilized to fire at Allied Combat units during the Assault Phase. Unlike siege batteries, field batteries are not fired during the Siege Battery Phase and they have no effect on siege works. All Russian field batteries deployed in Bastion Positions are eligible to fire. Targets must be within range (600 yards) as measured on the Rangefinder. Field Batteries may not be fired at an Allied unit located in a Bastion Position other than the Bastion Positions of the bastion from which they are being fired. Field battery fire is resolved using the 2-1 column on the Melee Combat Results Table taking into account the terrain (see Terrain Effects Chart, 9.6) that the target unit is in. **Note:** Field battery units may be fired only during the Russian Field Battery Fire Segment of the Assault Phase.

**PROCEDURE:**
During the Russian Field Battery Fire Segment, the Russian Player may fire all, some, or none of his eligible field battery units. To be eligible to fire, a field battery must be deployed in a Bastion Position. The procedure for firing is as follows:

**Step 1:** The Russian Player selects a field battery to fire and an Allied Combat unit within range (600 yards) as a target using the Rangefinder to determine the range.

**Step 2:** The Russian Player rolls the die and modifies the result to account for range considerations.

**Step 3:** The modified die roll result is referenced to the 2-1 column of the Melee Combat Results Table and resolved according to the rules for Melee Combat (see Cases 14.2 and 14.3). Exception: When engaging in field battery fire, field batteries are never affected by adverse combat results.

When calculating the range between the Field Battery and target unit, the range is calculated from the center of the field battery counter to the center of the target unit. **Note:** this method is different from the method used for calculating siege battery fire.

If any part of the counter of the target unit of a Russian Field Battery Fire is located in a Depression (see Case 9.6) the Field Battery may fire twice at the unit.

If any part of the counter of the target unit of a Russian Field Battery Fire is located in a Ravine (see Case 9.6) the Field Battery may fire three times at the unit.

When resolving Russian Field Battery Fire the die roll may be modified by Cases 14.22 and 14.23.

---

**[14.0] MELEE**

**GENERAL RULE:**
During each Player's Melee Segments, he may have Friendly infantry units attack Enemy units developed in Bastion or Assault Positions. Units which are involved in Melee Combat may be eliminated, routed, or forced to retreat. When a unit is retreating or eliminated as a result of Melee Combat, the victim may occupy the vacated Bastion Position with one of his units which was involved in the combat.

**PROCEDURE:**
The Player whose Melee Segment is in progress is termed the attacking Player. The attacking Player determines what attacks (combats) he will conduct and proceeds to resolve them one-by-one in any order he chooses. For each combat, the attacking Player toals the Strength Points of all his attacking units and compares it to the Strength Point value of the defending unit. This comparison is expressed as a mathematical ratio of attacker to defender. For example, if two units with a total combat strength value of 13 attacked one unit with a combat strength value of 4, the ratio would be 13:4. The ratio is then reduced to one of the simplified ratios found on the Melee Combat Results Table (14.26), rounding off in favor of the defender if necessary. For example, the 13:4 ratio would be reduced to 3:1, and 17:6 would be reduced to 2:1. The attacking Player then rolls the die and adds the result to the ratio (see Cases 14.21, 14.22, and 14.23). The die roll result (as adjusted) is cross referenced with the simplified ratio on the Melee Combat Results Table. The result will indicate whether either (or both) the attacking unit(s) and/or defending unit are subject to incurring an adverse morale effect as a result of the combat (exception, see Case 14.25). For each unit subject to an adverse morale effect, the attacking Player rolls the die once for each such unit and refers to the appropriate column(s) of the Morale Effects Table (depending on the unit's Morale Class, see 3.22), adjusting the die roll for Cases 14.32 through 14.35. Any elimination, rout, and/or retreat effects are applied immediately, and victorious units may then be advanced. All such effects must be applied, and any advances conducted prior to the resolution of the next combat.

**CASES:**

**[14.1] WHICH UNITS MAY ATTACK AND WHICH UNITS MAY BE ATTACKED**

**[14.11]** During a given Player's Melee Segment, only Friendly in Bastion or Assault Positions or Bastion Reserve Boxes may attack.

**[14.12] A Player may have one of his units attack an Enemy unit if and only if his unit is deployed in a Bastion Position or Assault Position directly connected to the Bastion or Assault Position in which the Enemy unit is deployed.

**[14.13] A Player may combine any number of units in an attack against an Enemy unit so long as each attacking unit is deployed in a directly connected Bastion or Assault Position in accordance with Case 14.12. Remember that only one unit may be deployed in any one Bastion Position or Assault Position at any one time.

**[14.14] No more than one Enemy unit may be attacked in any one combat.

**[14.15] No unit may attack, nor may any unit be attacked more than once in any one Melee Segment.

**[14.16] Melee combat is voluntary for the attacking Player. During his Melee Segment, a Player is never required to conduct Melee attacks. He conducts as many attacks as he desires involving whatever units he desires in accordance with the restrictions listed in this Section.

**[14.17] Russian field battery units deployed in Bastion Positions may be attacked by Allied infantry units and defends at a strength of 2. Such units cannot perform melee attacks. See Case 14.25 for the effects of Melee combat on field artillery units.

**[14.18] During the Russian Melee Phase, each Enemy-occupied Bastion Position connected to a Bastion Reserve Box may be melee attacked by one Russian unit deployed in that Bastion Reserve Box. Allied units may never melee with Russian units deployed in any Bastion Reserve Box.

---

**[14.2] THE MELEE COMBAT RESULTS TABLE**

**[14.21] One is added to the die roll result for any melee attack made against a Russian unit.

**[14.22] One is subtracted from the die roll result for any melee or field battery attack made against a French unit (exception: Case 14.23).

**[14.23] Two is subtracted from the die roll result for an adverse morale effect against a Russian unit made against a French Zouave unit or any English unit.

**[14.24] Whenever an infantry unit is the object of an attack and receives a result, the Morale Effects Table (14.37) is consulted in accordance with this Section's Procedure.

**[14.25] Whenever a Russian field battery unit is the object of an attack and receives a result, the unit is placed in the corresponding Bastion Reserve Box.**
[14.26] **MORALE EFFECTS TABLE**

[14.3] **THE MORALE EFFECTS TABLE**

[14.31] There are four columns on the Morale Effects Table, each corresponding to a Morale Class (see Case 3.22). The die roll for each affected unit is cross-referenced with the column representing the unit’s Morale Class.

[14.32] **Two** is subtracted from the morale die roll result for any unit in an assault position that was involved in an attack against a Russian unit in a bastion with a Bastion Strength Level of 4 or greater during the current Allied Melee Segment.

[14.33] **One** is subtracted from the morale die roll result for any unit in an Assault Position that was involved in an attack against a unit in a bastion with a Strength Level of 2 or 3 during the current Allied Melee Segment.

[14.34] **One** is subtracted from any morale die roll result which applies to a unit that has been retreated once previously in that Assault Phase. (Players must note on a separate sheet of paper which units have been routed or retreated.)

[14.35] Additions and/or subtractions made to a die roll result for Morale Effects are cumulative. Thus, for example, 3 would be subtracted from the morale die roll result for a previously retreated Allied unit in an Assault Position which was involved in an attack against a Russian unit in a bastion with a strength level of 2 or 3 during the current Allied Melee Segment.

[14.36] **MORALE EFFECTS**

Possible morale effects include E, R, 1, and 2. Note that only infantry units are subject to morale effects; see Case 14.25 for the effects of Melee combat on field artillery units.

[14.41] **An E** results in the permanent elimination of the unit in question for the remainder of the game. It is removed from the map. Note that an advance may be possible (see Case 14.6).

[14.42] **An R** effect results in a unit being rendered useless for the duration of the current Assault Phase. Routined Russian infantry units are removed from the map and automatically returned during the Reinforcement Segment of the next Game-Turn. These units do not count towards the replacement rate. Routined Allied units are placed behind the Allied Start Line and may not be moved again that Assault Phase. Note that an advance may be possible.

[14.43] **A 1 or 2 effect results in the compulsory retreat of the affected unit (see Case 14.5). An advance may be possible.** Note that unlike routed units, routed units may be moved and attacked during subsequent Tactical Movement and Melee Segments of the current Assault Phase.

[14.5] **RETREAT OF INfanTRY UNITS**

A unit incurring a 1 or 2 effect must be retreated by the owning Player to either an unoccupied Bastion Position (or Assault Position for Allied units only) or to the nearest unoccupied parallel (Allied units only) or corresponding Bastion Reserve Box (Russian units only).

[14.51] A unit may never be retreated into (or through) a Bastion Position if that position is occupied and/or directly connected to a position occupied by an Enemy unit.

[14.52] A Russian unit to which a 1 effect applies must be retreated to a Bastion Position directly connected to the Bastion Reserve Box, the unit may be retreated there. If a unit cannot be so retreated within the restrictions of Case 14.51, it is instead eliminated.

[14.53] A Russian unit to which a 2 effect applies must be retreated to a Bastion Position directly connected to the position it is deployed in. Alternatively, if and only if a Russian unit’s position is directly connected to the Bastion Reserve Box, the unit may be retreated there. If a unit cannot be so retreated within the restrictions of Case 14.51, it is instead eliminated.

[14.54] An Allied unit to which a 1 effect applies must be retreated to a Bastion or Assault Position directly connected to the position it is deployed in. Alternatively, if the unit is deployed in an Assault Position, it may be retreated to the nearest unoccupied (or occupied with one unit) parallel. If the unit cannot be so retreated within the restrictions of Case 14.51, it is instead eliminated.

[14.55] An Allied unit to which a 2 effect applies must first be retreated in accordance with Case 14.54. If the unit is retreated to a parallel, its retreat is considered completed. However, if the unit is retreated to an Assault Position, it must then be retreated to the nearest unoccupied (or occupied with one unit) parallel. Or, if finally the unit is retreated to a Bastion Position, it must then once again be retreated to a third position, as in Case 14.53. The unit is eliminated if such a retreat is not possible.

[14.6] **ADVANCE AFTER COMBAT**

In any Melee combat in which one Player’s unit(s) is eliminated, routed, or retreated and the other Player’s unit is not affected, the second Player’s victorious unit may be advanced into the vacated position of the eliminated, routed, or retreated unit.

[14.61] Units may only be advanced into Bastion Positions.

[14.62] The victorious Player has the option of advancing any one victorious attacking unit to the position that more than one is eligible to occupy a vacated Bastion Position.

[14.63] If a unit suffers a 2 result the Victorious Player has the option of Advancing a unit which participated in the attack into the second Bastion Position vacated and another unit which participated in the attack into the first Bastion Position Vacated. An advancing unit may advance into or through an Assault Position which is directly connected to a position occupied by an Enemy unit.

[14.64] An Allied unit may never be advanced into a Bastion Reserve Box.

[14.65] A Russian unit may never be advanced into an Assault Position.

[14.66] If, at the end of the Allied Movement Segment, an Allied unit occupies an assault position which is connected to an unoccupied bastion position, that Allied unit may be advanced into that bastion position.

[15.0] **WINTER GENERAL RULE:**

The three Game-Turns of December, January, and February constitute Winter. During Winter, the following parts of the Sequence of Play are skipped: the Russian Field Artillery Intervention Segment, the Allied Siege Construction Segment, the Assault Phase, and the Russian Siege Construction Segment. During each Winter Game-Turn, each of the armies is subject to Attrition (see Section 2.7).

[16.0] **LEADERS CASES:**

[16.1] **ALLIED AT START COMMANDERS**

At the start of play, the Lord Raglan is the Commander-in-Chief for the British, and Canrobert is the Commander-in-Chief for the French.

[16.11] Lord Raglan may activate 2 British brigades.


[16.2] **REPLACEMENT OF LORD RAGLAN**

In July 1855, Lord Raglan died and was finally replaced with a new leader. Two men were in line to replace him—Simpson and Campbell. Campbell, the able of the two, was passed over for the command for political reasons (he was Scottish). On the July 1 1855 Game-Turn, roll the die to determine who replaces Lord Raglan.

**Brigades**

Commander

1-4 Simpson becomes C-in-Chief

3-6 Campbell becomes C-in-Chief

[16.3] **REPLACEMENT OF CANROBERT**

As the major participants in the siege, the French wanted action as well as little loss of life as possible. Thus, the French Commander was constantly under pressure to do the exact opposite of whatever he was doing at the time. If Canrobert fails in an assault (loses four units), he is replaced. On the turn following an unsuccessful assault, the die is rolled to replace Canrobert.

**Brigades**

Commander

1-4 Pelissier becomes C-In-Chief

5-6 Bouquet becomes C-In-Chief

[17.0] **RUSSIAN MARINE FIELD BATTERIES**

The Russian Black Sea Fleet Base and Naval Arsenal was located in Sevastopol. During the siege large g.m. were stripped from the fleet and dragged to the Bastions to replace previously destroyed batteries never reestablishing the supply. Where the Russians faced limits however was in the supply, of trained gunners.
During the Reinforcement/Replacement Phase of any Game-Turn the Russian Player may replace any one of his four Marine Battery Infantry units with a Marine Field Battery. Once placed on the map the Marine Field Battery is treated as any other Field Battery. Once a Marine Field Battery infantry has been replaced with a Field Battery it may not be replaced with the Infantry unit.

[18.0] ENFILADE FIRE

The Parallel siegework is so named because the trench is built parallel to the enemy position, thus guarding from enfilade fire. If a trench were built such that the enemy artillery could fire along its length, the "bowling alley" effect would destroy everything in the siegework.

If, at the end of any Allied Siege Construction Segment, the Russian Player can trace a line from any point within Sevastopol or the Mamelon (if the Mamelon is in Russian hands) between the parallel lines printed on the parallel counter and out the other side of the counter, and the parallel is within 1200 yards of that point, the parallel counter and the units constructing it are destroyed (removed from the map) with no siege battery ammunition expenditure. (It would take very few rounds to destroy the parallel.) Saps are immune to enfilade fire.

[19.0] VICTORY CONDITIONS

GENERAL RULE:

As in any siege, victory rests on the besiegers' success in capturing the enemy fortress. To procure victory, the Allied Player must capture at least two bastions (see Case 11.2), a major bastion and a minor bastion (or two major bastions). The Malakoff, the Great Redan, the Mast Bastion, the Central Bastion, and Red Rotish are major Bastions; the Mamelon, Little Redan, and Quarranteine are minor Bastions. The Russian Player wins if the Allied Player has failed to capture two bastions by the end of the game.

DESIGNER'S NOTES

When designing Siege of Sevastopol, my major concern was for the Players to experience what it may have been like for the respective Allied and Russian generals at the siege. Thus, if the game is successful, all the mechanics of frustration should be there. Greatest weight was given to contemporary sources, especially those by engineering officers as to what a siege is all about. Thus, Redlich's own history and Elphinstone's Journal of the Royal Engineers provided a good view of both sides of the siege operations.

Siege of Sevastopol's map contains no hexes. This was done because of the nature of building a trench system and the time-distance scale between the two sides. Indeed, it was found detrimental to the game as it imposed problems dealing with the construction of siegeworks.

The units represent such a disparity of strength due to formation of those units by national standards. Thus, a British regiment of 1,000 men in two lines was as effective as a Russian column of 2,000 in regimental mass because fewer soldiers in the Russian formations were actually available to fire. Hand-to-hand combat was rare and the Allied troops were trained sufficiently well to receive column attack. Turkish and Sardinian units were not represented due to their negligible participation during the siege. Turkish, Croatian and other labor troops are intrinsic to the British Construction total and off-map supply.

The time scale is graduated by season. Because invariable weather also would reduce engineering and combat to nothing, not to mention the lowering of morale, so as to preclude successful assaults against fortified positions.

It may seem odd that during a siege the besieged army would receive both replacement drafts and reinforcements. However, Sevastopol was never truly besieged. The Allies at first did not have sufficient troops or resources, and, even when they did, the Russians had direct linkage with the rest of the Crimea and southern Russian supply sources by virtue of a bridge of boats spanning from Sevastopol to the North Shore fortifications. Failure of the combined Allied fleet to force the harbor ensured this steady influx of Russian men and munitions.

Designing a game is much like solving a puzzle. In order to present an historical situation for the Players to develop a game strategy, the "basic truths" of what happened have to be answered and represented.

The first problem tackled was that of engineering the siegeworks. There are two basic types of siege works in the game: parallels and Saps. Both types served their own distinct functions.

Historically, any assaults on a fortified position, especially as extensive as the Sevastopol bastions, would be doomed to failure, as the fire-power which could be brought to bear on troops advancing over "exposed" terrain would be overwhelming. The final assault did not succeed until French parallels were 50 yards from the nearest Russian position. Players will find that they must build a series of connecting parallels in order to provide enough protected space from which to launch a maximum number of units in one assault segment. Parallels were also so extensive to provide mutual support from saps and to prevent enfilade fire from enemy artillery.

Saps function as connecting trenches between parallels. They were used as communication and supply channels. Assaults and artillery batteries are prohibited in Saps because of the Saps' extreme narrowness. Though many manuals dictate the number of man-hours to dig "X" amount of trenches, a perusal of company war diaries will show variables such as weather, disease and the initiative of the commanding officer determined what would be dug. Construction rates in Siege of Sevastopol are based on contemporary evidence and by the Commander-In-Chief Officer Rating is based upon the relative competence of those men.

