THE ART OF SIEGE

Tyre

Alexander’s Siege and Assault, 322 BC

RULES OF PLAY

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 Batterling Rams
  13.4 Tyrian Catapults
14.0 ENGINEERING
  14.1 Building the Mole
  14.2 Building Catapults and Batterling 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 fleet 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 establishe 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.

[3.3.1] How to Read the Units
LAND LEADER (Front)

FIRE UNIT (Front)

NAVAL LEADER (Front)

FIRE/MELEE UNIT (Front)

NAVAL UNIT (Front: Full Strength)

MELEE UNIT (Front)

MELEE UNIT (Back)

[3.3.2] Summary of Counter Types

[3.3.3] How to Read the Units
LAND LEADER (Back)

FIRE/MELEE UNIT (Back)

MELEE UNIT (Back)

[3.3.4] Summary of Counter Types

Backprinted Leader

Naval

Alexander

Macedon

54:37

Cypreus

5-7-10

Tyre

3-7-10

Normal

Movement

Allowance

Ramming

Movement

Allowance

Hypaspist

Melee Strength

5-5

Disrupted

Hypaspist

Melee Strength

(Defense only)

(5)

(1)6
[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 Phases) 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 bombard or assault during this Game-Turn. The Tyrian Player then secretly notes the number of Engineer 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, catapults, and battering rams individually.

C. Tyrian Construction and Wall Repair Segment
Using the Engineer 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 catapults (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 catapults 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)
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 un-disrupt all their land combat units.

*Note: The Players repeat Segments A through J up to 16 times, each Sequence being an Impulse. There may only be one Amphibious Assault Phase during the entire game. If after the tenth Impulse the Macedonian Player occupies neither the Temple of Hercules nor the Agrigentum or if after the sixteenth Impulse the Macedonian Player has failed to take both objectives, the Tyrian Player is declared the winner.*

**GAME-TURN INDICATION PHASE**
The Game-Turn marker is advanced one space on the Game-Turn Record Track, unless the Macedonian Player has Amphibiously assaulted, in which case the game is over.

### [5.0] NAVAL FACING AND MOVEMENT

**GENERAL RULE:**
Nautical units may be moved only into All-Sea or Beach hexes, or be turned one hexside, at the cost of one Movement Point per hex or hexside. Nautical units have both normal and ramming speeds and may be used to ram Enemy ships. No two nautical 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 nautical units first during all the even numbered Naval Impulses.

**CASES:**

**[5.1] NAVAL FACING**

**5.11** Nautical units are always faced in a specific direction. The top 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 nautical unit may be changed by one hexside at the beginning of the owning Player's Movement Segment. After that, a nautical unit's facing may be altered by one hexside per hex entered.

**5.13** Changing the facing of a nautical 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**

Nautical 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 nautical 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** Nautical units may not use ramming speed two Segments in a row. Furthermore, after a nautical 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** Nautical units may not be moved through hexes occupied by other nautical units, Friendly or Enemy.

**5.23** The normal Movement Point Allowance of a nautical unit may not be reduced to less than half of the value printed on the nautical unit (fractions rounded down). That is, a nautical unit which is exhausted after a ram attempt has an Movement Point Allowance halved may not be disrupted and halved again.

**5.24** A nautical 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 nautical unit which is exhausted or disrupted may utilize this maneuver. A nautical unit may not be used to ram, nor may its Facing be changed during that Segment. During the next Movement Segment, the nautical unit may be moved normally.

### [5.3] REGROUPING

**5.31** During the Regrouping Segment of the Naval Bombardment Phase, all nautical 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 booms for Tyrian ships.

**5.32** During this Redeployment Segment, both Players may combine any two damaged naval units of the same type and nationality to form 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 objective of ramming is 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 nautical 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 nautical 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 no 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 nautical 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 Movement 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.

---

**MAY NOT RAM**
(This unit illegally faced)

**TARGET UNIT**

**MAY RAM**

6-6-9

6-6-9
[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 may be attacked by 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 losses 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 current 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 backside. 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:

Battleground represents Macedonian attempts to breach the walls of Tyre. During the Macedonian Bombardment Segment of the Naval Bombardment Phase, 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, the Macedonian Player rolls a die to determine if damage occurs. For each battering ram, the Macedonian Player rolls a die to determine if the ram breaches the wall. If damage is dealt, batteries are placed on the wall hex.

[7.1] MCDONIAN BOMBARDMENT

[7.11] During the Bombardment Segment of the Naval Bombardment Phase, the Macedonian Player must allocate the fire of each ship'sPrimary Wall hex. He may not 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; if 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.

