

THE SIEGE OF CONSTANTINOPLE

The End of the Middle Ages 1453 A.D.

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[1.0] INTRODUCTION

The Siege of Constantinople, 1453 simulates one of the classic sieges in all of history. Considered the strongest fortified city in the Western world, Constantinople, capital of the Byzantine Empire, had withstood over twenty sieges. Only once had it fallen — in 1204 to Dandolo and the Venetian Crusaders, who used guile and treachery to gain entry. The city's final, gallant stand against a foe that outnumbered her by more than 15 to 1 is one of the most exciting stories of courage and heroism in all of military history. This game enables the Players to recreate the famous siege, commanding the powerful forces of the Ottoman Sultan, Mehmet II, the Conqueror, or the small but able garrison under Emperor Constantine XI and Giovanni Giustiniani. The objective is simple; the Ottoman Player must gain entry to the city in strength, while the Byzantine Player must keep him out.

There are two "games" in *The Siege of Constantinople, 1453* (hereinafter referred to as *Constantinople*). The *Assault Game* covers the second half of the siege, when most of the actual fighting took place. The *Assault Game* enables two Players to play a quick (two hours or less) game that incorporates all the major portions of the rules. The second game is the *Land Game*, which covers the siege and can be played in about four hours. For solitaire play, it is recommended that the *Assault Game* be used.

Constantinople contains several new and/or adapted principles, none of which is overly complex. Some of the combat rules are unusual, and the idea of Assault Areas and their restrictions may seem strange at first. But it is not a complex game, and the Players should find an initial understanding of the rules sufficient to begin play.

[2.0] GENERAL COURSE OF PLAY

Constantinople is played in a series of Phases, not all of which are used in each Game-Turn. One Player controls the Ottoman (besieging) Army, while the other Player directs the Byzantine (besieged) forces. During each Game-Turn — dependent on which scenario ("game") the Players are using — the Players perform a series of maneuvers governed by the Phase they are in. First, the Ottoman Player decides whether he wishes to Bombard or Assault. If he chooses the former, he simply fires his artillery at the walls, after which the Byzantine Player may undertake repairs. If the Ottoman Player chooses to Assault (he may either Bombard or Assault — not both) he determines his Assault Capability for that Game-Turn, deploys his forces (secretly) in their chosen Assault Areas,

and launches an Assault. He has ten separate impulses of Movement, Missile Fire and Melee Combat in which to place 25 Strength Points inside the city. As soon as he does this the game is over; if he has failed by the end of ten impulses play reverts to a new Game-Turn. If, at the end of the 27th Game-Turn, the Ottoman Player has not, during an Assault Phase, placed 25 Strength Points inside the city the Byzantines have withstood the siege and are victorious. This Game-Turn (actually the 4th of June, 1453) was chosen because it is the "guestimated" date of the arrival of the relief Galley Fleet from Venice, which most assuredly would have turned the tide in favor of the Byzantine forces, given Ottoman failure up to that point.

The naval events of the siege have been abstracted because there was little naval combat, and what there was had minimal tactical effect on the siege. Its main effect was in dictating the strategies used.

[3.0] GAME EQUIPMENT

CASES:

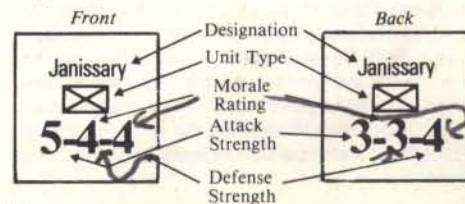
[3.1] THE GAME MAP

The 22" x 32" mapsheet portrays the city of Constantinople and the immediate surrounding areas, as it stood at the time of the siege. A numbered hexagonal grid has been superimposed over the terrain features in order to regulate Movement and Combat. To help the map lie flat, fold it against the creases. Explanations of the effects of the different types of terrain features used on the map will be found on the Terrain Effects Chart.

[3.2] THE PLAYING PIECES

The playing pieces (or units) represent the contingents of fighting men present at the siege, the "artillery" used, as well as the actual historical personages who commanded the troops. There are also several markers used for informational purposes, such as Breach Damage Level markers, etc. The numbers on the land combat units represent the strengths (attack and defense) as well as the morale of that unit. "Strength" and "Capability" are designer's quantifications of that unit's numerical composition and military worth.