During the siege, concentrated artillery bombardment occurred very infrequently. This was due to the limit of ammunition, of which the Russians always had more than the Allies. Players should be aware of the current total of ammunition they have to expend. Russian artillery batteries never ceased to function simply because the Russians always had more artillery pieces than they could man. They would replace disabled (disabled) guns with new pieces, while the Allies would be forced to undergo an arduous task of remounting them on their carriages or platforms.

The key to the assault is the asymmetrical impulses which allow the defender to use his field artillery (or Russian Marine Artillery, which represents large caliber naval carronades) and rifle fire upon attacking troops. It also simulates the effect of "wave" attack allowing units in reserve to move into the forward trenches or into reserve bastion positions. The Commander-In-Chief Officer Rating reflects the various generals' abilities, options, training, insight, etc.

No game is the creation of just one person. Many people spent a good deal of time and effort making sure this game will be hopefully well received. I would like to thank the playtesters and the developer who contributed to making the game work.

HISTORICAL NOTES

Regardless of the romanticized Victorian battles of the Alma, Balaklava and Inkerman (Tchernaya Bridge is often overlooked, being a non-British battle), and the Allied comic-opera naval operations in the Baltic (or perhaps in spite of them) the zenith of the Crimean War was decided by the rather unspectacular years of digging and tunneling before the gabion and earthen redoubts of Imperial Russia's premier naval base in the Black Sea, Sevastopol.

Why Sevastopol? Why the Crimean? Originally the Black Sea theatre of operations was chosen because Russian forces were already campaigning against the Turks in the Balkans with the ultimate objective of morally freeing the Slavic provinces of Turkey in Europe, and politically and, obviously, militarily) taking Constantinople. Control of the Dardanelles would lead to Russian naval presence in the Mediterranean, especially since the massacre
of Sinope had removed the Turkish Navy from the balance sheet of naval strength. The British and French governments, fearing infringement on what was considered their sphere, were not prepared to allow any imperial Russian designs or presence in the Mediterranean. Thus, after much jingoistic rhetoric, both the French and British main war efforts were to be directed to the Balkans, to prevent the fall of Constantinople.

Surprisingly, the Ottoman forces were putting up a tenacious defense of the Danube crossing points, eventually forcing the Russian Army to lift the siege of Silistria, the key stronghold on the Danube. Thus, when the Allied Armada deposited its charges at Scutari and Constantiopole, the original purpose of the Allies had been rendered unnecessary. While searching around for a new ad hoc objective, the British and French troops were slowly demobilized by choler and dysentery, while St. Arnaud and Raglan (respectively the French and British Supreme Commanders) bickered over what to do next, the British Light Brigade fumbled an elementary reconnaissance, achieving nothing, but losing valuable mounts. Meanwhile, the French exercised their penchant for Oriental exotica by raising a Bash-Bazouk Division, which, on its first foray into the field, produced a disease-ridden, mutinous rabble. The only victory accomplished was the terrorizing of the native populace. At this point, peace could have been negotiated, with the status quo maintained, as the Russian Balkan Army had left the Wallachian province and moved back into the Ukraine.

However, the Allies ‘had come to defend Turkey and, by God, we shall defend Turkey!’ The British force of personality, bullied the French into the Crimean adventure. The new main objective was to be to silence Russian naval power by occupying its home port of Sevastopol. To the British Home Office, any removal of potential naval opponents was a worthwhile goal. As a result, any achievement which would win Louis Napoleon’s army’s ‘glorie’ was worthwhile. Finally, after spending all of August in feverish preparation, the invasion fleet sailed.

The rendezvous of the Allied fleets was mistimed by a week, and the lightly packed French transports, aside from providing a sterile opportunity for disease, had the added defect of the hasty departure of the Russian fleet, were further weakened by continued outbreaks of cholera.

If the Siege of Sevastopol proved to be nothing else, it was a classical case of lost opportunities. Originally two very good plans were put forth. The first, suggested by the French staff, was a landing at Theodosia. Here there were ample accommodations for the fleets, and a protected base could be readily established. While waiting for the spring before investing Sevastopol, the Allied armies would occupy the Simpheropol-Sevastopol road, blocking all reinforcements and supplies. It was an excellent plan. The consideration of any of the problems which would later arise. The drawback, however, was that it would take time, and the British wanted a quick campaign. Thus, as Theodosia was over 70 miles from Sevastopol, the plan was scrapped.

Another week was spent reconnoitering the coastline between Theodosia and Balaladova. At this point, in an uncharacteristic flash of Allied brilliance, it was suggested that a surprise landing on the Chersonese Uplands followed by one quick, bloody battle would lead on to a storming of Sevastopol proper a la Wolfe at Quebec. It was probably the best idea of the entire campaign, but Raglan’s overriding nature of overcautiousness and indecision let the plan slip.

One further landing site, Katcha Bay, was considered, but this plan was cancelled when the British Press announced that it was there that the Allied fleets would land, thus alerting the Russians, who promptly erected fortifications in the adjoining heights.

Finally a compromise between Theodosia and Katcha was decided upon. The landing site would be Eupatoria; it was 20 miles from the Allied armies to a year of misery in the siege-lines before Sevastopol.

The accepted military definition of a ‘siege’ is the surrounding and attacking of a fortified place in such a manner as to isolate it from help and supplies, thereby making capture possible. At no point during the entire investment was Sevastopol under the siege, for the city was divided by the harbor into two parts. On the northern shore was the Star Fort, a pre-war prepared fortification dominating the entire harbor. Its construction was virtually impregnable to the small Allied siege train. The southern shore contained Sevastopol proper. Except for several pre-war forts dominating the harbor entrance, (Quarrantine and Fort Alexander), the wall protecting the enclosure of the city was woefully inadequate to defend against a determined assault. The two halves of the city were connected by several bridges, and the harbor entrance was blocked by the sinking of over a third of the Russian Black Sea fleet. At no time were both portions of the city under effective blockade. Indeed, throughout the ‘siege’ Russian reinforcements continually swelled the garrison with men and supplies. Incredibly, the southern part of the city was only half-invested for most of the siege, with Russian troops moving with impunity in and out of the fortifications. In several of the battles outside the walls of Sevastopol, a fair portion of the Russian field armies were supplied by the garrison itself! Not until June of 1855, when massive Russian reinforcements arrived, was the southern face of Sevastopol completely and effectively blockaded (although the successful evacuation of the entire garrison when the Malakoff Bastion was captured attest to the fluidity of the Russians in regard to moving men and material into and out of the city).

The inability of the Allies to effect total investment was due to both a lack of manpower and a lack of foresight. Even the force left at Eupatoria, which was itself attacked and successfully defended and which contained the Turkish force, did nothing to interdict the flow of Russian supplies through the neck of the Crimean Peninsula.

Other difficulties encountered by the Allies were mainly three fold. First, for every Allied siege gun placed in battery, the Russians had two siege guns. In fact, because Sevastopol was a naval arsenal, any Russian gun destroyed (or, more commonly, dismounted) was replaced by the overstock within the arsenal from the now-obsolete fleet. The Allies, meanwhile, had to husband both guns and ammunition, which is the reason why there were only a few concentrated and widely separated major bombardments.

Second, the topography of the ground before the city was divided by deep ravines which effectively cut the siege lines into several major portions, preventing effective communication between British and French sectors, and preventing one combined, concentrated assault. The ground between these ravines was heavily laden with rocky soil, making engineering difficult and nearly impossible in the wet ground fronts.

Besides this, the Russian flanks were protected by natural and man-made breakwaters. On the Allied right flank was the Mamelon Redoubt, a fortified hill which would have to be assaulted and taken before any sapping could begin against the main defense line, as the Mamelon could endanger any Allied siege line. On the Allied left flank was the Sevastopol cemetery. This limited operations on the extreme left as the Russians were superstitious and the French respected the consecrated ground, although both sides did use the outer walls and sent sniping parties into the cemetery.

The third and most significant difficulty was the problem of supply. The Allied armies had two different supply bases. For the French, it was Kaniutech Bay. For the British, it was Balaladova. The French Army, geared to long campaigns, were better equipped for the siege than the British. Besides this, their supply source was closer and, compared to that of the British, much more organized. The British, expecting a short coup de main, were woefully unprepared for the undertaking of a full-fledged investment. Their supply system was a shambles, and Balaladova harbor was prey to storms, aside from being a good six to eight miles away from the siege lines. Compounding their problem was the fact that there was only one road over which supplies could be brought in and after the fine October weather, this road soon disintegrated into a muddy quagmire. Eventually (in late May or early June) a railroad track was constructed, which finally organized their supply route. Throughout the siege, the basic beast of burden was the infantryman, who was supplemented by labor brigades of eastern locale who the British had hired. This not only reduced the effective number of men in the trenches and covering forces, but further fatigued them until all but a skeletal force had succumbed to disease.

A full chronology of the siege could not be covered in such a capsule summary and I prefer to touch upon a few other major factors which contributed to the occurrences and situation at the Siege of Sevastopol.

The siege officially opened on October 17, with the first bombardment of Sevastopol. This soon petered out, as Allied ammunition stocks were too low for the prolonged firing. Coupled with this was the fact that the Russians opposed the bombardment with more and heavier guns. Finally an ammunition pile explosion in the French camps brought the operation to a halt. Still, Allied guns had exacted a severe toll on the defenders’ still incomplete fortifications, and a determined assault could possibly have carried the city by storm. Again, the lack of initiative robbed the Allies of victory prior to this, and as a result, they had spent a month preparing the first parallel from which they could be dug closer and closer to Sevastopol. An immediate assault was not undertaken due to a projected casualty list of 500 men, which would have been unacceptable to the politicians and press back in London and Paris.

During this month of preparation, the one bright star of the entire campaign came to the forefront. He was Cousi Franz Todelben, the Russian Engineer officer. Given the one-month respite, he erected, using the labor of the entire city, a series of mutually supporting redoubts. Todelben constructed these redoubts completely of earth-filled gabions and sandbags. To support these he added casemates, which were huge holes dug into the ground and covered with ship-timber. This was, in turn, covered with earth to the thickness of eight to ten feet.

During this month of preparation, the one bright star of the entire campaign came to the forefront. He was Cousi Franz Todelben, the Russian Engineer officer. Given the one-month respite, he erected, using the labor of the entire city, a series of mutually supporting redoubts. Todelben constructed these redoubts completely of earth-filled
gabions and sandbags. To support these he added casemates, which were huge holes dug into the ground and covered with ship-timber. This was, in turn, covered with earth to the thickness of eight to ten feet.

Through the months the siege dragged on; slowly the trenches moved closer to the guns of Sevastopol. Laboriously the Allied siege guns were moved into the forwardmost parallel line so that their fire would be more effective against the Russian defenses.

For both sides, each day became an exercise in attempting to retain the status quo of the siegeworks as artillery fire was directed at new construction. Almost all losses for both sides were inflicted on troops engaged in siegework construction and repair. To draw fire (and waste Russian ammunition) the Allies purposely built trenches in areas where they had no intention of assaulting. Meanwhile, Allied strategy was dictated by the indecisiveness of their officers and restraints upon their ridiculously long supply line (it took literally six months to resupply the Lancaster Gun battery). The Russians continued to walk the fine line between total repair of their bastions and loss of life due to these repairs.

Each night repairs and elaborations were made in every redoubt, and gun placements were corrected. These formidable defenses were not successfully assaulted until French trenches were within 25 yards of the Malakoff bastion. The British trenches were still over 200 yards away from their target of Redan. (Incredibly, the British staff calculated that it would cost 50 men for each additional yard of trenches dug.) The result was a massacre for the assaulting divisions (2nd and Left). The French, stormed and held the Malakoff Bastion on September 8th, 1855, repulsing all day counterattacks by Russian troops stationed in the reserve areas behind the bastions.

The loss of the Malakoff turned the entire Russian defense line. Under cover of night, the Russians evacuated the southern portion of the city and burned the remaining ships. History, it has been said, is a record of the deeds of the great. But for the tens of thousands of men toiling and dying in the frozen trenches outside Sevastopol, it was also a record of the deeds of the mediocre and insensitive.

**Example of Typical Siegework Construction**

**DESIGN CREDITS**

Game Design: Rob Mosca  
Game Development: David Werden  
Physical Systems and Graphic Design: Redmond A. Simonsen  
Rules Editing: Brad Hessel  
Playtesting: Michael George, John Butterfield, Tom Hamilton  
Production: Karen Cantor, Robert A. Degni, Andrew Grossman, Kate Higgins, Ted Koller, Manfred F. Mlkuhn, Bob Ryer
ABBREVIATED SEQUENCE OF PLAY

1. PLANNING PHASE
   A. Russian Field Army Intervention Segment
   B. Reinforcement/Replacement Segment
   C. Attrition Segment

2. SIEGE BATTERY PHASE
   A. Ammunition Supply Segment
   B. Siege Battery Fire Segment

3. ALLIED SIEGE CONSTRUCTION AND OPERATIONAL MOVEMENT PHASE
   A. Allied Siege Construction Segment
   B. Allied Operational Movement Segment

4. ASSAULT PHASE
   The Assault Phase occurs only if the Allied Player wishes to conduct assaults during the current Game-Turn. If he does not wish to do so, the Assault Phase is omitted. An Assault Phase consists of up to five Assault Impulses, each of which may be considered a “turn within a turn.”

   ASSAULT IMPULSE OUTLINE
   A. Initiative Segment
   B. Allied Tactical Movement Segment
   C. Russian Field Battery Segment
   D. Allied Melee Segment
   E. Russian Tactical Movement Segment
   F. Russian Melee Segment
   The Players execute Segments “A” through “F” once and then Segments “B” through “F” up to four more times; each time through constitutes one Assault Impulse.

5. RUSSIAN OPERATIONAL MOVEMENT AND SIEGE CONSTRUCTION PHASE
   A. Russian Operational Movement Segment
   B. Russian Siege Construction Segment

6. GAME-TURN INDICATION PHASE
### [5.3] RUSSIAN FIELD ARMY INTERVENTION TABLE

<table>
<thead>
<tr>
<th>Battle Option</th>
<th>Balaklava</th>
<th>Inkerman</th>
<th>Tchernaya</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Die</strong></td>
<td><strong>British</strong></td>
<td><strong>French</strong></td>
<td><strong>Russian</strong></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Balaklava:** #: number of Game-Turns during which British receive no artillery rounds.

**Inkerman:** #: number of Allied infantry units removed from map for one Game-Turn. Units must be taken from British and/or French Right Siege Areas.

**Tchernaya:** #: number of additional replacement units per Game-Turn Russian Player receives for remainder of game.

- = No effect.

### [7.2] ATTRITION TABLE

<table>
<thead>
<tr>
<th>Number of Units Lost</th>
<th><strong>British</strong></th>
<th><strong>French</strong></th>
<th><strong>Russian</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Die</strong></td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Attrition Die Roll Modifiers:**

Add 1 during Winter Game-Turns.
Add 1 to the French die roll during June 1855.
Subtract 1 from the British die roll beginning with 1 March 1855.

### [8.18] AMMUNITION DETERMINATION CHART

<table>
<thead>
<tr>
<th><strong>GAME-TURN</strong></th>
<th><strong>British</strong></th>
<th><strong>French</strong></th>
<th><strong>Russian</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>UNITS</strong></td>
<td><strong>SIEGE GUNS</strong></td>
<td><strong>MORTARS &amp; LANC.</strong></td>
</tr>
<tr>
<td>Oct I</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Oct II</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Nov I</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nov II</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Apr I</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Apr II</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>May I</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>May II</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Jul I</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Jul II</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Aug I</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Aug II</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Numbers represent number of rounds available to unit types of specified nationalities.

**Note:** Allied Player receives indicated number of both mortar and Lancaster battery rounds. Column headed "units" refers to number of units that must occupy Supply Box of appropriate nationality in order for ammunition for that Game-Turn to be made available. - = No rounds due that Game-Turn.
[9.6] CONSTRUCTION POINT COST CHART

<table>
<thead>
<tr>
<th>Terrain</th>
<th>Construction Cost for...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parallels</td>
</tr>
<tr>
<td>Flat or Hill</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>4</td>
</tr>
<tr>
<td>Ravine</td>
<td>Prohibited</td>
</tr>
<tr>
<td>Allied Start Line</td>
<td>Prohibited</td>
</tr>
</tbody>
</table>

Construction of parallels and saps is prohibited in water, Sevastopol, parallels, saps, Assault Positions and Bastion Positions.

[8.99] SIEGE BATTERY FIRE RESULTS TABLE

<table>
<thead>
<tr>
<th>Target Bastion Strength of...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel or Sap</td>
</tr>
<tr>
<td>8-7</td>
</tr>
<tr>
<td>6-5</td>
</tr>
<tr>
<td>4-3</td>
</tr>
<tr>
<td>2-1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIEGE BATTERIES DIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortars Dio.</td>
</tr>
<tr>
<td>-2 -2</td>
</tr>
<tr>
<td>-1 -1</td>
</tr>
<tr>
<td>0 -1</td>
</tr>
<tr>
<td>1 -2</td>
</tr>
<tr>
<td>2 -3</td>
</tr>
<tr>
<td>3 -4 D/1</td>
</tr>
<tr>
<td>4 -5 D/1</td>
</tr>
<tr>
<td>5 -6 D/1 *</td>
</tr>
<tr>
<td>6 -7 D/2</td>
</tr>
<tr>
<td>7 D/2 D/2</td>
</tr>
</tbody>
</table>

#/# = Bastion Strength losses/infantry unit losses; * = chance of ammunition dump explosion (see Case 8.98); D = Damaged

Note: Lancaster battery uses mortar die roll column.