[7.14] Batteries caused by ships may also be used during the Bombardment Segment of the Naval Bombardment Phase. To ram the ship, the ship's battering ram's head 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 (7.5, see game map).
[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 catapulta, 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, catapulta, leaders, and land combat units may be loaded and unloaded from ships located in harbor hexes (mainland port hexes 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 dice 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 catapulta, 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 Amemlik have both land and Naval Leader Ratings and may be transported in their naval mode.

[8.13] If a ship which is transporting a catapulta or battering ram is damaged or sunk, the catapulta 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 catapulta 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 land 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 Breached Primary Wall hex, may disembark 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 must then be moved into the Breached Wall hex, or attack to dislocate 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 away from the beach hex without exceeding stacking limitations if forced to retreat into an All-Sea hex. Once a unit has 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 (9.28). 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 Controlled 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 his 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 its 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 catapulta 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 4 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, 2901, 3001 at a cost of 2 Movement Points at the owner’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 in 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 density 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 populace 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 three: one leader, one combat unit, and one siege unit.

The Informational 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 tracing 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 Zones of Control.

CASES:

HOW ZONES OF CONTROL OPERATE

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

A combat unit’s Zone of Control does not extend through an All-Sea hexside.

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

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 immediate 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 purposes 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 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 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 that 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 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 blocking 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.
[11.24] 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 must be retreated 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 is eliminated. Units may not be retreated into more than one Beach hex.

[11.26] Eliminated
A leader in a hex with a unit that is eliminated is subject to the Leader Loss Procedure (see Case 15.4, Loss of Leaders).

[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.

[12.0] LAND MELEE COMBAT
GENERAL RULE:
Melee combat takes place during the Melee Combat Segment 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.
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 defense 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.

C A S E S:

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 an enemy unit. When both units are occupied by 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 enemy unit.

[12.15] Disrupted melee units may not attack.

[12.16] A friendly unit may not melee attack an enemy in an unoccupied 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 Aegonion hexes are entered by Macedonian Player's units, the Tyrian Army Morale is decreased by 1.

[12.35] Changes in the Tyrian Army Morale affect land melee combat involving Tyrian units. Increases and decreases in Macedonian Army Morale affect land melee combat involving Macedonian units.

[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 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.

[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 amplify the defensive benefits of wall hexes, Macedonian catapults and battering rams may be used to increase the Breach 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).

C A S E S:

[13.1] SIEGE TOWERS

Siege Towers were constructed from wood by the Macedonians and were deployed on the mode 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 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 CATAPOULTS

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 (bombed) 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 through 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 both 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, Counters.)

[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 the 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 3724-3824. The mole may be expanded each Game-Turn in the 3700 and 3800 hexrows 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 the 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 the 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 expend six Engineer Points per Game-Turn. This capacity may never be increased or decreased. During the Allocation Segment of each 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.

[14.31] During 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 vaxcopy).

[14.32] 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.

[14.33] 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 mole 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 resolutely 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 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 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, King Azemlik may command units from the Royal Guard, the Marines, and the Militia, and Gonzu may command units from the Marines and the Militia. In addition, Alexander, King Azemlik, 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 combat, 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 the 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 the 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.

[15.24] There is no limit to the number of times a particular leader’s Morale Rating can be applied to different melee combat 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 Impulse 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

COMMENTARY:

The naval leaders counter represent 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" or 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 all directions that may 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 or 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 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 cancelling out).

[16.3] NAVAL LEADERSHIP 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 Impulse Impulse 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 no ill effects.
[16.42] 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
  - Macedonians under Aegaeus and Dourus: 19 units

- **Mercenaries under Chares**
  - Four catapults, four battering rams, and two siege towers

- **TYRIANS**
  - **LAND UNITS**
    - Royal Guard under King Azemil: 5 units
    - Marines under King Azemil: 6 units
    - later: 10 units
  - **GONZUS**
  - **Militia under King Azemil**
  - **Gonzus, or Coyle**
  - Four catapults, engineering capability of six

NAVAL UNITS

- All Tyrian naval units under Hanno, Leibas 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 leaders 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, Byblus, Sidon under Enylus, Gerostratus 8 Triremes, 4 Quinqueremes, 2 Biremes
- Rhodes, Solai-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

COMMENTARY:

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 for 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 Aegidium, 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 Aegidium by the end of the tenth Impulse of that Assault Phase, or if both the Temple of Hercules and the Aegidium 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 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 way 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’s 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. Seapower, 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 inexperience, plus the high cost of building and maintaining a large fleet, made this an unviable 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 City 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 archers fired arrows from the ruins of the construction problems. When finally the mole was 100 yards from the island, construction stopped due to the combination of the harassing fire and the 10 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 Tyrians attention, but a second plan was being put into action.