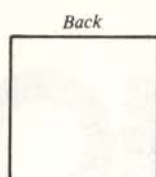
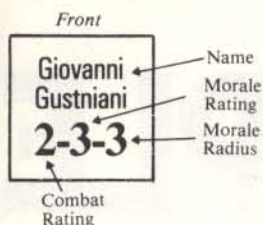
[3.21] Sample Units Typical Combat Unit



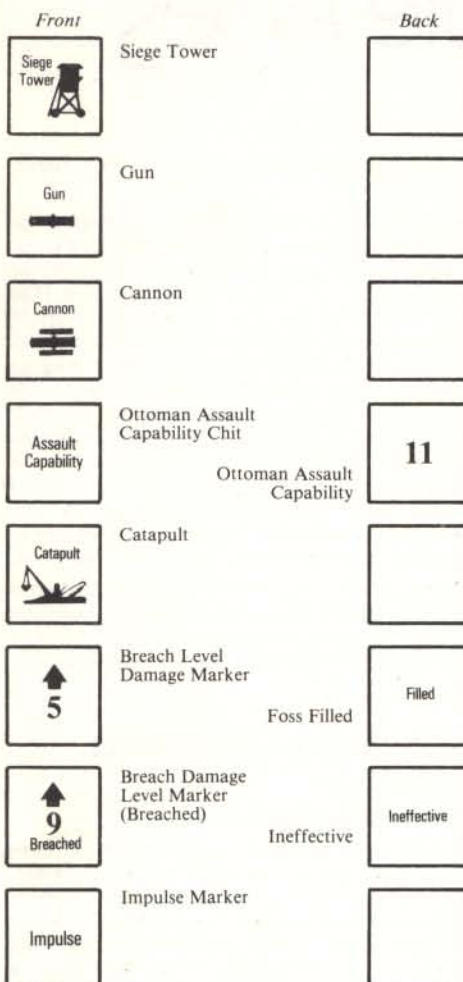
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Open the magazine to the center; bend open the staples with a penknife or screwdriver; lift out the rules and close the staples.

Typical Leader Unit



[3.22] Summary of Unit Types



[3.23] Summary of Unit Abbreviations

Basibazuks = Bashi-Bazouks; Cnstntine = Constantinian; Gustniani = Giustiniani; Archbshp Leonard = Archbishop Leonard; Theophls Palolgs = Theophilus Palaeologus; Dmetrius Cntczns = Demetrius Catacuzenus; Nicphrus Palolgs = Ncephorus Palaeologus; Chios/Rds = Chios/Rhodes.

[3.3] 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, the Catapult/Missile Fire Table, Melee Combat Results Table, Casualty Possibility Table, Bombardment Table, Repair Capability Table, Levels Repaired Table, Ottoman Tunnel Determination Table, Foss Debris Removal Table and the Assault Game Wall Damage Table. In addition, on the map there are several tracks: the Game-Turn Track and the Impulse Track. There is also a page in the Rules booklet showing the western portion of the map, known as the Ottoman Mine Planning Sheet.

[3.4] GAME SCALE

Each hexagon on the map is the equivalent of approximately 200 yards. However, because of the unusual nature of sieges, certain terrain features have been abstracted in the interest of playability. The Foss and the Parateichion were not 200 yards across (they were about $\frac{1}{3}$ that width across, possibly less) and the number of Towers was much greater. In addition, the Ottoman camp was less than a mile from the walls; in the game it is off-map for obvious play reasons. Each Game-Turn is the equivalent of two days, but this, too, should not be taken literally. Two days was used so that the Players have a frame of reference as to the passage of time, but the game is more interested in periods of action versus periods of relative inaction. However, all actions are, within the relative frame, quite accurate. As the actual "body count" at the siege was general at best (more accurate for the Byzantines than the Ottomans), unit counters represent capability rather than numerical strength. The Ottomans outnumbered the Byzantines 80,000+ to maybe 7,000. An accurate countermix for this would be ludicrous.