[14.36] MORALE EFFECTS TABLE

<table>
<thead>
<tr>
<th>Morale Level</th>
<th>Morale Point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>-1</td>
<td>E</td>
</tr>
<tr>
<td>0</td>
<td>E</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
</tr>
<tr>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

E = unit eliminated; R = unit routed; 1, 2 = retreat (see Case 14.5); = no effect.

[14.26] MELEE COMBAT RESULTS TABLE

<table>
<thead>
<tr>
<th>Combat Ratio (Attacker Strength to Defender Strength)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoE</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

A = Attacker affected; D = Defender affected; B = Both Attacker and Defender affected. Affected Player must roll die on Morale Hit Table (14.37). Note: Field batteries fire on the 2-1 column; no Defender results apply in field battery fire.
ART OF SIEGE WARFARE

ADDENDA
as of October 1979

TYRE
Counters
(correction) The Grstrs and Enllus ABS leader counters should be printed white.

Map
(addition) Beach hex 4509 should have a grounding number rating of 1.

Rules
[3.32] (correction) The sample Bireme unit is mislabelled Quinquereme, and vice-versa. Naval units with no bands printed on the counter are Biremes, units with 1 band are Quinqueremes, and units with 2 bands are Triremes.
[3.5] (correction) There is no separate chart sheet included with the game. All the charts and tables needed for play are printed in the rules or on the map sheet.

[6.13 Illus.] (correction) The target unit in the illustration is incorrectly faced. It should be faced to the left or right towards a hexside. Each unit has four broadside hexes. The hexes adjacent to the top and bottom of a naval unit counter are non-broadside hexes.

[6.26] (correction) "...in beach or home port hex." should read "in a beach/homr port hex."

[6.32] (clarification) A disrupted unit may not ram.

[8.21] (addition) A damaged naval unit may transport one land combat unit. If two land combat units are being transported on a full strength naval unit and that naval unit is damaged, then one land combat unit is eliminated (the Macedonian Player’s choice).

[8.3] (addition) This section refers to beach and port hexes. Port hexes within the Tyrhan harbors are assumed to have a grounding rating of zero.

[9.28] (clarification) It costs one Movement Point for a Tyrhan unit to enter a secondary wall hex from a non-wall wall hex.

[11.24] (correction) Fire-Melee units are not considered Fire Combat units for purposes of retreat.

[11.5] (correction) "Secondary" should read "Any."

[12.31] (correction) "Walls" should read "city."

[13.41] (addition) If a catapult is fired at a ship during the Tyrhan bombardment segment of the Amphibious Assault Phase, it may not be fired during the subsequent simultaneous Fire Combat Segment.

[14.31] (addition) Only four engineer points may be allocated to Boulder Mining per turn.

[15.0] (correction) Gonuz of Tyre has no naval leader rating.

[15.41] (correction) A leader is killed only if a 6 is rolled twice in succession; the Leader Loss procedure on page 16 is correct.

[17.3] (addition) Alexander the Great may command all contingents (land or naval, depending on mode). The leader Pytngs enters the game with the Cyrpus naval forces and may command all Macedonian Allied naval units.

SEVASTOPOL
Game-Turn Record Track
The Engineer initiative is 4, as per Case 9.23, when an asterisk is indicated on the Game-Turn Record Track.

Rules
[3.0] (Major Terrain Types) (correction) All references, in the rule to the Terrain Effects Chart, should be to the Construction Points Cost Chart (9.6).

[3.32] (correction) The Russian unit Grand Duke Michael enters during Game-turn 8 (March). This is not noted on the Turn Record Track.

[7.14] (correction) "For Game-Turns 8 and 13" should be "Game-Turn 8 through 13."

[8.98] (correction) "May destroy." should be "must destroy."

[8.99] (clarification) After "Asterisk=", delete the words "chance of."

[9.23] (addition) The presence of Engineer Initiative is indicated on the Game-Turn Record Track by the presence of an asterisk next to a nationality’s construction points.

[10.2] (correction) There are 10 Bastion Positions at the Mast Bastion, not 8. In addition, the Russian Engineer does not count as a unit for purposes of deployment.

[10.5] (clarification) This section refers to undamaged parallels.

LILLE
Counters
(correction) All French combat units should not be backprinted.

Map
There are 10 incorrect Star Bastion Positions on the map which should only be Bastion Positions. These incorrect Star Bastion Positions may be recognized by three characteristics: 1) They are not adjacent to the inner city of Lille, 2) each is connected to 5 other Star Bastion Positions, and 3) they are not within the Citadelle.

Rules
[3.5, Repair] (correction) Bastion Positions may only be repaired to a Bastion Strength level of 3.

[5.11] (clarification) All results are listed in terms of Cavalry Squadrions and Infantry Battalions.

[6.24] (correction) The case reference should be to Case 5.11, not 5.2.

[10.5] (clarification) This section refers to undamaged parallels. Forwardmost parallels are defined as the parallels which are closest to any French Bastion Position using the rangefinder to sight from the rarging points.

[10.6] (addition) Routed French units within Lille may be counted towards the garrison requirement.

[11.1] (addition) If an Assault is initiated, all English units which are currently garrisoning a French Bastion Position must be activated first. English units which are garrisoning French Bastion Positions may be replaced before the beginning of an Assault Phase by other Allied units which are in covering boxes, or behind the Allied Start-Line. Since English units may only be activated for an assault twice, if the English have been used to Assault twice, the Allies may not initiate an Assault until there are no English units garrisoning French Bastion Positions (since all garrisoning units must be activated in an Assault).

[12.0] (correction) Procedures: "up to two Bastion Positions" should read "up to three Bastion Positions;" Case 12.32 is correct.

[13.0] (correction) General Rule reference to "(see Terrain Effects Chart, 9.6)" is irrelevant and should be dropped.

[14.25] (correction) No attacker results apply in field battery fire.

[14.55] (addition) A unit may displace a friendly unit from a Bastion Position which is in its line of retreat, which may displace another unit as long as Case 14.51 is not violated.

[14.66] (addition) If a Bastion Position is occupied by French siege artillery and/or French Leaders only, an Allied infantry may be advanced into that Bastion Position during movement (the French units are retreated).

[15.0] (addition) At the end of the French Sortie Phase (whether or not the French Player has sorted that turn), if there is a Covering Box with no Allied Infantry Battalions in it, the French Player receives 8 Rounds of Siege Ammunition.

[20.0] (addition) The game is over if an Allied unit occupies a Star Bastion Position at the end of an Assault Phase. Alternatively, if, at the end of a Game-Turn, the Allied casualties exceed the French casualties by 12,000 men, the French Player is declared the winner.

ACRE
[4.3] (correction) The Assault, Repair and Regrouping Phase should read the Assault and Regrouping Phase.

[5.27] (correction) There should be no filled foss hex listed on the Terrain Key. There are no filled foss hexes at the beginning of the game. (correction) Non-Enemy-Controlled Wall/Tower hexes should be listed as Friendly Occupied Wall/Tower hex.

[8.3] (addition) If more than one engineer point is allocated to wall repair, the damage level is reduced, all later engineer points use the repaired damage level column on the wall repair table.

[9.23] (clarification) If a unit is disrupted by fire combat and then disrupted again in the Melee Segment it is retreated. In addition, since all fire combat is simultaneous, the statement "Disrupted units cannot engage in fire combat" is not applicable.

[9.24] (addition) All units which are retreated are disrupted at the end of the retreat.

[10.34] (addition) Ladder assaults may be made from inside the city (in an Acre street pattern hex) out onto the walls.

[10.72] (addition) Leaders may not advance after combat unless they are stacked with a combat unit which participated in the attack.

[12.2] (clarification) A wall hex with a damage level of 6 from giant catapults may be repaired.

[13.12] (correction) The Regrouping Segment occurs at the end of every Game-Turn for purposes of loss unwinding during both the Planning and Assault Phases.

[17.0] (correction) The harbor tower hex is hex 2104 not 1951.
<table>
<thead>
<tr>
<th>Date</th>
<th>Key B: British</th>
<th>F: French</th>
<th>R: Russian</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 May 11</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Jun</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Jul</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Jul</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Aug</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Aug</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Sep</td>
<td>B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:
- B = British
- F = French
- R = Russian
- Audition Game Turn
1.0 INTRODUCTION
2.0 GENERAL COURSE OF PLAY
3.0 GAME EQUIPMENT
  3.1 The Game Map
  3.2 Game Charts and Tables
  3.3 The Playing Pieces
  3.4 Game Scale
  3.5 Game Equipment Inventory
  3.6 Rules Questions
4.0 SEQUENCE OF PLAY
5.0 NAVAL FACING AND MOVEMENT
  5.1 Naval Facing
  5.2 Naval Movement
  5.3 Regrouping
6.0 NAVAL COMBAT
  6.1 Ramming
  6.2 Naval Melee Combat
  6.3 Explanations of Naval Combat Results
  6.4 Ramming Table
  6.5 Naval Melee Combat Results Table
7.0 BOMBARDMENT, COUNTER-
  BOMBARDMENT, AND REPAIR
  7.1 Macedonian Bombardment
  7.2 Tyrian Counter-Bombardment
  7.3 Repairing Wall Breach Damage
  7.4 Bombardment Table
  7.5 Wall Ramming Table
  7.6 Counter-Bombardment Table
  7.7 Wall Repair Table
8.0 NAVAL TRANSPORT AND
  AMPHIBIOUS ASSAULT
  8.1 Transport During the Naval Superiority
      and Bombardment Phase
  8.2 Transport During the Amphibious
      Assault Phase
  8.3 Amphibious Assault
9.0 MOVEMENT OF LAND COMBAT UNITS
  AND LEADERS
  9.1 How to Move Units
  9.2 Effects of Terrain on Movement
  9.3 Special Terrain
  9.4 Effects of Leaders on Movement
  9.5 Stacking
10.0 ZONES OF CONTROL
   10.1 How Zones of Control Operate
   10.2 Effects of Zones of Control
11.0 FIRE COMBAT
   11.1 Line of Sight and Other Restrictions
       on Fire Combat
   11.2 Fire Combat Results Table
   11.3 How to Resolve Simultaneous
       Fire Combat Retreats
   11.4 Fire Combat Range Attenuation Table
   11.5 Fire Combat Results Table
12.0 LAND MELEE COMBAT
   12.1 Restrictions on Melee Combat
   12.2 Effects of Leaders on Melee Combat
   12.3 Effects of Army Morale Levels
       on Melee Combat
   12.4 Melee Combat Results
   12.5 Advance After Melee Combat
   12.6 Melee Combat Results Table
13.0 SIEGE ENGINES
   13.1 Siege Towers
   13.2 Macedonian Catapults
   13.3 Battering Rams
   13.4 Tyrian Catapults
14.0 ENGINEERING
   14.1 Building the Mole
   14.2 Building Catapults and Battering Rams
   14.3 Tyrian Engineer Points: Boulder Mining,
       Ship Repair, and Wall Repair
   14.4 Tyrian Fireship
15.0 LAND LEADERS
   15.1 Command Radius of Land Leaders
   15.2 Land Leadership Morale Ratings
   15.3 Land Leadership Combat Bonus
   15.4 Loss of Land Leaders
16.0 NAVAL LEADERS
   16.1 Command Radius of Naval Leaders
   16.2 Naval Ramming Leadership Ratings
   16.3 Naval Leadership Melee Bonus
   16.4 Loss of Naval Leaders
17.0 INITIAL SET-UP AND
  NAVAL REINFORCEMENTS
   17.1 Initial Deployment of Units
   17.2 Naval Reinforcements
   17.3 Naval Reinforcement Table
18.0 VICTORY
   18.1 Macedonian Victory
   18.2 Tyrian Victory
   HISTORICAL NOTES
   DESIGNER'S NOTES
[1.0] INTRODUCTION

Tyre was the greatest siege undertaken during the Hellenistic era and one of the most decisive in all history. Tyre, the last remaining Persian-allied port in the Eastern Mediterranean, was an island city, a key to Alexander’s dream of a world empire, which lay astride Alexander the Great’s line of communication to Greece. In 322 B.C., after a siege of four months during which Alexander’s forces tried in vain to construct a land bridge to the island, it became apparent to Alexander that Tyre could be taken only by a naval amphibious assault. Tyre simulates the last climactic months of the siege while Alexander the Great gathered the fleets from the newly conquered port cities to launch the largest amphibious assault of the ancient world.

[2.0] GENERAL COURSE OF PLAY

Tyre is played in a series of Phases, not all of which are used in each Game-Turn. One Player controls the besieging Macedonian fleets and army, while the other directs the besieged fleet and garrison of Tyre.

Each Game-Turn begins with a Planning Phase. After completing that Phase, the Macedonian Player decides whether he wishes to bombard or launch the amphibious assault during that Game-Turn. In the former case, both Players have six separate Impulses (turns within a turn) of naval movement/melee and bombardment with Alexander’s ships brandishing battering rams and catapults, while the Tyrian Player’s fleet protects the island city. During this Phase, both Players may also attempt to achieve naval superiority through ramming and melee. Play then proceeds to a new Game-Turn. In the latter case, both Players have 16 separate Impulses of naval movement/melee, land movement, fire combat and land melee, during which time the Macedonian Player attempts to convey his land units to establish a beachhead on Tyre, and overrun the island.

[3.0] GAME EQUIPMENT

[3.1] THE GAMEMAP

The 22” x 35” mapsheet portrays the island city of Tyre and the surrounding areas as they were at the time of the siege, including all the terrain significant to the battle. Also printed on the mapsheet are the various charts used in the play of Tyre. A numbered hexagonal grid is superimposed over the terrain features printed on the mapsheet in order to regulate movement and combat.

[3.2] GAME CHARTS AND TABLES

Various visual aids are provided for the Players in order to simplify and illustrate certain game functions. These are the Terrain Effects Chart, Naval Reinforcement Table, Naval Melee Combat Table, Ramming Table, Melee Combat Table, Fire Combat Table, Range Attenuation Table, Bombardment Table, Battering Ram Table, Counter-Bombardment Table, Wall Repair Table, and Mine Planning Sheet.

[3.3] THE PLAYING PIECES

The playing pieces (or units) represent the contingents of fighting men, the siege artillery, the naval forces, and the historical leaders who took part in the actual siege. The numbers and symbols on the pieces represent the strength, movement capability, and the type of unit represented by the piece. These playing pieces are referred to as units. There are also several markers used for informational purposes, such as Breach Damage Level markers, etc.

[3.31] How to Read the Units

LAND LEADER (Front)

NAVAL LEADER (Front)

NAVAL LEADER (Back)

NAVAL UNIT (Front: Full Strength)

NAVAL UNIT (Back: Damaged)

MELEE UNIT (Front)

MELEE UNIT (Back)

FIRE UNIT (Front)

FIRE UNIT (Back)

FIRE/MELEE UNIT (Front)

FIRE/MELEE UNIT (Back)

[3.32] Summary of Counter Types

<table>
<thead>
<tr>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macedon</td>
<td>Alexander</td>
</tr>
<tr>
<td>54.37</td>
<td>335</td>
</tr>
<tr>
<td>Cypon</td>
<td>Cypon</td>
</tr>
<tr>
<td>5.7-10</td>
<td>5.7-10</td>
</tr>
<tr>
<td>Quitterona</td>
<td>Quitterona</td>
</tr>
<tr>
<td>2.8-11</td>
<td>2.8-11</td>
</tr>
<tr>
<td>Bireme</td>
<td>Bireme</td>
</tr>
<tr>
<td>6-6-9</td>
<td>6-6-9</td>
</tr>
<tr>
<td>Fireship</td>
<td>Fireship</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[3.6] RULES QUESTIONS

Questions concerning the rules for Tyre will be answered if phrased in such a way that a simple yes or no reply will suffice, and if the questions are accompanied by a stamped, self-addressed envelope. Mark the envelope "Rules Questions: Tyre."

[4.0] SEQUENCE OF PLAY

GENERAL RULE:
The Sequence of Play in Tyre consists of three Phases, only two of which are used in any given Game-Turn. They are the Planning Phase, Naval Superiority and Bombardment Phase, and Amphibious Assault Phase. Two of the Phases (the Naval Bombardment and the Amphibious Assault Phase) consist of a number of Impulses which may be considered "turns-within-a-turn." All actions must be performed in the Sequence listed. Once an entire Game-Turn has been completed, the Players move the Game-Turn marker to the next Game-Turn on the Game-Turn Record Track and begin the Sequence of play anew. There are 12 Game-Turns in the entire game, but the Players may, by fulfilling certain victory criteria, shorten the length of the game. If the Macedonian Player has not launched a successful Amphibious Assault (there may be only one) by the end of Game-Turn Twelve, the Tyrian Player automatically wins.

THE GAME TURN

1. THE PLANNING PHASE

A. Allocation Segment
The Macedonian Player secretly notes if he is going to bomb or assault during this Game-Turn. The Tyrian Player then secretly notes the number of Engineering Points allocated to wall repair, ship repair, and mining coastal hexes with boulders for this Game-Turn. Repaired ships and wounded leaders may be returned to play.