The plan was to obtain a fleet. Alexander offered amnesty to 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, Lycean, Cilician and Cyprian naval squadrons joined the Macedonian cause.

These various navies totaled approximately 250 ships. The siege began in earnest, Naxos, and 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 seagoing armada of warships, transports, and siege engine carriers. 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 blockaded the Tyrian fleet in their harbors. One incident that illustrates the initial naval fighting occurred when the Tyrians realized that the Macedonian fleet had landed on their beach. 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 mole in three places near the harbor entrance. 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 of the transports and into the breach. The combined forces of ships and soldiers captured 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.

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 Peltast 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 Istipcites 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 peltast 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

Navel 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 quinquiremes 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 on each side. The trireme was the battleship of its time and was used on 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 the trireme 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.

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 point is, 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 to, 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 was not consulted by either 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 proportions of ships from miniature rules. As 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 Constantinoople 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, with the other two based on the Lille/Sievestopol system. The original naval system for the game borrows heavily from the original Constantinoople 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 due to my smaller budget (what are friends for?).

The playtesting began with Tony Beavers testing the game and staying close to the Constantinoople system. What resulted was a fairly boring move 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 by 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
### 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>½/No effect</td>
</tr>
<tr>
<td>Uncontrolled Gate</td>
<td>P/No effect</td>
</tr>
<tr>
<td>Slope</td>
<td>+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>
<tr>
<td>Wall Hexes</td>
<td></td>
</tr>
<tr>
<td>Breached</td>
<td>2/Defender in hex doubled in Strength</td>
</tr>
<tr>
<td>Moving or attacking into from Wall hex</td>
<td>½/Defender in hex doubled in Strength</td>
</tr>
<tr>
<td>Enemy-controlled Secondary Wall (moving or attacking into from non-Wall hex)</td>
<td>P/Not applicable</td>
</tr>
<tr>
<td>Non-Enemy-controlled Secondary Wall (moving or attacking into from non-Wall hex)</td>
<td>4/Not applicable</td>
</tr>
<tr>
<td>Primary Wall (moving or attacking into from non-Wall hex)</td>
<td>P/P for Macedonian; 1 MP Tyrian units</td>
</tr>
</tbody>
</table>

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>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyrian Catapult</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cretan Archer</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Royal Archer</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guard Archer</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marines</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelissas/Agrian</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baetrian Sling</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></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></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6</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/Breach 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.

### 12.6 Melee Combat Results Table

<table>
<thead>
<tr>
<th>Combat Ratio (Attacker Strength to Defender Strength)</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>-</td>
<td>-</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</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>E</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>R</td>
<td>R</td>
<td>E</td>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

Results indicate effect on defending unit. D = Disrupted; R = Retreat; E = Eliminated; = = No effect.

Morale Effects:
Army 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.

Tyrian Army Morale
Subtract 1 if King Azimilk is killed.

Macedonian Army Morale
Add 1 if a Macedonian unit enters the City of Tyre.

Subtract 1 if six or more Macedonian units have been eliminated.

Melee Die Modification Determination:
Subtract the defending contingent Morale Rating from the attacking contingent Morale Rating. Add or subtract applicable Army Morale Ratings. Apply the resulting number to the melee resolution die roll.

### 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

ADDENDAs
as of October 1979

TYRE

Counters
(correction) The Grsrrts 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 Birenes, 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 beach/home port hex.

[6.32] (correction) 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 Tyrian harbors are assumed to have a grounding rating of zero.

[9.28] (correction) It costs one Movement Point for a Tyrian unit to enter a secondary wall hex from a non-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 Tyrian 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) Gonujs 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 incorrect.

[17.3] (addition) Alexander the Great may command all contingents (land or naval, depending on mode). The leader Pyntger enters the game with the Cyrus 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] (correction) Major Terrain Types (correction) All references, in the rule to the Terrain Effects Chart, should 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] (correction) 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.

[10.22] (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] (correction) 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] (correction) Bastion Positions may only be repaired to a Bastion Strength level of 3.

[5.11] (correction) 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 5.21.

[10.5] (correction) 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.

[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 within an 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 hex should be listed as Friendly Occupied Wall/Tower hex.

[8.2] (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] (correction) 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] (correction) 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 foss unfilling during both the Planning and Assault Phases.

[17.0] (correction) The harbor tower hex is hex 2104 not 1951.