[3.5] GAME EQUIPMENT INVENTORY

A complete game of *Constantinople* should include the following parts:

- One Game-Map (22" x 32")
- One Sheet of Die-Cut Counters (200)
- One Rules Folder
- Two Plastic Dice (not included in subscription edition)
- One Coversheet / Game Box Assembly (not included in subscription edition)

If any of these parts are missing or damaged, please write:

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

Questions regarding the *rules* of the game will be answered if accompanied by a stamped, self-addressed envelope and if phrased so as to be answered as briefly as possible. Send the rules questions to the above address and mark the envelope "Rules Questions: Constantinople."

[4.0] SEQUENCE OF PLAY

The Sequence of Play in *Constantinople* consists of three Phases, only two of which are used in any given Game-Turn. The Assault Phase consists of a number of *Impulses*, which may be considered "turns-within-a-turn." All actions in the Sequence of Play must be performed in rigid order in the sequence listed. Once an entire Game-Turn has been completed the Players move the Game-Turn marker to the next Game-Turn and begin the Sequence of Play anew. There are 27 Game-Turns in the entire game, but the Ottoman Player may, by fulfilling certain victory criteria, shorten the length of the game. If the Ottoman Player has not achieved any of his Victory Conditions by the end of the last Game-Turn, the Byzantine Player automatically wins.

THE GAME-TURN

1. The Planning Phase

A. *Ottoman Troop Allocation Segment*: The Ottoman Player secretly notes the location of his troops by Assault Area.

B. *Byzantine Strategic Movement Segment*: The Byzantine Player may move any of his land units up to *twice* (i.e., double) their Movement Allowance.

C. *Ottoman Tunnel Segment*: The Ottoman Player notes on his Mine Planning Sheet (secretly) which hexes he is attempting to tunnel. He then rolls a die for each hex to see whether the tunnelling operations have succeeded.

2. The Bombardment Phase

(The Ottoman Player may Bombard only if he did not plan an Assault for this Game-Turn; if he has, he skips this Phase and proceeds to Phase 3.)

A. *Ottoman Bombardment Segment*: The Ottoman Player may Bombard the Walls of the city with any Guns, Cannons or Urban's Bombard that have not been reallocated in the previous Planning Phase, 1A.

B. *Damage Repair Segment*: The Byzantine Player may attempt to repair damage to the city Walls using the Wall Repair Tables. He may also attempt to discover tunnels.

3. The Assault Phase

(If the Ottoman Player has chosen to Bombard, the Assault Phase is eliminated for that Game-Turn and play proceeds to a new Game-Turn.)

A. *Ottoman Assault Capability Segment*: The Ottoman Player picks a Capability Chit and adds to the number on that chit the Capability Number on the Turn Record Track for that Game-Turn. This gives the number of Assault Capability Points he may allot that turn as per Case 7.2.

B. *Byzantine Tunnel Discovery Segment*: The Byzantine Player may attempt to discover Ottoman tunnels, as per Case 11.15. Any discovered tunnels are automatically destroyed.

ASSAULT IMPULSE (Segments C through I)

C. *Ottoman Movement Segment*: The Ottoman Player may move his units.

D. *Byzantine Movement Segment*: The Byzantine Player may move his units.

E. *Simultaneous Fire Combat Segment*: The Ottoman and Byzantine Players may direct Fire Combat at each other with any units that have not moved that Impulse. Note that though combat is resolved sequentially, all results are applied simultaneously.

F. *Ottoman Engineering Segment*: The Ottoman Player may attempt to fill in the Foss by using his combat units as "engineers." Only units that have *not* moved may perform this task.

G. *Byzantine Melee Segment*: The Byzantine Player may melee (attack) any Ottoman units adjacent to his own. Units eliminated or forced to retreat (R result) are removed from the map immediately.

H. *Ottoman Melee Segment*: The Ottoman Player may melee (attack) any Byzantine units adjacent to his own. Units eliminated are removed from the game immediately.

I. *Simultaneous Ineffective Removal Segment*: The Players remove all Ineffective markers from the combat units.

Note: The Players repeat Segments C through I up to ten times (each sequence being an Impulse). At the end of the last Impulse, all Ottoman combat units are removed from the map for future use.

J. *Byzantine Repair Segment*: The Byzantine Player may attempt to repair the city Walls, as per 2B above. He may also, in this Segment only, attempt to remove fill from filled-in Foss hexes.