B. Macedonian Construction Segment
The Macedonian Player may construct mole hexes, catapaults, and battering rams.

C. Tyrian Construction and Wall Repair Segment
Using the Engineering Points allocated for that Game-Turn, the Tyrian Player may repair ships, mine coastal hexes with boulders and repair damaged wall hexes using the Wall Repair Table.

D. Strategic Movement Segment
First the Macedonian Player may move (embark) any of his battering rams and catapaults (if he chooses to bombard) or land combat units (if he has planned an amphibious assault) onto ships in the mainland harbor. He may also relocate his siege towers and fire units on the causeway (mole) or on the mainland. The Tyrian Player may then move his land units up to twice their Movement Point Allowance. Finally, the Tyrian Player may relocate his catapaults anywhere on the walls of Tyre.

E. Naval Reinforcement Segment
The Macedonian Player rolls the die for naval reinforcement using the Naval Reinforcement Table.

2. NAVAL SUPERIORITY AND BOMBARDMENT PHASE

The Macedonian Player may use this Phase only if he did not plan an amphibious assault for this Game-Turn; if he has, he skips this Phase and proceeds immediately to the Assault Phase.

NAVAL SUPERIORITY AND BOMBARDMENT IMPULSE
(Segments A through E)

The Tyrian Player moves first on the odd numbered Impulses and the Macedonian on the even numbered Impulses.

A. First Player Movement Segment
The Player who moves first during this Impulse removes Exhaustion markers from his eligible ships and then may attempt to unpin and move his naval units and attempt to ram Enemy ships.

B. Second Player Movement Segment
The Player who moves second removes Exhaustion markers from his eligible ships and then may attempt to unpin and move his naval units and may attempt to ram Enemy ships.

C. Simultaneous Naval Melee Segment
The Players may engage in naval melee combat. Disruption markers placed in the previous Game-Turn are removed.

D. Macedonian Bombardment Segment
The Macedonian Player may attempt to breach the walls of Tyre with any of his catapaults or battering ram platforms. All attacks must be allocated before any are resolved.

E. Tyrian Bombardment Segment
The Tyrian Player may use his catapaults to bombard any Macedonian naval unit that is carrying a catapault or battering ram platform. All attacks are allocated before any are resolved.

Segments A through E are repeated six or, if both Players agree, fewer times. Proceed to Segment F.

F. Naval Regrouping Segment
Tyrian ships are returned to either home harbor. Macedonian ships are returned to the mainland harbor. Two damaged ships may be combined into one full-strength unit.

3. AMPHIBIOUS ASSAULT PHASE
If the Macedonian Player has chosen to bombard, the Amphibious Assault Phase is eliminated for that Game-Turn and play proceeds to a new Game-Turn.

AMPHIBIOUS ASSAULT IMPULSE
(Segments A through F)

The Tyrian Player moves first on the odd numbered Impulses and the Macedonian Player on the even numbered Impulses.

A. First Player Naval Movement Segment
The Player who moves first during this Impulse removes Exhaustion markers from his eligible ships and then may attempt to unpin and move his naval units and may attempt to ram Enemy ships.

B. Second Player Naval Movement Segment
The Player who moves second removes Exhaustion markers from his eligible ships and then may attempt to unpin and move his naval units and may attempt to ram Enemy ships.

C. Simultaneous Naval Melee Segment
The Players engage in naval melee combat. Disruption markers placed in the previous Game-Turn are removed.

D. Tyrian Bombardment Segment
The Tyrian Player may use catapaults to bombard any Macedonian naval units that are carrying land units. All attacks are allocated before any are resolved.

E. Macedonian Land Movement Segment
The Macedonian Player may move any of his land combat units which are on the island of Tyre. Land units loaded in ships may disembark.

F. Tyrian Land Movement Segment
The Tyrian Player may move his land combat units.

G. Simultaneous Fire Combat Segment
The Macedonian and Tyrian Players may direct
fire combat at each other’s units. Note that though combat is resolved sequentially, all results are applied simultaneously.

H. Macedonian Melee Segment

The Macedonian Player may melee (attack) any Tyrian units adjacent to his own.

I. Tyrian Melee Segment

The Tyrian Player may melee (attack) any Macedonian units adjacent to his own.

J. Rallying Segment

Both Players may unrally all their land combat units.

Note: The Players must roll a dice when the melee is over.

GAME TURN INDICATION PHASE

The Game Turn marker is advanced one space on the Game Turn Record Track, unless the Macedonian Player has Ambushously assaulted, in which case the game is over.

[5.0] NAVAL FACING AND MOVEMENT

GENERAL RULE:

Naval units may be moved only into All-Sea or Beach hexes, unless turned one hexside at a time, or by using normal and ramming speeds and may be used to ram Enemy ships. No two naval units may occupy the same hex at the end of a Movement Segment of a Naval Impulse. Players alternate Movement Initiative for each Naval Impulse, with the Tyrian Player having the Initiative and moving first during the odd numbered Impulses, and the Macedonian Player moving his naval units first during all the even numbered Naval Impulses.

CASES:

[5.1] NAVAL FACING

[5.11] Naval units are always faced in a specific direction. The top of the edge of the counter must always face toward a specific hexside. It may never face or point to a junction of two hexsides.

[5.12] Naval units must be moved into the hex toward which they are facing (Exception: see Case 5.24). The facing of a naval unit may be changed by one hexside at the beginning of the owning Player’s Movement Segment. After that, a naval unit’s facing may be altered by one hexside per hex entered.

[5.13] Changing the facing of a naval unit costs one Movement Point. This expenditure is in addition to any Movement Points expended in moving from hex to hex.

[5.2] NAVAL MOVEMENT

Naval units have two speeds: normal speed and ramming speed. Both speeds are maximums; the Player is never required to use the full Movement Point Allowance when moving his naval units. Generally a Player will use the normal speed when moving his ships, and he is thus limited to the maximum Allowance at that speed. He may, however, shift to ramming speed, if he attempts to ram (see Case 6.11). The decision whether to attempt to ram must be made for each ship at the beginning of that ship’s Movement.

[5.21] Naval units may not use ramming speed two Segments in a row. Furthermore, after a naval unit has used ramming speed, it is exhausted and may be moved at only one half of its normal Movement Point Allowance during the next Movement Segment of that Game Turn.

[5.22] Naval units may not be moved through hexes occupied by other naval units, Friendly or Enemy.

[5.23] The normal Movement Point Allowance of a naval unit may not be reduced to less than half of the value printed on the naval unit fraction rounded down. That is, a naval unit which is exhausted after a ram attempt and has its Movement Point Allowance halved may not be disrupted and halved again.

[5.24] A naval unit may be moved “backwards” up to three hexes through hexes directly opposite the one it is facing at a cost of its entire Movement Point Allowance. A naval unit which is exhausted or disrupted may utilize this maneuver. A naval unit may not be used to ram, nor may its Facing be changed during that Segment. During the next Movement Segment, the naval unit may be moved normally.

[5.3] REGROUPING

[5.31] During the Regrouping Segment of the Naval Bombardment Phase, all naval units are placed, without stacking, in their home ports. The Players may redeploy their naval units in any way and face them in any direction within their respective home ports — the mainland port hexes and adjacent all-sea hexes for Macedonian forces; island port hexes and all-sea hexes within Tyrian harbors inside the boundaries for Tyrian ships.

[5.32] During this Redeployment Segment, both Players may combine any two damaged naval units of the same type and nationality into one full strength unit. However, the Tyrian Player may repair his ships during the Tyrian Construction and Wall Repair Segment (see Case 14.32, Tyrian Engineering Points).

[6.0] NAVAL COMBAT

GENERAL RULE:

There are two types of naval combat: ramming and melee. Ramming is executed during the Movement Segments of the Naval Phases. Naval Melee Combat is executed during the Naval Melee Combat Segments of the Naval Phases. The primary objectives of ramming are to damage and sink opposing naval units or to pin them, thereby making them easy targets for boarding and melee. Ships loaded with battering rams may attempt to ram walls (see Case 13.3). Naval melee combat represents all close ship-to-ship actions between opposing naval units and includes the effects of short range catapults and boarding. It occurs only when Enemy units are in adjacent hexes and are either engaged via a ‘pin’ ramming result or are parallel to each other.

CASES:

[6.1] RAMMING

[6.11] A naval unit attempting to ram must be moved at ramming speed and begin its naval movement at least three hexes from the naval unit it is attempting to ram.

[6.12] A ship being used to ram an opposing vessel may be turned more than one hexside during the entire course of its ram attempt, and such a turn must be executed at least two hexes distant from the target hex.

[6.13] The ramming ship must directly face the broadside of the target Enemy naval unit. Ramming is performed in a Movement Segment; it is not considered combat per se.

[6.14] After fulfilling the above prerequisites for ramming, consult the Ramming Table (6.4). Cross-reference the ramming ship type of the attacker with the ship type of the defender, and roll the die. If the number rolled is equal to the number needed to successfully ram, the die may be rolled again for damage as called for by the table. After the attempt, the ramming naval unit may not be moved for the remainder of that Movement Segment. A ship may be rammed more than once during a naval Movement Segment.

[6.15] A naval unit may use ramming speed only when attempting to ram. After a ramming attempt, place an exhausted counter on the unit. The naval unit is moved at half its normal Movement Allowance during the next Movement Segment.

[6.16] At the beginning of each Player’s Movement Segment, that Player may attempt to free his pinned units. If a pinned naval unit was the object of a ramming attempt, the owning Player rolls the die, and if the result is 1 or 2, his naval unit is unpinned and may be moved and attack normally during that Movement Segment. If the naval unit initiated the ramming, the owning Player rolls the die, and if the result is 1 through 4, the unit is unpinned and may move and attack normally.

[6.17] A Player may attempt to un-pin an exhausted unit, but not a disrupted unit.

[6.2] NAVAL MELEE COMBAT

[6.21] Naval melee combat takes place during the Simultaneous Naval Melee Segment. To engage in melee combat, a Friendly naval unit must be parallel and adjacent to or pinned with an Enemy unit. If both ships are not so situated, the melee combat is not allowed.
[6.22] Melee combat is voluntary. To determine the result of melee combat, the Attacker
1. Adds the Melee Strength of all attacking naval units and leaders
2. Subtracts the Melee Strength of the defending unit and leader from the above sum
3. Rolls the die
4. Cross references the difference with the result of the die roll on the Naval Melee Combat Results Table.

[6.23] No more than two Friendly ships may attack an Enemy vessel. If two ships melee attack an Enemy vessel, their Naval Melee Strengths are combined. Each ship may undergo and initiate only one melee combat attack per Game-Turn. If a Friendly ship is adjacent and parallel to more than one Enemy ship, it may only attack one Enemy ship of its choice.

[6.24] Naval melee combat is simultaneous; all attacks for both Players are resolved before any moves are taken. Thus, if a naval unit is damaged by an Enemy unit, that naval unit could still attack an Enemy unit at full strength during the mutual Combat Segment in which it was damaged.

[6.25] There is no Advance after Combat at the completion of a naval melee.

[6.26] Naval melee combat may not take place between units if one or both is in beach or home port hex.

[6.27] A naval unit that is pinned during ramming may melee only with the naval unit with which it has been pinned.

[6.3] EXPLANATION OF NAVAL COMBAT RESULTS

[6.31] – No effect

[6.32] Dis = Disrupted. For the next Movement Segment, the ship’s Movement Allowance is halved and the ship may not melee attack; it may only defend.

[6.33] Pin = Pinned. Naval units may not be moved and may melee only with the unit with which it is pinned. (Pinned counters are placed on the defending ship with the Pinning marker pointing to the ramming ship).

[6.34] Dam = Damaged. The ship counter is flipped to its back printed side. If a damaged ship is damaged again, it is Sunk.

[6.35] Sunk = The ship is sunk and is removed from play.

[6.4] RAMMING TABLE (see map)

[6.5] NAVAL MELEE COMBAT RESULTS TABLE (see map)

[7.0] BOMBARDMENT COUNTER-BOMBARDMENT, AND REPAIR

GENERAL RULE:

Battlement represents Macedonian attempts to breach the walls of Tyre. During the Macedonian Bombardment Segment of the Naval Bombardment Phases, the Macedonian Player allocates each of his catapults and battering rams which are carried on naval units to fire at or ram a particular Primary or Secondary Wall Hex. For each catapult and battering ram, he rolls the die and consults the Bombardment Table (7.4) to determine its effect. If the Macedonian Player has fulfilled the prerequisites for battering, the Macedonian Player will roll a die and consults the Wall Ramming Table (7.5). The Tyrian Player may then have his catapaults counter-bombard Macedonian units that are carrying catapults or battering rams, using the Counter-Bombardment Table (7.6). Finally, during the Wall Repair Segment, the Tyrian Player may attempt to repair wall damage using the Wall Repair Table (7.7).

CASES:

[7.1] MACEDONIAN BOMBARDMENT

[7.11] During the Bombardment Segment of the Naval Bombardment Phase, the Macedonian Player must allocate the fire of each ship-based combat that for a segment to a particular Wall Hex. He cannot roll the die to resolve any bombardment until he has completed all allocations, and once all allocations have been completed, they may not be changed.

[7.12] Each catapult may be fired at only one Wall Hex per Game-Turn. Each Macedonian bombardment attempt is resolved individually; the fire of two catapults may not be combined in one attack against the same hex. However, one hex may be fired upon by more than one Macedonian catapult in the same Bombardment Segment (the fire of each being resolved individually).

[7.13] A Macedonian catapult can bombard at a range of up to four hexes. The Macedonian Player need not trace a Line of Sight (see Case 11.1) between the catapult and its target hex.

[7.14] Battlement carried by ships may also be used during the Bombardment Segment of the Naval Bombardment Phase. To ram, the ship’s battering ram must be in an All-Sea hex and be adjacent to and facing a Primary Wall Hex (no secondary walls are adjacent to the sea). The ship carrying the battering ram may ram a wall a maximum of twice per Game-Turn. Two or more battering rams may attempt to breach a Primary Wall Hex from different hexes, as long as the ramming requirements are met, with each ram resolved separately using the Ramming Table (7.15, see game map).

[7.15] The number of successful Breach Points needed to breach a Primary or Secondary Wall Hex is six; however, one is added to the die roll on the Bombardment Table when the catapult attack is against a Secondary Wall Hex.

[7.16] All Macedonian naval units and naval leaders including the ships that are carrying catapults or battering-ram platforms must return to their home ports at the end of the Naval Bombardment Phase of the same Game-Turn in which they left their home port during the Regrouping Segment (see Case 5.3).

[7.2] TYRIAN COUNTER-BOMBARDMENT

[7.21] At the beginning of the Counter-Bombardment Segment, the Tyrian Player may allocate the fire of each of his catapults to a particular Macedonian naval unit that is carrying a catapult or battering-ram. He cannot roll the die to resolve any counter-bombardment until he has completed his allocation, and once completed, these allocations may not be changed.

[7.22] Only Tyrian catapults which are on Wall Hexes may fire at Macedonian catapults and battering rams. The range of Tyrian catapults is four hexes. The Tyrian Player need not trace a Line of Sight between any catapult occupying a Wall hex and its target.

[7.23] Tyrian catapult fire affects only Macedonian ships, not the catapults and battering rams and the ships carrying them during the Counter-Bombardment Segment, if the ship being fired upon is a Macedonian ship in the same Segment. Note: Tyrian catapult fire has no effect on Macedonian ship-based catapults and battering rams during the Ambush Assault Phase (they may not be carried during that phase).

[7.3] REPAIRING WALL BREACH DAMAGE

During the Wall Repair Segment, the Tyrian Player may utilize any Engineer Points which he allocated to wall repair during the Planning Phase to attempt to repair damaged Wall Hexes.

[7.31] The Tyrian Player determines how many Engineer Points are allocated to wall repair. Prior to resolving any repair attempts, the Tyrian Player must allocate each Engineer Point to a particular Wall Hex. More than one Engineer Point may be allocated to a particular Wall Hex. The Tyrian Player cannot roll the die to resolve any repair attempts until all Engineer Points available have been allocated. Once completed, Engineer Point allocations may not be changed.

[7.32] For each Engineer Point allocated to the repair of a particular Wall Hex, the Tyrian Player may roll the die once and consult the Wall Repair Table (7.4) to determine how much the Wall Damage Level is reduced. There is no limit on the number of times a particular hex may be repaired. Note, however, that a hex may never have a "negative" Wall Damage Level.

[7.4] BOMBARDMENT TABLE (see separate sheet)

[7.5] WALL RAMMING TABLE (see separate sheet)
[8.0] NAVAL TRANSPORT AND AMPHIBIOUS ASSAULT

GENERAL RULE:
During the Naval Superiority and Bombardment Phase, the Macedonian Player may use his ships to transport catapults, battering rams, and naval leaders. During the Amphibious Assault Phase, the Macedonian Player may use his ships to transport land combat units and leaders (naval and land). Battering rams, catapults, leaders, and land combat units may be loaded and unloaded from ships located in harbor ports (mainland port boxes and adjacent all-sea hexes) during the Strategic Movement Segment of the Planning Phase. Macedonian land combat units that are loaded in ships may be used by the Macedonian Player to conduct Amphibious Assaults against the island of Tyre. Ships which are transporting may not ram Enemy units, and one is added to any damage die roll resulting from a ramming by an Enemy naval unit. They may melee both offensively and defensively, subtracting two from their Naval Melee Strength.

CASES:

[8.1] TRANSPORT DURING THE NAVAL SUPERIORITY AND BOMBARDMENT PHASE

[8.11] The Macedonian Player may transport either one catapault, one battering ram, or one naval leader on each of his full strength ships during the Naval Superiority and Bombardment Phase.

[8.12] Land Combat units and land leaders may not be transported during the Naval Superiority and Bombardment Phase. Note: Alexander and King Azemnik have both land and naval Leader Ratings and may be transported in their naval mode.

[8.13] If a ship which is transporting a catapult or battering ram is damaged or sunk, the catapult or battering ram is eliminated.

[8.2] TRANSPORT DURING THE AMPHIBIOUS ASSAULT PHASE

[8.21] The Macedonian Player may transport up to two land combat units (fire and/or melee), plus one land or naval leader, on each of his full strength ships during the Amphibious Assault Phase.

[8.22] Battering rams and catapults may not be transported during the Amphibious Assault Phase. In addition, leaders which have both land and naval Ratings must be transported and used in one mode only during the Amphibious Assault Phase. Once committed, these leaders may not change mode during the Phase.

[8.23] If a ship which is transporting land combat units (with or without a land leader) is sunk during the Amphibious Assault Phase, the land combat units and/or leader are eliminated.

[8.24] Macedonian land combat units which are being transported may not melee. However, fire units may engage in fire combat with Tyrian land units and be fired upon by Tyrian fire units. Macedonian melee units are not affected by Tyrian fire combat attacks while being transported (they were below deck).

[8.3] AMPHIBIOUS ASSAULT

[8.31] Macedonian naval units adjacent to a Beach hex which is adjacent to a Secondary Wall hex or a Breached Primary Wall hex may disembark land combat units into that Beach hex. To disembark a land unit, the naval unit is moved adjacent to the Beach hex and the Macedonian Player announces that the ship is disembarking a land unit. He then rolls the die to see if the ship and men are lost due to grounding. The ship is then considered to be beached and the Macedonian Player does not roll for grounding for that ship again (Exception to Case 9.31). If the ship survives the beaching, land units and leaders may enter that beach hex at a cost of two Movement Points. During the next Macedonian Movement Segment if the ship is moved once units have been disembarked from a ship into a Beach hex, it may not return to a hex adjacent to a beach hex.

[8.32] Macedonian naval units adjacent to an All-Sea hex which is adjacent to a Beach hex may move land combat units into that All-Sea hex. During the Macedonian Land Movement Segment, a land unit and land leader may be moved into the All-Sea hex adjacent to the Breached Primary Wall hex at a cost of two Movement Points (they are wading ashore). They may not then be moved into the Breached Wall hex, or attack or disengage from an Enemy unit in that hex during the Fire Combat and Land Melee Segments of that Impulse. If they are unsuccessful in dislodging the Enemy unit to enter the hex, they must be returned to the ship they were disembarked from or be eliminated.

[8.33] A land combat unit or land leader in a Beach hex may not be moved into an adjacent Beach hex. It may only be moved into a Breached Primary Wall hex, a Secondary Wall hex not in an Enemy Zone of Control, or into a Secondary Wall hex that has just been vacated due to combat (its advance after combat, see case 12.5).

[8.34] Macedonian land combat units that suffer a Retreat result are eliminated unless there is a ship full hex to disembark without exceeding stacking limitations if forced to retreat into an All-Sea hex. Once a unit has been retreated onto a ship, it may not be melee attacked (however a fire combat unit is vulnerable to fire combat attacks from land). Such units may be moved back into a Beach hex in the next Macedonian Land Movement Segment.

[9.0] MOVEMENT OF LAND COMBAT UNITS AND LEADERS

GENERAL RULE:
During his Land Movement and Strategic Movement Segments, each Player may move as many or as few of his land combat units and leaders as he wishes. These units may be moved in any direction or combination of directions, so long as their Movement Point Allowances are not exceeded. Note: Movement of siege units is covered in Section 13.0.

PROCEDURE:
Units are moved through the hexgrid one at a time along a path of contiguous hexes. When a unit is moved into a hex, a portion of its Movement Point Allowance is expended. Movement costs vary depending on the type of terrain in the hex. The cost for each type of terrain is listed on the Terrain Effects Chart (8.28). Note: In this Section, the term "unit" refers to both land combat units and leaders.

[9.1] HOW TO MOVE UNITS

[9.11] A Player may move his units only during his Land Movement Segment or the (mutual) Strategic Movement Segment. Note that Advance after Melee Combat (see Case 12.5) is not considered movement for purposes of this section.

[9.12] Friendly units may never be moved into a hex containing Enemy combat units. Friendly combat units may be moved into a hex containing only an Enemy leader and/or siege units, in which case the Enemy leader or siege unit is eliminated. Friendly leader and/or siege units may not be moved into a hex containing Enemy leaders and/or siege units.

[9.13] Friendly combat units may be moved through hexes containing other Friendly units, but at the end of a Movement Segment, no combat unit may ever occupy the same hex as another combat unit (Exception: Naval Transport, Section 8.0). There is no "stacking" of combat units in this game. One leader, however, may occupy the same hex as a Friendly combat unit (see Case 9.5). There may be one siege unit in a hex in addition to any other units.

[9.14] Once a Player moves a combat unit into an Enemy Wall hex (see Section 10.0, Zones of Control), he must not move that unit any further during that Movement Segment (i.e., the unit must end the Movement Segment in that hex). The Player may move the unit again in his next Movement Segment, but only if it is moved immediately into a non-Enemy controlled hex.

[9.15] The number of Movement Points expended by a unit during a single Movement Segment may never exceed its given Movement Point Allowance (Exception: Strategic Movement). Unused Movement Points may never be accumulated from one segment to another or transferred between units.

[9.16] During the Planning Phase, both Players have a Strategic Movement Segment. During this Segment (only) the Macedonian Player may move land units from anywhere on the mainland onto any of his ships located in mainland Harbor hexes. Then the Tyrian Player may move his land units up to twice their Movement Point Allowance. A unit need not be within his leader's command radius to move its full strategic movement allowance.

[9.17] During the Strategic Movement Segment the Macedonian siege towers may be relocated anywhere on the mainland or the mole. Tyrian catapults may be relocated anywhere on or within the walls of Tyre.

[9.2] EFFECTS OF TERRAIN ON MOVEMENT

Moving a unit into a hex costs a certain number of Movement Points, depending on the type of terrain in the hex.

[9.21] The cost to move a unit into a Clear terrain hex is one Movement Point.

[9.22] The cost to move a unit into a Breached Wall hex is two Movement Points.

[9.23] The cost to move a unit from a Wall hex to an adjacent Unbreached Wall hex is ½ Movement Point. The cost to move a unit from a non-Wall hex into an Unbreached Secondary Wall hex is four Movement Points (however, see Case 9.24).

[9.24] A unit may not be moved into an Enemy-controlled Unbreached Secondary Wall hex unless it is moved into such a hex from an adjacent wall hex.

[9.25] A Macedonian unit may not be moved into an Unbreached Primary Wall hex except directly from an adjacent Wall hex.
A unit may never be moved into a hex if it does not have sufficient Movement Points remaining in its Movement Point Allowance to pay for the cost of the hex.

Other terrain types that affect movement are the beaches, the booms, and the city. The effects of these types of terrain are listed on the Terrain Effects Chart (9.28). They are also discussed in more detail in Case 9.3, Special Terrain.

Terrain Effects Chart (see map)

SPECIAL TERRAIN

The Tyrian beaches were rocky and surrounded by treacherous currents. In addition, they were so shallow that the coordinated movement of the massive Macedonian Army formations up and down the rock beaches was impossible. Each naval unit which enters or disembarks a land unit into a beach hex must roll a die for grounding; if the number rolled is equal to or less than the number listed in the hex the ship is destroyed. (Exception: Any ships not carrying land units may be moved into hexes 2801, 3901, 5001 at a cost of 2 Movement Points at the owning Player's option and not roll for grounding. They may still be moved into these hexes at a cost of one Movement Point; however, a die would have to be rolled for grounding. This simulates circumnavigation of the island. No lateral movement (from hex to hex) is allowed by land combat units on the beaches. A unit which is in a beach hex may be moved into a breach in a primary wall, a breach in a secondary wall, or into a Secondary Wall hex that is not an Enemy Zone of Control, but not into an adjacent Beach hex.

The Booms

The Booms are located at the entrances of both of the Tyrian harbor ports. They were massive wooden logs and ships that were chained together to protect the harbors. The Macedonian Player may destroy a boom if he is able to maintain one full strength naval unit adjacent to the boom which is not adjacent to any Tyrian naval units for one complete Impulse of any Naval Phase. Combat and movement restrictions for the boom are listed on the Terrain Effects Chart.

The City

The City proper was on the highest ground on the island and was the only multi-storied city in the ancient world. The close and street pattern made movement of army formations through the city difficult.

Primary and Secondary Walls

The primary walls were the first line of defense for the population of Tyre. With the cliffs rising from the ocean, these walls reached to a height of one hundred and fifty feet in places. Secondary walls were considerably smaller and are located on various, less vulnerable areas of the island.

EFFECTS OF LEADERS ON MOVEMENT

At the beginning of each Movement Segment, any fire and/or melee units that are further than twice their leader's Command Radius (in hexes) from that leader may expend a maximum of only one-half their Movement Point Allowance in that Movement Segment (see Case 15.1, Command Radius).

STACKING

In Tyre, units of the same type may not generally be "stacked" together in the same hex. Note that fire units and melee units are considered combat units while leaders and siege units are not. Stacking restrictions apply at the end of each Movement Segment and/or Phase. Except during retreats, Players may move Friendly units through other Friendly units (see Case 5.13, How to Move Units).

No more than one combat unit may occupy a particular hex at the end of any Movement Segment or Phase.

No more than one leader may occupy a particular hex at the end of any Movement Segment or Phase.

No more than one siege unit may occupy a particular hex at the end of any Movement Segment or Phase.

A Player may freely combine units of different types in the same hex, as long as no more than one of each unit type is present. The maximum number of units that could be combined in any one hex in this manner would be these: one leader, one combat unit, and one siege unit.

The Information markers never count in any way for stacking purposes.

ZONES OF CONTROL

Each land combat unit in the game exerts a Zone of Control. The six hexagons immediately surrounding a hex occupied by a land combat unit constitute the Zone of Control of that unit. Zones of Control affect movement, retreat, and the tracking of leader's command radii. Hexes constituting a Zone of Control are referred to as "controlled" hexes. In the Section following, the term "combat unit" refers to land combat units. Naval units and leaders have no Zone of Control.

CASES:

1. HOW ZONES OF CONTROL OPERATE

1.11 Each combat unit exerts a Zone of Control, except when it is stacked with a siege unit. Disrupted combat units do not exert Zones of Control. Siege units, leaders, and Informational counters do not exert Zones of Control.

1.12 A combat unit's Zone of Control does not extend through an All-Sea hexside.

1.13 A combat unit that is not in an Unbreached Wall hex does not exert a Zone of Control into any Unbreached Wall hexes.

1.14 Friendly Zones of Control do not negate the effects of Enemy Zones of Control for any purpose except that Friendly units do negate Zones of Control in the hex they occupy for the purpose of tracing Command Radius.

EFFECTS OF ZONES OF CONTROL

A unit that is moved into an Enemy-controlled hex must cease movement in that hex. There is no additional cost in Movement Points to move a unit into an Enemy-controlled hex, but a unit so moved may be moved no further for the remainder of that Movement Segment.

A unit that is in an Enemy-controlled hex at the beginning of a Movement Segment may be moved during that Segment if and only if the first hex it is moved to is not Enemy-controlled.

A unit may not enter an Enemy-controlled Secondary Wall hex except directly from an adjacent Wall hex.

A Player may not trace the Command Radius of a leader to a combat unit through an Enemy-controlled hex. Exception: Friendly units negate Enemy Zones of Control in the hex they occupy for the purpose of tracing Command Radius.

A unit forced to retreat as a result of combat may never be retreated into or through an Enemy-controlled hex.

Friendly Zones of Control never affect Friendly units. There is no additional effect when more than one unit exerts a Zone of Control into the same hex.

FIRE COMBAT

GENERAL RULE:

Fire combat takes place during the Simultaneous Fire Combat Segment of the Assault Phase. Only fire units (including Tyrian catapults) have fire combat capability. Leaders, siege towers, Macedonian catapults, battering rams and melee units may not engage in fire combat. In general, a fire unit may attack any hex within range to which an unblocker Line of Sight may be traced. Fire combat is always voluntary, and all results are applied simultaneously, after all fire combat has been resolved.

PROCEDURE:

To fire, the owning Player announces which a fire unit is firing at. The Range Attenuation Table is consulted to determine the units' Fire Strength. A die is rolled and the result cross-referenced with the fire strength column yielding the result. Any results are applied to defending combat units after all other fire combat attacks have been resolved, simultaneously with all other results. Note: As fire combat results are not applied until after all fire combat has been resolved, Players will have to "remember" all such results. In practice, it is useful to apply all Disrupted and Eliminated results as the attacks are resolved. But apply retreat results that affect each other in local areas (nearby attacks) together.

CASES:

LINE OF SIGHT AND OTHER RESTRICTIONS ON FIRE COMBAT

In order for a unit to be able to fire, the owning Player must first trace a Line of Sight from the firing unit to the hex at which the fire is directed. A Line of Sight is defined as a straight line traced between the center of the hex occupied by the firing unit and the center of the hex being fired upon, which does not pass through any City hex, or primary or secondary Wall hexes (breached or not). If the owning Player cannot trace a Line of Sight between a given unit and a potential target, then that unit cannot fire at that target.

A Line of Sight cannot be traced along the border between two hexes, one of which is Block- ing terrain. A Line of Sight may be traced through an otherwise eligible hex occupied by Friendly or Enemy units.

A fire unit can only fire at one hex per Segment. A hex may be attacked by more than one unit in a single Segment, in which case each attack would be resolved separately.

FIRE COMBAT RESULTS

Fire combat results are all applied simultaneously, after all fire combat has been resolved. Hence, a fire unit eliminated by fire combat would still be able to fire during the Segment in which it is eliminated. Similarly, all Retreat results are applied simultaneously; hex by hex, after all fire combat has been resolved.
[11.21] Combat results apply to fire and melee units (combat units). Siege towers, catapults/battering rams, and naval combat units are never affected by fire combat results and remain in a hex regardless of whether or not a unit in the same hex is fired upon and retreats, is disrupted or eliminated.

[11.22] A leader in a hex with a unit that is retreated may be retreated along with the unit at the owning Player's option. A Leader in a hex with a combat unit that is eliminated is subject to the Leader Loss Procedure (see Case 15.4, Loss of Leaders).

[11.23] Disruptions
An affected combat unit is flipped over to indicate its disrupted status. Disrupted units cannot engage in fire combat or melee attack. A disrupted unit disrupted a second time must be retreated. A disrupted unit is automatically "undisrupted" — its counter is flipped back right-side up — during the Disruption Removal Segment of each Assault Impulse. Disruption affects only melee and fire units.

[11.24] Retreat (see also Case 11.3)
An affected unit must be retreated a number of hexes equal to its Movement Point Allowance plus two (exception: Case 11.25) ignoring terrain movement costs. A disrupted unit which suffers a retreat result is eliminated. A unit cannot be retreated into a hex containing Prohibited terrain, into an Enemy-controlled hex, or a Friendly land combat unit (Exceptions: units may retreat through fire combat units. Fire Melee units are considered fire units for this purpose). A retreating unit must be retreated as far away (in hexes) as the combat result indicates from the hex which it occupied when the combat was resolved. Any unit that cannot be retreated within these guidelines is eliminated. A unit may be retreated into a hex containing only an Enemy Leader and/or siege engine, thereby eliminating any such Enemy unit. A unit that has suffered a retreat result may not use the Road Movement Rates during the next Game-Turn.

[11.25] A unit in a Wall hex that must be retreated is retreated only two hexes. If the unit is Tyrian, it is retreated off the wall and toward the city of Tyre. If the unit is a Macedonian, it must be retreated off the wall and back onto a ship which is not already carrying two land units. If no ship is available, the units must be retreated two hexes free from Enemy Zones of Control or eliminated. Units may not be retreated into more than one Beach hex.

[11.26] Eliminated
The affected combat unit is removed from play.

[11.3] HOW TO RESOLVE SIMULTANEOUS FIRE COMBAT RETREATS
Retreats required by the resolution of fire combat are accomplished simultaneously, hex-by-hex (i.e., all units that must be retreated are retreated one hex, and any units unable to do so within the restrictions listed in Case 11.24 are consequently eliminated). Then all surviving retreating units are retreated a second hex, and any that cannot do so are eliminated, and then all are retreated a third hex, and so forth.

[11.31] A unit in the process of being retreated expects a Zone of Control only into the hex from which it has just been moved. Example: A Friendly unit retreated from hex 3106 to hex 3206 would expect a Zone of Control only into hex 3106. Note that no Enemy unit could be retreated into hex 3106 because the Friendly unit was retreated from that hex and it would be exerting a Zone of Control into that hex.

[11.32] If a Friendly unit could retreat into a hex which an Enemy unit could also retreat into, neither unit may retreat into that hex. If forced to do so, they are eliminated instead. A Player may not voluntarily retreat his unit into the same hex as his opponent is retreating a unit to if he has an alternative retreat.