4. Game-Turn Indication Phase

The Game-Turn marker is advanced one space to signal the passage of one Game-Turn, unless the Ottoman Player has achieved his Victory Conditions, in which case the game is over.

[5.0] MOVEMENT

GENERAL RULE:

During each Player's Movement the Phasing Player may move as many or as few of his units as are capable of movement (see Cases 5.18, 7.22 and 12.2). These units may be moved in any direction, or any combination of directions, except that Ottoman units may not leave their assigned Divisional Assault Areas and Byzantine units may not leave the city. The only other limit to moving units is the Movement Allowance, which is *five* for all combat units and *six* for all Leader units. The Movement Allowances are *not* printed on the counters.

PROCEDURE:

Units are moved one at a time, tracing a path of contiguous hexes through the hexgrid. As a unit enters each hex it must pay a portion of its Movement Allowance for entering the hex, and possibly another portion of its Movement Allowance for crossing certain hexsides. Movement costs are listed on the Terrain Effects Chart (5.25).

CASES:

[5.1] HOW TO MOVE UNITS

[5.11] Units may move only in the Segments specifically designated for movement (see Sequence of Play). A Player's units may move only during his own Movement Segment. Players should note that Advance after Combat (see Case 9.27) is not considered Movement for the purposes of this Section. The moving Player may be referred to as the Phasing Player.

[5.12] The Ottoman Player is restricted by his Assault Capability (see Case 7.2) as to the number of units he may move in a Game-Turn.

[5.13] Friendly units may never enter a hex containing Enemy combat units. Friendly combat units *may* enter a hex containing *only* an Enemy Leader and/or a Catapult, in which case the Enemy Leader or Catapult is eliminated. Friendly Leaders may not move into a hex containing only Enemy Leader units. Catapult units may not move. Byzantine units may not leave Constantinople.

[5.14] Friendly combat units may move *through* hexes containing other Friendly units, but they may not end up in the same hex with another Friendly combat unit. *There is no stacking of combat units in this game.* Leaders, however, may always stack with combat units, and there may be as many Leaders as the owning Player wishes in the same hex — although it is foolish to do so (see Case 5.5). There may be one Catapult unit in a hex in addition to any other units.

[5.15] Once a combat unit has entered an Enemy Zone of Control (see Section 6.0) it must cease Movement for the remainder of that Movement Segment (or Byzantine Strategic Movement Segment). It may move again in its next Movement Segment (or Byzantine Strategic Movement Segment), but only if it moves into a non-Enemy controlled hex (see Case 6.14).

[5.16] The number of Movement Points expended by a unit during a single Movement Segment may never exceed its given Movement Allowance (exception: Byzantine Strategic Movement, see Case 5.18). Unused Movement Points may not be accumulated from one Segment to another, nor may they be transferred between units.

[5.17] Byzantine land combat units that begin the game in any hex *other than* a hex in the Parateichion and/or the Blachernae area (inside the city, hexes 3414, 3413, 3513, 3412, 3313, 3213) may not move until an Ottoman unit has meleed a Byzantine

combat unit or Game-Turn 15 — whichever comes first. See Case 15.13 for details. They are in "reserve" until such action takes place. Reserves are noted in the initial deployment (see Case 15.11).

[5.18] During the Planning Phase, the Byzantine Player has a Strategic Movement Segment. During this Segment (only) the Byzantine units (including Leaders) may move up to twice their Movement Allowance.

[5.2] EFFECTS OF TERRAIN ON MOVEMENT

[5.21] Units pay costs for entering certain types of hexes on the map and/or for crossing certain types of hexsides. The different types of hexes and hexsides and their costs are listed on the *Terrain Effects Chart* (5.25).

[5.22] Costs for crossing a hexside are always in addition to the cost for entering a hex.

[5.23] Units may never enter an all-sea hex or cross an all-sea hexside. However, see Case 11.4.

[5.24] A unit may not enter a hex if it does not have sufficient Movement Points remaining in its Movement Allowance to pay the cost for that hex and/or hexside.

[5.25] *Terrain Effects Chart*
(see page R10)

[5.3] SPECIAL TERRAIN

There are a number of types of terrain in *Constantinople* that are unusual as far as standard war-games go. They are examined in detail below.