[11.4] FIRE COMBAT RANGE ATTENUATION TABLE (see chart sheet)

[11.5] FIRE COMBAT RESULTS TABLE (see separate sheet)

[12.0] LAND MELEE COMBAT
GENERAL RULE:
Melee combat takes place during the Melee Combat Segments of the Assault Phase. Only melee units may engage in attacks using melee combat. Some units have the option to retreat before melee combat. Leaders and army morale may affect melee combat. Melee combat results are applied immediately, and attacking units may advance if the Enemy unit is eliminated or retreated.

---

In example A, the Tyrian Marine unit (which is surrounded by Enemy Zones of Control) fires upon the Macedonian Guard Archer unit, inflicting a retreat result. In turn, the Macedonian Guard Archer unit (which is also surrounded by Enemy Zones of Control) fires upon the Tyrian Marine unit and inflicts a retreat result. During the simultaneous retreat procedure, both units are forced by Enemy Zones of Control to enter the same hex as the first hex of their retreat paths. In this example, both units would be eliminated (Case 11.32).

In example B, the Tyrian Marine unit (which is surrounded by Enemy Zones of Control at the beginning of the Simultaneous Fire Phase) fires upon the Macedonian Guard Archer unit, inflicting a retreat result. In turn, the Macedonian Guard Archer unit fires upon the Tyrian Marine unit and inflicts a retreat result. During the simultaneous retreat procedure, both units may be retreated into the hexes indicated by arrows. In this example, both units which have been forced to retreat may retreat because their Zones of Control extend only into the hex from which they are retreating.
PROCEDURE: The attacking player determines his Attack Strength by totaling the individual Melee Strengths of all units involved in the attack, plus the Leader Bonus if any (see Case 12.2). The defending player determines the Defense Strength by adding the defending unit’s Melee Strength to the Leader Bonus (if any). The Attack Strength is compared to the Defense Strength. This comparison is stated as a ratio — Attack Strength to Defense Strength. This ratio is simplified to conform to one of the ratios listed on the Melee Combat Results Table (12.6), rounding the result “down” in favor of the defender if necessary. The Attacker rolls the die. The Morale Rating of one Leader may be added to the die roll by the attacker and subtracted from the die roll by the defender. Army Morale Ratings are added and/or subtracted from the die roll as applicable (12.3). The adjusted die roll is then cross-referenced with the odds ratio on the Melee Combat Results Table. Any results are applied immediately, prior to the resolution of any other melee attack.

CASES:

[12.1] RESTRICTIONS ON MELEE COMBAT

[12.11] During the Macedonian Melee Segment, only Macedonian units may attack using melee combat. During the Tyrian Melee Segment, only Tyrian units may engage in melee attacks.

[12.12] Melee attacks are voluntary. A Player is not compelled to have a unit engage in a melee attack.

[12.13] A melee unit may attack any Enemy combat unit in a hex adjacent to the hex occupied by the attacking unit. A melee unit may attack a Leader or siege unit in any adjacent hex not also occupied by another unit. When the hex is occupied by both a combat unit and a Leader or siege unit, only the combat unit may be attacked. No unit may attack more than one Enemy unit in any single Melee Segment and no unit may be attacked more than once per Melee Segment.

[12.14] All Friendly melee units adjacent to an Enemy unit may combine to execute a single melee attack against that unit (see Case 12.15).

[12.15] Disrupted melee units may not attack.

[12.16] A Friendly unit may not melee an Enemy unit in an adjacent primary Wall hex unless the Friendly unit is in an adjacent Wall hex.

[12.2] EFFECTS OF LEADERS ON MELEE COMBAT

[12.21] A Player may add the Combat Bonus of any leader that is in the same hex as one of the combat units belonging to that leader’s contingent (see Section 15.0, Land Leaders) to the Melee Strength of that unit in any melee combat (attack or defense) in which that unit is involved.

[12.22] The Morale Rating of a leader may be added to the resolution die roll of any melee attack involving only units of that leader’s contingent, so long as at least one of the units involved in the attack is within the Command Radius (see Case 15.1) of that leader. The Morale Rating of a leader may be subtracted from the resolution die roll of any melee attack involving only units of that leader’s contingent, so long as the unit is within the Command Radius of the leader. When both Players utilize leaders’ Morale Ratings in a given melee, the defender’s die roll modifier is subtracted from the Attacker’s to yield the final effect on the die-roll for that melee.

[12.3] EFFECTS OF ARMY MORALE LEVELS ON MELEE COMBAT

At the beginning of the game, the Morale Levels of both armies is zero (i.e., normal). Certain actions may affect the morale of either army positively or negatively. If one Player’s Army Morale Level is less than or greater than zero, all melee die rolls are adjusted accordingly.

[12.31] The first time the Macedonian Player moves (or retreats) an army unit inside the walls of Tyre, the Morale Level of the entire Macedonian army is increased by 1. Beach and Wall hexes do not count as part of Tyre.

[12.32] Should as many as six Macedonian land units be eliminated, the Macedonian army Morale Level is decreased by 1.

[12.33] If King Azemil is killed, the Army Morale Level of the Tyrian Army Morale is decreased by 1.

[12.34] If either the Temple of Hercules or the Agonemion hexes are entered by Macedonian Player’s units, the Tyrian Army Morale is decreased by 1.


[12.36] Army Morale Level melee effects are cumulative. Thus if the Macedonian Army Morale were +1 and the Tyrian Army Morale Level were -1, a die roll for an attack by Macedonian units would be +2, not counting adjustments for leaders. However, the army Morale Level of a particular force does not affect a particular die roll more than once, regardless of the number of affected units involved. That is, if the Tyrian Army Morale was -1 and two Tyrian units made a melee attack the die roll would be adjusted by -1, not -2.

[12.37] Army Morale Level effects are permanent, although they may be altered by additional Morale Level adjustments.

[12.4] MELEE COMBAT RESULTS

The results of melee combat are applied immediately after the die is rolled, before another melee attack is resolved.

[12.41] Melee combat results apply to fire and melee units (combat units). All other units (leaders, ships, and siege units) which are alone in a hex are automatically eliminated if melee attacked.

[12.42] Disruption

See Case 11.23 for the effects of disruption.

[12.43] Retreat

See Cases 11.24, 11.25, for the effects of retreats.

[12.44] Elimination

See Case 11.26 for the effects of elimination.

[12.5] ADVANCE AFTER MELEE COMBAT

[12.51] Whenever a defending unit is eliminated as a result of melee attack, one attacking unit plus one leader may be advanced into the vacated hex immediately, disregarding Zones of Control, by the attacking Player, at his option.

[12.52] Whenever a defending unit is retreated as a result of melee combat, the hex it vacates and the subsequent hexes through which it is retreated constitute the Path of Retreat. At the owning Player’s option, any of the attacking units, including leaders, may be advanced along the Path of Retreat disregarding Zones of Control (Exception: see Case 12.53). Friendly advancing units may be moved only into hexes through which the Enemy unit retreated. Friendly advancing units may not enter hexes occupied by Enemy combat units or containing prohibited terrain. A unit may be advanced up to a maximum of its Movement Point Allowance.

[12.53] A unit cannot be advanced into a Secondary Wall hex in an Enemy Zone of Control unless that unit participated in a melee attack against a unit in that hex during the current Melee Segment. In that case, it can be advanced normally.

[12.6] MELEE COMBAT RESULTS TABLE

(see chart sheet)

[13.0] SIEGE ENGINES

GENERAL RULE:

The Macedonian Player can deploy siege towers and battering rams. Both Players have catapults. The siege towers may be utilized to nullify the defensive benefits of wall hexes. Macedonian catapults and battering rams may be used to increase the Beach Damage Level of particular Wall hexes. Tyrian catapults may be used against combat units or to counter-bombard Macedonian shipborne catapults and rams (see Case 13.4).

CASES:

[13.1] SIEGE TOWERS

Siege Towers were constructed from wood by the Macedonians and were deployed on the mole to provide a firing platform to protect the archers firing at men on the walls of Tyre.

[13.11] Each siege tower counter represents the tower itself and the men assigned to move it. Thus, siege towers may move by themselves; it is not necessary to have them pushed by other units.

[13.12] Siege towers have no Melee Strength and may only be destroyed if attacked by the Tyrian fireship (see Case 14.42).

[13.13] A Tyrian unit in a wall hex attacked by a fire unit in a hex with a siege tower gains no defensive benefit from the wall. Siege towers negate the effects of Tyrian walls for melee purposes.

[13.14] If a Macedonian combat unit is in the same hex as a siege tower, that unit is immune to all Tyrian fire combat attacks except Tyrian small catapults. Siege towers are immune to all fire combat attacks.

[13.15] Siege towers may be relocated anywhere on the mainland (including the mole) by the Macedonian Player during the Strategic Movement Segment of the Planning Phase.

[13.2] MACEDONIAN CATAPULTS

Ship-borne catapults were built by the Macedonians to destroy the walls of Tyre.

[13.21] Macedonian catapults may be fired only during the Macedonian Bombardment Segments of the Bombardment Phase (see Section 7.0, Bombardment).

[13.22] Macedonian catapults may be used to attack (batter) the walls of Tyre only; they may not be used to attack Tyrian units. Macedonian catapults have a range of four hexes, and the Macedonian Player need not trace a line of sight between the catapult and the wall that is the target.

[13.23] Macedonian catapults have no Melee Strength or Movement Point Allowance. They may be eliminated during counter-bombardment by Tyrian catapults when loaded on ships if the ship is damaged or sunk. Macedonian catapults cannot be moved by themselves except during the Strategic Movement Segment, when they can be deployed on any Macedonian ship located on a mainland harbor hex.
[13.3] BATTERING RAMS
The Macedonians also built ship-borne battering rams to ram and collapse the walls of Tyre.

[13.31] Macedonian battering rams may ram the wall hex of Tyre only during the Macedonian Bombardment Segment of the Bombardment Phase (see Section 7.0, Bombardment).

[13.32] Battering rams may be used to attack the walls of Tyre only; they may not be used to attack Tyrian units. Macedonian battering rams must be in an All-Sea hex directly adjacent to a Tyrian wall hex in order to use the Battering Table (they may not be in a beach hex).

[13.33] Battering rams have no Melee Strength or Movement Allowance. They may be eliminated through counter-bombardment by Tyrian catapults when loaded on ships if the ship is damaged or sunk. Battering rams cannot be which by themselves except during the Strategic Movement Segment, when they can be deployed on any Macedonian ship located on a mainland harbor hex.

[13.4] TYRIAN CATAPULTS
The Tyrians had a number of smaller catapults which were used either to bombard Macedonian ships laden with catapults and battering rams, and to fire at the Macedonian Army using small stone shot.

[13.41] All Tyrian catapults may be fired during the Assault Phase, during each Simultaneous Fire Combat Segment, at combat units only. Small catapults that fire during the Amphibious Assault Phase never affect leaders, siege engines, or other catapults. In order to fire at a combat unit, a Line of Sight (see Case 11.1) must be traced between the firing catapult and the target unit.

[13.42] During the Bombardment Phase (only) Tyrian catapults that are in Wall hexes may fire at Macedonian catapults and battering rams which are laden on ships. The Tyrian Player need not trace a Line of Sight in order to direct such fire. Only Tyrian catapults may fire during the Bombardment Phase, and such fire affects only Macedonian Ships and catapults and battering rams which are being transported (see Case 7.2, Counter-Bombardment).

[13.43] Tyrian catapults have no Melee Strength or Movement Point Allowance. Catapults alone in a hex (or with a leader) melee attacked or moved through by an Enemy combat unit are eliminated (removed permanently from the game). Tyrian catapults may not be moved, except during the Strategic Movement Segment, when the Tyrian Player may deploy his catapults anywhere on the island of Tyre, including in any Wall hex.

[14.0] ENGINEERING

GENERAL RULE:
The Macedonian Player may attempt to build a causeway called the "Mole" across the water to the island of Tyre, He may also build one catapult or battering ram each Game-Turn. Each Game-Turn the Tyrian Player receives six Engineer Points. These may be applied to either wall repair, ship repair, or to mine coastal waters with boulders.

CASES:

[14.1] BUILDING THE MOLE
The mole was part of the mainland—a causeway built by Alexander's forces to bridge the water to the island of Tyre—and was not completed during the siege. It provided a platform, however, for siege towers which were manned by archers to fire at men on the walls of Tyre. In addition, its continued expansion narrowed the strait between the mole and the island, making naval movement through the strait increasingly hazardous.

[14.11] The mole begins the game located from hexes 3731-3831 through hexes 3724-1816. The mole may be expanded each Game-Turn in the 3700 and 3800 hexes beginning with hex 3823 and continuing with hexes 3723, 3822, etc. The progress of the mole is designated by using the Mole Progress markers, and by noting it on the Mine Planning Sheet.

[14.12] During the Macedonian Construction Segment of each Game-Turn, the Macedonian Player rolls die once. On a roll of 4-6, inclusively, the mole is extended one hex in the north — or in the south hexrow, if the north hexrow was the last to be extended. During the following Strategic Movement Segment, the Macedonian Player may relocate one of this siege towers anywhere on the mainland or the mole and one combat or fire unit into the hex with the siege tower.

[14.2] BUILDING CATAPULTS AND BATTERING RAMS

[14.21] At the beginning of the game, the Macedonian Player has four catapults and four battering rams. He may build one catapult or battering ram during each Macedonian Construction Segment. Once built, they may not be changed and, if destroyed, that particular catapult or battering ram may not be rebuilt.

[14.22] The Tyrian Player begins the game with four catapults. He may not build catapults and, if they are destroyed, they may not be rebuilt.

[14.3] TYRIAN ENGINEER POINTS: BOULDER MINING, SHIP REPAIR, AND WALL REPAIR

The Tyrian Player has the capability to spend six Engineer Points per Game-Turn. This capacity may never be increased or decreased. During the Allocation Segment of the next Planning Phase, the Tyrian Player decides and records on paper how many Engineer Points will be allocated to mining coastal hexes with boulders, and how many will be applied to ship repair and wall repair during the current Game-Turn. This allocation cannot be changed until the next Game-Turn.

[14.4] Building the Tyrian Construction Segment, the Tyrian Player may drop boulders from any wall hex into any adjacent beach hex at a cost of two Engineer Points. Boulders add two to the Grounding Number of a Beach hex (see Case 9.31). The Placement of boulders by the Tyrian Player is revealed to the Macedonian Player and recorded on the Mine Planning Sheet (or a voxel copy).

[14.33] Damaged Tyrian ships (backprinted strength) may be repaired during the construction segment at the cost of two Engineer Points for each naval unit being repaired. If a Tyrian ship undergoes repairs, it is removed from play and is returned (at full-strength) during the Construction Segment of the next Game-Turn. Only the Tyrian Player may repair damaged ships. Eliminated ships may not be repaired.

[14.34] Engineer points allocated for wall repair are utilized during the Tyrian Construction and Wall Repair Segment of the Planning Phase (see Case 7.3, Repairing Wall Breach Damage).

[14.4] TYRIAN FIRESHIP
As the mole was extended, the siege towers which were manned with Macedonian archers drew closer to the Tyrian walls. The Tyrians constructed a fireship to destroy the wooden siege towers.

[14.41] Once per game, during a Naval Movement Segment, the Tyrian Player may launch the fireship from one of the two Tyrian harbors. The fireship is considered a trireme for purposes of movement.

[14.42] The fireship may not be rammed or melee attacked by Macedonian naval forces, nor may it initiate melee. However, if the fireship successfully rams a Macedonian naval unit or comes adjacent to a siege tower at the end of its Movement Segment the Macedonian naval unit or siege tower (and the Tyrian fireship) are eliminated. Note: Both siege towers may be destroyed if the fireship is adjacent to them both.

[14.43] The fireship is automatically eliminated after it attempts to ram an Enemy naval unit, successfully eliminates a siege tower, or at the end of the Game-Turn it was launched, whichever occurs first.

[15.0] LAND LEADERS

COMMENTARY:
The land leader counters represent the most charismatic of the highly ranked officers at the siege. The effects of the leaders on the morale of their men cannot be over-emphasized; ancient kings and generals routinely led their men into battle, and frequently a battle was decided by the presence of an inspiring leader and his standard at a critical moment. By the same token, the death of a beloved leader could cause an entire army to lose heart.

GENERAL RULE:
Counters representing individual historical leaders of the Macedonian and Tyrian armies have been provided with the game. These individuals, each represented by a particular counter, are the leaders of the various contingents within the Macedonian Army and Tyrian Armies. Leaders influence both melee combat and movement. Land leaders have three characteristics: a Leadership Morale Rating which can effect the die roll of a melee combat; a Command Radius which is the effective "range" of both the morale rating and the ability of the leader to affect movement; and a Leadership Combat Bonus which can be used to augment the Melee Strength of a particular unit.

Each is the historical leader of a contingent and each combat unit in the game also belongs to a particular contingent. In order for a leader to influence the movement or affect the combat ability of any unit or units, leader and unit must belong to the same contingent. Exception: For the Tyrians, KingAzmilik may use command units from the Royal Guard, the Marines, and the Militia, and Gonzu may command units from the Marines and the Militia. In addition, Azemlik, KingAzmilik, and Gonzu of Tyre are also rated for Naval Combat and may change from one rating to another at any point during the Game-Turn.

CASES:

[15.1] COMMAND RADIUS OF LAND LEADERS
A leader's Command Radius is the maximum distance in land hexes between that leader and a unit of that leader's contingent for the unit to benefit in movement or combat from the leader's presence. When calculating a Command Radius, the hex containing the unit, which the Radius is traced is counted, but the hex containing the leader is not counted.
[15.11] A Command Radius must be traced through a path of contiguous hexes between the leader and the particular unit. This path of hexes must be free of Enemy combat units and their Zones of Control. Exception: For the purpose of tracing Command Radii, Friendly combat units negate Enemy Zones of Control.

[15.12] To be moved at its full Movement Point Allowance, a combat unit must be within a number of hexes of its leader equal to twice the leader's Command Radius. If this condition is not met, the unit may be moved a maximum of one-half its Movement Point Allowance, with any fractions dropped.

[15.13] For a leader's Morale Rating to affect a particular combatant, at least one of the Friendly combat units involved must be within the Command Radius of the leader. See Case 15.2 for other restrictions on the application of leadership Morale Ratings to melee combat.

[15.2] LAND LEADERSHIP MORALE RATINGS

The Morale Rating of a leader may affect the outcome of a melee combat both for the offense and defense.

[15.21] If and only if all the units involved in a melee attack belong to the same contingent, the attacking Player may apply that unit's leader's Morale Rating to the attack, if the condition of Case 15.13 is observed.

[15.22] If the unit which is the object of a melee attack is within the Command Radius of its leader in accordance with Case 15.1, then the Morale Rating of that leader may be used to affect that melee attack in favor of the defending unit.

[15.23] If a Player applies the Morale Rating of a leader to an attack, he may add the leader's Morale Rating to the die roll. If a Player applies the Morale Rating of one of his leaders to a combat in which one of his units is being attacked, he may subtract that Morale Rating from the die roll. It is possible for both Players to apply Morale Ratings to the same combat, and thus for an addition and a subtraction to be made to and from the die roll (possibly on canceling out). Example: If the Macedonian Player applied the Morale Rating of a leader whose Morale Rating is 3 to an attack against a Tyrian army unit, and the Tyrian Player applied a leader Morale Rating of 2 to the same combat defensively, and the die roll for the combat were 4, then the adjusted die roll would be 2 (3 + 3 for the Macedonian leader and 2 for the Tyrian leader).

[15.24] There is no limit to the number of times a particular leader's Morale Rating can be applied to different melee combats in the same Game-Turn. However, a Player, may not apply more than one leader's Morale Rating to any one melee combat.

[15.3] LAND LEADERSHIP COMBAT BONUS

If a unit is in the same hex as the leader of its contingent, it may benefit from the leader Combat Bonus.

[15.31] A unit may benefit from the leader Combat Bonus whenever involved in a melee combat, either on attack or defense.

[15.32] The effect of the Combat Bonus is to increase the Melee Strength of the unit by an amount equal to the leader Combat Bonus. However, the Melee Strength of a unit may never be more than doubled as a result of a leader Combat Bonus.

[15.33] A Player may never apply a leader's Combat Bonus to that leader's own defense. A leader alone in a hex that is the subject of a melee attack is automatically eliminated.

[15.34] A Player may apply the one leader Morale Rating and the leader Combat Bonus to the units that leader is stacked with. Note that any attack to which more than one leader Combat Bonus were applied would be ineligible for any leader Morale Rating bonus, as units from more than one contingent would be involved in the attack.

[15.4] LOSS OF LAND LEADERS

A leader unit in the same hex with a combat unit is not affected per se by any combat results affecting the combat unit. If the unit is retreated, the leader may be retreated with the unit; if the unit is eliminated, however, the Player must perform the leader loss procedure to determine the fate of the leader. Alexander immediately retreats to the nearest unit and does not undergo leader loss procedure, however.

[15.41] To perform the land leader loss procedure, the Player rolls the die for each affected leader. A roll of 1 through 5 allows the Player to place the leader in any hex containing a Friendly combat unit. A roll of 6 results in the leader being wounded. In this case, the Player must roll the die a second time. A roll of 5 or 6 (on a second die roll) results in the death of the leader (elimination). A roll of 1 through 4 means that the leader is wounded and temporarily removed from the game. A wounded leader would be out of play for a number of Impulses equal to the second die roll (i.e., between one and four impulses). Example: If, during Impulse Two of the Amphibious Assault Phase, a Player rolled for a leader and obtained rolls of 6/2 (the second roll being necessitated by the 6 rolled on the first roll), then that leader would be removed from the game until Impulse Four.

[15.42] Wounded leaders are returned to play during the Movement Segment of the appropriate Impulse. Returned leaders may be placed with any Friendly land combat unit.

[16.0] NAVAL LEADERS

COMMENTS:

The naval leaders counter the Tyrian and Macedonian naval leaders, as well as the leaders of local fleets which have been bullied by Alexander into helping his fleetless armies. The leaders were crucial to the cohesion of the various individual fleets, and their utilization was crucial to the outcome of the siege.

GENERAL RULE:

The individual leaders of the various fleets present during the siege are represented by the naval leader counters. Naval leaders influence naval movement, ramming, and melee. They have three characteristics: a Ram Defense and Attack Rating which can affect the die roll of the ramming ship; a Melee Combat Bonus which can be used to augment the Melee Strength of a naval unit; and a Command Radius which is the effective "range" of the ability of the leader to affect naval movement. Each is the historical leader of a fleet and each naval unit in the game belongs to a particular fleet. In order for a leader to influence the movement or combat abilities of a naval unit or units, the naval unit and leader must belong to the same fleet.

PROCEDURE:

During the course of the Game-Turn, at the option of the owning Player, each naval leader may be utilized to affect the movement or augment the ramming and naval melee abilities of the naval units belonging to that naval leader's fleet.

CASES:

[16.1] COMMAND RADIUS OF NAVAL LEADERS

A naval leader's Command Radius is the maximum distance in hexes for any leader to be between that leader and a naval unit of that leader's fleet in order for the unit to benefit from the leader's presence.

[16.11] A Command Radius must be traced through a path of contiguous hexes between the leader and the particular naval unit. For purposes of tracing this path, Enemy units have no effect.

[16.12] In order to be moved at its full Movement Point Allowance, a unit must be within a number of hexes of its leader equal to the leader's Command Radius. If the condition is not met at the beginning of an individual naval unit's Movement Segment (naval leaders may be moved earlier during the Movement Segment to allocate command to the largest part of the fleet), the unit may not be moved at all.

[16.2] NAVAL RAMMING LEADERSHIP RATINGS

The Ramming Rating of a naval leader may affect the outcome of a naval ramming both for offense and defense.

[16.21] If a naval unit is involved in a ramming on either attack or defense and one of the naval leaders of its fleet is stacked with that naval unit, then the ramming rating of that leader may be used to affect that ramming.

[16.22] If a Player applies the Ramming Rating of a naval leader to a ram attack, he may add the leader's Ramming Rating to the first die roll of the ram. If a Player applies the Ramming Rating of one of his naval leaders to a ramming in which one of his naval units is being attacked, he may subtract that Ramming Rating from the first die roll of the ram. It is possible for both Players to apply ramming ratings to the same naval melee, and thus for an addition and a subtraction to be made to and from the die roll (possibly even canceling out).

[16.3] NAVAL LEADERSHIP MELEE BONUS

If a naval unit is in the same hex as the leader of its fleet, it may benefit from the leader Melee Bonus.

[16.31] A naval unit may benefit from the leader Melee Bonus whenever involved in a naval melee combat, either on attack or defense.

[16.32] The effect of the naval Melee Bonus is to increase the Melee Strength of the naval unit by an amount equal to the naval leader Melee Bonus.

[16.33] A Player may not apply a Ramming Rating to a melee attack, or affect a ramming by using a naval Melee Bonus to a ramming attack or defense.

[16.4] LOSS OF NAVAL LEADERS

[16.41] If a naval leader is in the same hex with a naval unit which is sunk, the leader undergoes naval leader loss procedure. To perform the naval leader loss procedure, the player rolls the die for each affected leader. A roll of 6 results in the leader being drowned. A roll of 1 through 5 results in the leader being placed on the nearest Friendly naval unit regardless of fleet. However, that naval leader may not use any of his leadership ratings for a number of Impulses equal to the number rolled (1-5). Alexander never undergoes leader loss procedure. He is placed on the nearest Friendly naval unit without a naval leader suffering any ill effects.
A leader may not transfer between damaged or undamaged naval units except during the Strategic Movement Segments of the Assault Phase.

[17.0] INITIAL SET-UP AND NAVAL REINFORCEMENTS

CASES:

[17.1] INITIAL DEPLOYMENT OF UNITS

The Macedonian Player places all of his land units (minus Alexander the Great) on the mainland and/or the connecting mole. The Tyrian Player then places his land units anywhere on the island of Tyre. He then places his naval forces in any All-Sea or harbor hex within the two harbors of the island of Tyre. All units must begin the game within Command Radius of their leaders.

Macedonians:

LAND UNITS

Macedonians under Diades

14 units

Allied Greek under Poseidonius and Arabas

19 units

Mercenaries under Charisius

10 units

Four catapults, four battering rams, and two siege towers

Tyrians:

LAND UNITS

Royal Guard under King Azemlik

5 units

Marines under King Azemlik or Gonzus

6 units

Militia under King Azemlik, Gonzus, or Coyle

10 units

Four catapults; engineering capability of six

Naval Units

All Tyrian naval units under Hanno, Leithas 10 Triremes, 4 Quinqueremes, 2 Biremes

[17.2] NAVAL REINFORCEMENTS

[17.21] The Macedonian Player rolls one die at the beginning of each Game-Turn to determine which of his naval reinforcements may enter the game. If the number rolled matches the number needed to activate a particular group of naval units then he may bring them on during a Naval Phase of that same Game-Turn. Naval commanders of the fleet arrive loaded on a naval unit of their fleet.

[17.22] All Macedonian naval units entering as reinforcements may enter anywhere along the north edge of the game map.

[17.3] NAVAL REINFORCEMENT TABLE (see map)

Arados, Byblos, Sidon under Eunlus, Gerostrasus 8 Triremes, 4 Quinqueremes, 2 Biremes Rhodos, Soli-Mallus, Lycia under Antiochus 3 Triremes, 1 Quinquereme, 1 Bireme Cyprus under Marcus, Lestus, plus Alexander 9 Triremes, 3 Quinqueremes, 4 Biremes

[18.0] VICTORY

COMMENTS:

Alexander the Great would have eventually taken Tyre. However, the victory conditions are based on the time it historically took Alexander and his forces to capture Tyre and the loss of life. Had the siege dragged on, the fragile condition that Alexander headed would have broken apart. In addition, had the fighting dragged on through another day and night, the additional losses would have crippled Alexander’s forces morale for the next battle.

CASES:

[18.1] MACEDONIAN VICTORY

If, at any time during the Amphibious Assault Phase, Macedonian land combat or leader units occupy the Temple of Hercules and the Agendrium, the game ends in a Macedonian victory.

[18.2] TYRIAN VICTORY

If the Macedonian Player initiates Amphibious Assault and does not take either the Temple of Hercules or the Agendrium by the end of the tenth Impulse of that Assault Phase, or if both the Temple of Hercules and the Agendrium are not occupied by Macedonian units by the sixteenth Impulse of that Assault Phase, the game ends in a Tyrian victory. If the Macedonian Player does not initiate an Amphibious Assault by Game-Turn 12, the Tyrian Player is also declared the winner.

HISTORICAL NOTES

In 332 B.C., Alexander, fresh from his victory at Issus, was advancing south along the Phoenician coast. The Macedonian army had entered the Persian empire as an invading army, but to some of the Persians the Macedonians were liberators. As Alexander advanced, he sent envoys ahead of the army to all the walled cities. The cities were offered two choices. One was to open their gates to the Macedonians and be welcomed as brothers; the other was to fight and die before the invading juggernaut.

Alexander’s march to Egypt was the product of many motives. The Macedonian army had crossed the Bosphorus on a fleet of naval transports which were soon after dismantled. Inexperienced in naval command, Alexander undertook this action to avoid confrontation with the vastly superior Persian fleet. Greece was a hotbed of rebellion, and Persian financed Sparta had never been totally subdued. A Macedonian defeat of any kind could spark another large scale rebellion similar to the one that heralded Alexander’s ascent to the throne. Persia and navy would have to be subdued in another fashion.

Alexander had several options. One was to ignore his overseas communications and hope to defeat the Persian army quickly. Sea power, then as now, was an important strategic edge, and its lack could be disastrous to an invading army far from home. Another option would be to create a large navy and win a major naval campaign. Alexander’s naval ineptitude, plus the high cost of building and maintaining a large fleet, made this an uneconomical strategy. Last, he could capture all Persian fleet land bases and neutralize the fleet from land. The exercise of this option is what the march on Egypt was all about.

Ancient naval fleets were not particularly seaworthy. Ships of the period usually stayed close to shore and were frequently inactive due to rough water. These weaknesses created a large dependence among all fleets on land based facilities. The Persian fleet in particular had other inherent weaknesses. Persia was a loose confederation of states, with certain nationalities less reliable than others. Alexander’s envoys often found warm welcomes. As cities fell or switched sides, the Persian navy dwindled. In early 332 B.C., the Macedonian army stood before the walls of Tyre.

Actually, the Macedonian army did not stand literally before the walls of Tyre, because the city is one third of a mile offshore. The island of Tyre was surrounded by walls as high as 150 feet at some points. The walls in many places had their foundations in the sea which later would cause problems when the Macedonians tried to employ battering rams. The inner city of Tyre was also surrounded by a wall, but of smaller dimensions than the main island walls. The Tyrians, however, had a far more potent defensive capability — a navy.

The Tyrian navy consisted of 80 ships, most of which were probably Triremes and the rest Biremes and Quinqueremes (not of the Roman design). The Tyrian navy was a highly professional force composed of seasoned veterans. Tyre had other assets from which they hoped to draw among the many overseas colonies that they maintained.

Alexander was faced with a perplexing problem. How to besiege an island without a fleet. In due course the Macedonians started to build a mole, or land causeway, from the mainland to the island. While the mole was under construction, Alexander’s siege artillery would be able to bombard the island. Upon completion, the mole would allow the Macedonians to assault the island without a fleet.

Constructions of the mole went quickly at first. The water was shallow and due to the range the workers did not have to wear armor. The mole was approximately 200 feet in width. As the mole crept into the sea, the Tyrian ships were able to lie off the mole and harass the workers with arrow, javelin, and large missile fire. When the mole was within 200 yards of the walls, Tyrian archer fire started to become lethal. Construction now became a problem. When finally the mole was 100 yards from the island, construction stopped due to the combination of the harassing fire and the 18 foot depth of the water which was not as easily filled in. In response to these problems Alexander had two 150-foot wooden towers built. He then covered the towers with wet hides so that they could not easily be set on fire. These siege towers were then dragged to the end of the mole to answer the Tyrian fire. Wooden walls were also erected along the sides of the mole to shield the workers from naval missile fire.

The Tyrians were not to be outdone. They secretly modified a sailing vessel into a fire ship. The stern was weighted so that the bow was high out of the water. The ship was then filled with combustible material, and extra masts were constructed from which jars of pitch, brimstone, and oil hung. Upon receiving a favorable wind, the fire ship was directed at the end of the Macedonian mole where the towers were stood. After igniting the ship, the crew jumped overboard and swam to the island. The fire ship beached itself on the mole and ignited the towers. When the flames reached the ropes, the jars fell into the flames and exploded, engulfing the towers in flames. Alexander’s answer to the fire ship was to widen the mole so that towers could be spaced further apart and more towers could be set up, but Diades knew that further construction of the mole had to be abandoned. The Macedonians kept up a pretense of activity to hold the Tyrian attention, but a second plan was being put into action.

The plan was to obtain a fleet. Alexander offered arms to the owners of ships that would help the Macedonians. The amnesty had impact because the various city states and islands of the region realized that Alexander was serious about destroying Tyre. Given the coast’s history of trading
jealousies, volunteers quickly arrived. Most of the Phoenician, Rhodian, Lycian, Cilician and Cyprian naval squadrons joined the Macedonian cause.

These various navies totaled approximately 250 ships. The siege began in earnest, Naukratis on Crete, and the other officers with sea experience drilled the Macedonian soldiers at Sidon in the use of weapons aboard ship. By the early summer of 332 B.C., Alexander had amassed a sweeping armada of warships, transports, and siege engine carries. The fleet's appearance had a negative effect on the Tyrian morale. The Tyrians made several counterattacks and sunk a large part of the armada, but superior Macedonian numbers eventually blocked the Tyrian fleet in their harbors. One incident that illustrates the initial naval fighting occurred when the Tyrians realized that the Macedonian flotilla was coming to their harbor. While the Macedonian and allied sailors rested on shore, a small Tyrian squadron sorted and sank several ships at anchor. Alexander reacted quickly to the sortie by launching a counterattack and tried to cut off the squadron. Leaving some ships to blockade the Egyptian harbor, Alexander cut off most of the squadron and sank it. Thereafter the Tyrian ships were much less active.

With the sea flanks secured, the siege works on the mole again approached the island. As the Macedonians drew near, the Tyrians threw hot sand at the soldiers which got inside the armor and scorched the men. The mole was not the way to victory; another route would have to be taken. Alexander observed that the weakest part of the eastern wall proved to be south of the mole. The main assault would be made here. Alexander had ram ships brought up to the walls to batter them down. The Tyrians sent out divers to cut the ships' anchor cables. The Macedonians replaced the rope cables with chain, and the battering of the walls continued.

The Tyrians then threw large boulders into the sea so that the siege ships would break their wooden bottoms in the swell. Alexander had these boulders removed. This was a crude form of mine warfare and mine sweeping.

Eventually, though, the Macedonians succeeded in breaching the wall in the places near the harbor entrances. The final assault occurred on a calm day. Ships with archers ran along the walls clearing them. Transports with ramps moved to the breaches while the warships broke the chains blocking off the harbor entrances. Alexander himself was the first one off the transports and into the breach. The combined force of ships and men entered the city. Eight thousand Tyrians died, and thirty thousand were sold into slavery. Being defeated in ancient times could be very painful. The siege of Tyre had lasted seven months.

DESIGNERS NOTES

The work that I did on this game was both frustrating and rewarding. Some of the frustration was due to the small amount of material written on this siege, plus the fact that most of the sources agree on only a few points. Since I lack any fluency in ancient Greek, I had to rely on the various small chapters in the numerous accounts about Alexander and his campaigns. The sources agree on are that Alexander besieged the city of Tyre, the siege took approximately seven months, and Alexander won. This dearth of concensus is exaggerated only slightly.

One critical design point was the map of Tyre. The best that I could obtain was a map of the city during the period of the Crusades. By this time, the island of Melkart had sunk, and Tyre was no longer an island. What had occurred was that the islands of Tyre and Melkart were separated by a channel which had been filled in. The island of Melkart eventually sank and due to the mole now known as Alexander's causeway, silt accumulated to form a peninsula. From various sketch drawings of the island plus the narratives, I was able to place the walls and gauge their height relative to each other. It is not the definitive map of Tyre, but it is pretty close.

The Orders of Battle were the next problem to tackle. The Macedonian order of battle was arrived at by reviewing the Macedonian order of battles before and after the siege. This was done by studying the battles of Issus and Arbela and assuming that the Macedonian cavalry did not actively participate in the siege. Thus, a fairly accurate Macedonian order of battle took form, but the Tyrians were another matter. After the siege, Alexander executed most of the males and sold whoever was left alive into slavery. Consequently, no accounts of the siege from the Tyrian viewpoint survived. To establish the Tyrian order of battle, I took the number of males executed, which most of the sources agreed on, and made them soldiers. What this means is that the Tyrian order of battle is approximately correct in numbers of soldiers, but the types were made up by me and are a fabrication of my imagination and knowledge about the period. You'll have to forgive me, but I had to create an army for the Tyrians and destroying their city, so blame Alexander. The naval order of battles for both sides were in several accounts, and most agreed on the number of ships and the types present. I decided on the percentages of each type after looking at some commonly held favorite stories of ships from miniatures rules. At last I had soldiers, ships, and a city to assault.

The Art of Siege Quad was originally to be part of a five game set based on the Constantine polo system. As things developed, this idea was scrapped and the quad took on its own flavor, with two games based on the Tyre/Acre system, and the other two based on the Lille/Sévastopol system. The original naval system for the game borrows heavily from the original Constantine naval system which nobody saw except in MOVIES. I sometimes believe Rich Berg designed the naval system for his game so that he could help me out by leaving the smallest budget (what are friends for?).

The playtesting began with Tony Beavers testing the game and staying close to the Constantine polo system. What resulted was a fairly boring mole building game, with a furious naval engagement in the middle and a Macedonian assault at the end of the game that usually (99% of the time) did not succeed. At this time, the game was turned over to the then new and fresh (he is now a seasoned veteran) David Werden. David quickly modified many procedures and started the game at about the time the mole building was discontinued. After wringing the game out, asking many questions, and overseeing a lot of playtesting, he turned the game into the exciting naval siege that it was historically. The only point that David and I still disagree on is that I believe that once the Macedonians enter the city the Tyrians historically had no chance. David's solution from a game point of view is that if the Macedonians have not fulfilled their victory conditions on the last turn of the game, they lose. Basically, it can be assumed that if the end of the game, the Macedonians are in the city, they would soon win, and if they are not in the city, they would soon win. What can you do? Once Alexander was after you, there was really no where to run — he would eventually conquer you. I must say that I am very pleased with the way the game turned out, David made it a good game, and I made it as close to the real thing, historically, as I could. I hope you feel our combined efforts were worth it. — Mark Herman

Peltasts

The Peltasts is an interesting and controversial unit of the ancient world. As the hoplite formations of Greece came into contact with less organized populations living on more broken ground, there came a need for lightly armed auxiliary troops who could function more efficiently in broken ground than could a phalanx. The Athenian mercenary general Iphicrates was one of the first to grasp how formidable light infantry could be. He raised a force of infantry modeled on the Thracian javelin-men known as peltasts from the round shield (pelta) that they carried. These units were trained in rapid advances and retreats over all types of terrain employing both missile and hand to hand techniques. He lengthened the javelins and swords of these units over the norm. In 300 B.C., he annihilated a body of 600 Spartan hoplites with his peltasts near Corinth. During the siege of Tyre, peltasts and other auxiliary light infantry formations were used more extensively than phalanx infantry due to their superior flexibility in combat.

Naval Units

Naval units in Tyre represent three major categories of vessel: the trireme, bireme and quinquireme. The biremes in the game are any small ship that does not fit one of the other two classifications. As a class, Biremes were light ships with one sail and 13 or more oars on each side drawn by two men per oar. The quinqueremes in the game are not of the Roman design, but are warships that were larger and slower than triremes but were used in combat. Their oars were pulled by more than three men per oar. The trireme was the battle- ship of its time and understood mastery of the ancient seas. The actual construction of the trireme is a highly controversial issue. There are two schools of thought. One school maintains that a trireme contained three banks of oars each pulled by one man. The other school counters this by saying that each oar was pulled by three men and that there was only one bank of oars. Lack of hard information for either case makes the decision difficult. What we do know is that triremes decided naval battles and that they were the optimal design of the period.

DESIGN CREDITS

Game Design: Mark Herman
Physical Systems and Graphic Design: Redmond A. Simonsen
Game Development: Tony Beavers
QuadriGame and Game Development: David Werden
Rules Editing: Brad Hesse
Praetorian Game Design: Michael George, Jon Gautier, John Butterfield, Lynn Law
Production: Karen Cantor, Robert A. Degni, Andrew Grossman, Kate Higgins, Ted Koller, Manfred F. Mlukhan, Bob Ryer
**[9.28] TERRAIN EFFECTS CHART**

<table>
<thead>
<tr>
<th>Terrain Type</th>
<th>Movement Point Cost/Effect on Melee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>1/No effect</td>
</tr>
<tr>
<td>Road/Controlled Gate</td>
<td>1/No effect</td>
</tr>
<tr>
<td>Uncontrolled Gate</td>
<td>P/No effect</td>
</tr>
<tr>
<td>Slope</td>
<td>4/1/Unit attacking upslope halved in Strength</td>
</tr>
<tr>
<td>Beach</td>
<td>2/Attacker in hex halved in Strength</td>
</tr>
<tr>
<td>City</td>
<td>2/No effect</td>
</tr>
<tr>
<td>Temple of Hercules/Agenorium</td>
<td>2/Defender in hex doubled in Strength</td>
</tr>
<tr>
<td>Water (naval units only)</td>
<td>1/No Effect</td>
</tr>
<tr>
<td>Boom</td>
<td>D/Naval units defending behind Boom are doubled in Strength</td>
</tr>
</tbody>
</table>

**Wall Hexes**

| Breached                      | 2/Defender in hex doubled in Strength |
| Moving or attacking into Wall hex | 1/Defender in hex doubled in Strength |

**Enemy-controlled**

| Secondary Wall (moving or attacking into from non-Wall hex) | P/Not applicable |

**Non-Enemy-controlled**

| Secondary Wall (moving or attacking into from non-Wall hex) | 4/Not applicable |

| Primary Wall (moving or attacking into from non-Wall hex) | P/P for Macedonian; 1 MP Tyrian units |

P = Prohibited; D = Macedonian naval units may not cross unless Boom is destroyed.

**[11.4] FIRE COMBAT RANGE ATTENUATION TABLE**

<table>
<thead>
<tr>
<th>Target Distance (in hexes)</th>
<th>Firing Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tyrian Catapult</td>
</tr>
<tr>
<td></td>
<td>Cretan Archer</td>
</tr>
<tr>
<td></td>
<td>Royal Archer</td>
</tr>
<tr>
<td></td>
<td>Guard Archer</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
</tr>
<tr>
<td></td>
<td>Pelasgy/Agrian</td>
</tr>
<tr>
<td></td>
<td>Baetrian Sling</td>
</tr>
</tbody>
</table>

Number result is the Range Attenuation Rating used to resolve the fire combat on Table 11.5.

**[11.5] FIRE COMBAT RESULTS TABLE**

<table>
<thead>
<tr>
<th>Firing Unit's Range Attenuation Rating</th>
<th>DIE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>D</td>
</tr>
</tbody>
</table>

Results indicate effect on target unit. D = Disrupted; R = Retreat; E = Eliminated; - = No effect. A Disrupted unit that receives another Disrupted result is Eliminated. Attacks at less than 1-2 have no effect. Attacks at greater than 7-1 are resolved as 7-1. Modified die rolls of greater than 6 are resolved as die rolls of 6; modified die rolls of less than 1 are resolved as 1.

**Die Roll Modifiers:**

Add 1 if target unit is in a Breached Wall hex/Beach hex (fire unit firing from Wall hex); no modification if fire unit firing from non-Wall hex.

Subtract 1 if target unit is in a Secondary Wall hex.

Subtract 2 if target unit is in Temple of Hercules or Agenorium.

**LEADER LOSS PROCEDURE**

If a Leader is alone in a hex, and an Enemy combat unit moves through or attacks that hex, the Leader is permanently eliminated. If a Leader is stacked with a combat unit that is eliminated, roll one die. On a roll of 1-5, the Leader is unharmed; on a roll of 6, the Leader is injured, roll a second time. On a second roll of 6, he is permanently eliminated; on a second roll of 1-5, multiply the number rolled by one for the Tyrian Player and by two for the Macedonian Player. This is the number of Game-Turns the Leader is out of play; place the Leader counter on the Turn Record Track on the Game-Turn that he will return to the game.
ART OF SIEGE WARFARE
ADDENDA
as of October 1979

TYRE
Counters
(corr) The Grstrs and Enllus ABS leader counters should be printed white.

Map
(add) Beach hex 4909 should have a grounding number rating of 1.

Rules
[3.32] (corr) The sample Bireme unit is mislabelled Quinquereme, and vice-versa. Naval units with no bands printed on the counter are Biremes, units with 1 band are Quinqueremes, and units with 2 bands are Triremes.

[3.5] (corr) There is no separate chart sheet included with the game. All the charts and tables needed for play are printed in the rules or on the mapsheet.

[6.13 Illus.] (corr) The target unit in the illustration is incorrectly faced. It should be facing to the left or right towards a hexside. Each unit has four broadside hexes. The hexes adjacent to the top and bottom of a naval unit are non-broadside hexes.

[6.26] (corr) "...in beach or home port hex." should read "in beach/home port hex."

[6.32] (clar) A disrupted unit may not ram.

[8.21] (add) A damaged naval unit may transport one land combat unit. If two land combat units are being transported on a full strength naval unit and that naval unit is damaged, then one land combat unit is eliminated (the Macedonian Player's choice).

[8.3] (add) This section refers to beach and port hexes. Port hexes within the Tyrian harbors are assumed to have a grounding rating of zero.

[9.28] (clar) It costs one Movement Point for a Tyrian unit to enter a secondary wall hex from a non-wall hex.

[11.24] (corr) Fire-Melee units are not considered Fire Combat units for purposes of retreat.

[11.5] (corr) "Secondary" should read "Any."

[12.31] (corr) "Walls" should read "city."

[13.41] (add) If a catapult is fired at a ship during the Tyrian Bombardment Segment of the Amphibious Assault Phase, it may not be fired during the subsequent Simultaneous Fire Combat Segment.

[14.31] (add) Only four engineer points may be allocated to Boulder Mining per turn.

[15.0] (corr) Gonzos of Tyre has no naval leader rating.

[15.41] (corr) A leader is killed only if a 6 is rolled twice in succession; the Leader Loss procedure on page 16 is correct.

[17.3] (add) Alexander the Great may command all contingents (land or naval, depending on mode). The leader Pyrges enters the game with the Cyrus Naval forces and may command all Macedonian Naval units.

SEVASTOPOUL
Game-Turn Record Track
The Engineer initiative is 4, as per Case 9.23, when an asterisk is indicated on the Game-Turn Record Track.

Rules
[3.0] Major Terrain Types (corr) All references, in the rule to the Terrain Effects Chart, should be to the Construction Points Chart (9.6).

[6.33] (corr) The Russian unit Grand Duke Michael enters during Game-turn 8 (March). This is not noted on the Turn Record Track.

[7.14] (corr) For Game-Turns 8 and 13, "should be" and "Game-Turn 8 through 18."

[8.98] (corr) May destroy" should be "must destroy."

[8.99] (clar) After "Asterisk = " delete the words "chance of:"

[9.23] (add) The presence of Engineer Initiative is indicated on the Game-Turn Record Track by the presence of an asterisk next to a nationalization's construction points.

[10.32] (corr) There are 10 Bastion Positions at the Mast Bastion, not 8. In addition, the Russian Engineer does not count as a unit for purposes of deployment.

[10.5] (clar) This section refers to undamaged parallels.

LILLE
Counters
(corr) All French combat units should not be backprinted.

Map
There are 10 incorrect Star Bastion Positions on the map which should only be Bastion Positions. These incorrect Star Bastion Positions may be recognized by three characteristics: 1) They are not adjacent to the inner city of Lille, 2) Each is connected to 5 other Star Bastion Positions, and 3) They are not within the Citadelle.

Rules
[3.5, Repair] (corr) Bastion Positions may only be repaired to a Bastion Strength level of 3.

[5.11] (clar) All listed points in terms of Barracks and Infantry Battalions.

[6.24] (corr) The case reference should be to Case 5.11, not 5.21.

[10.5] (clar) This section refers to undamaged parallels. Forwardmost parallels are defined as the parallels which are closest to any French Bastion Position using the ranging points.

[10.6] (add) Routed French units within Lille may be counted towards the garrison requirement.

[11.1] (add) If an Assault is initiated, all English units which are currently garrisoning a French Bastion Position must be activated first. English units which are garrisoning French Bastion Positions may be replaced before the beginning of the Assault Phase by other Allied units which are in covering boxes, or behind the Allied Start-Line. Since English units may only be activated for an assault twice, if the English have been used to Assault twice, the Allies may not initiate an Assault until there are no English units garrisoning French Bastion Positions (since all garrisoning units must be activated in an Assault).

[12.0] (corr) Procedures: "up to two Bastion Positions" should read "up to three Bastion Positions."

[13.0] (corr) General Rule reference to "(see Terrain Effects Chart, 9.6)" is irrelevant and should be dropped.

[14.25] (corr) No attacker results apply in field battery fire.

[14.55] (add) A unit may place a friendly unit from a Bastion Position which is in its line of retreat, which may displace another unit as long as Case 14.31 is not violated.

[14.66] (add) If a Bastion Position is occupied by French siege artillery and/or French Leaders only, an Allied Infantry unit may be advanced into that Bastion Position during movement (the French units are retreated).

[15.0] (add) At the end of the French Sortie Phase (whether or not the French Player has sorted that turn), if there is a Covering Box with no Allied Infantry Battalion in it, the French Player receives 8 Rounds of Siege Ammunition.

[20.0] (add) The game is over if an Allied unit occupies a Star Bastion Position at the end of an Assault Phase. Alternatively, if, at the end of a Game-Turn, the Allied casualties exceed the French casualties by 12,000 men, the French Player is declared the winner.

ACRE
[4.3] (corr) The Assault, Repair and Regrouping Phase should read the Assault and Regrouping Phase.

[5.27] (corr) There should be no filled foss hex listed on the Terrain Key. There are no filled foss hexes at the beginning of the game. (corr) Non-Enemy-Controlled Wall/Tower hex should be listed as Friendly Occupied Wall/Tower hex.

[8.2] (add) If more than one engineer point is allocated to wall repair, the damage level is reduced, all later engineer points use the new (repaired) damage level column on the wall repair table.

[9.23] (clar) If a unit is disrupted by fire combat and then disrupted again in the Melee Segment it is retreated. In addition, since all fire combat is simultaneous, the statement "Disrupted units cannot engage in fire combat" is not applicable.

[9.24] (add) All units which are retreated are disrupted at the end of the retreat.

[10.34] (add) Ladder assaults may be made from inside the city (in an Acre street pattern hex) out onto the walls.

[10.72] (add) Leaders may not advance after combat unless they are stacked with a combat unit which participated in the attack.

[12.2] (clar) A wall hex with a damage level of 6 from giant catapults may be repaired.

[13.12] (corr) The Regrouping Segment occurs at the end of every Game-Turn for purposes of loss unfilling during both the Planning and Assault Phases.

[17.0] (corr) The harbor tower hex is hex 2104 not 1951.