[5.31] **Assault Areas:** These are arbitrary — but historical — divisions of the countryside in front of the Landward walls of Constantinople for the purposes of delineating the areas of the walls that may be assaulted by the Ottomans. Ottoman Divisions and Artillery are assigned, in the Planning Phase, to a particular Assault Area. Once assigned they may not move out of the Area, as delineated by the Area hexsides, during a given Game-Turn until they have crossed a Wall hexside (see Case 7.14). There is no limit to the number of Divisions that may be assigned to a given Assault Area. The Assault Area names are based on the section of the Landward walls that they encompass.

[5.32] **The Foss:** The Foss was a wide stone moat which ran parallel to and along most of the length of the Outer Walls. It was capable of being flooded (but was not during the siege) and was divided by partitions into sections (roughly equivalent to the hexsides on the map). The Foss is a formidable — but not impossible — obstacle, unless it is filled with debris. This is accomplished during the Ottoman Engineering Segment of the Assault Segment. It may also be emptied by the Byzantine Player in the Repair Segment of the Assault Phase. The Foss has different effects on Movement and Combat, depending on whether it is filled or empty. See the Terrain Effects Chart (5.25).

[5.33] **The Outer Walls:** The Outer Walls were the "second" line of defense (after the Foss) of the Triple Walls of Theodosius. Theoretically weaker than the Inner Walls, the Outer Walls were actually stronger, as the Inner Walls, although much higher and thicker, were in a state of disrepair. Units may cross any of the Outer Walls, paying a cost of three extra Movement Points to do so. The Ottomans may use Siege Towers to lessen that penalty, and breaching the Walls also makes them easier to move across. See the Terrain Effects Chart for all Movement costs and defensive benefits of the Outer Walls. Defensively, any unit inside the city and adjacent to an Outer Wall hexside is higher than hexes outside the city and derives a defensive benefit when attacked *through* that Outer Wall hexside.

[5.34] **The Inner Walls:** The Inner Walls run from hexes 3114 to 0316. Following the fall of the city to the Venetian Crusaders in 1204, they had fallen into disrepair, and by the time the Byzantines got around to repairing them it was too late. There are two sides to the Inner Walls; the Parateichion (the section between the Inner and Outer Walls) and the City proper. Units in the Parateichion are higher than units in the City proper; see Case 6.13 for the effect on Zones of Control. Units in Tower hexes (considered part of the Inner Wall) are considered higher than units in both the Parateichion and the City proper, and receive benefits accordingly. Defensive benefits are received in the same manner; e.g., a unit in hex 1213 would not receive a benefit if attacked from hex 1212. Tower hexes may be entered only through Gates from the Parateichion. See Terrain Effects Chart.

[5.35] **City Walls** simply delineated one area of the city from another. Only the major city walls of Constantinople are included on the map. City Walls act as only minor hindrances to movement and benefit defense similarly. All effects can be seen on the Terrain Effects Chart.

[5.36] **Palace hexes:** The two Palace hexes are treated as a specific type of terrain. Their defensive benefits and movement costs are listed on the Terrain Effects Chart. The New Imperial Palace in hex 3213 is considered level with the Parateichion and adjacent to the Blachernae Area. The Old Imperial Palace is, of course, level with the rest of the City proper.

[5.37] **Gates:** Gates provide easy access to the City through Wall hexsides. The Byzantines control *all* Gates at the beginning of the game. The movement benefit of a Gate (they act to negate the movement cost for a Wall) is given to the Player who controls the Gate; otherwise the movement cost for crossing a Gate hexside is the same as for crossing an Outer Wall hexside. To control a Gate a Player must control *both* hexes on either side of the Gate. Control is defined as being the last Player to have a unit physically occupy or pass through the hex. See the Terrain Effects Chart. The Gates on the Outer Wall, with the exception of the Kerkoporta (hex 3212/3313) were sealed at the time of the siege and are not considered in use for game purposes. However, all the names of those gates have been included for historicity.

[5.38] **The Parateichion:** The Parateichion was a roadway between the Inner and Outer Walls. The Parateichion is considered to be inside the city (however, see Case 7.41). For its height effects, see Case 5.34.

[5.39] **Galata:** Galata was a Genoese colony on the shore of the Golden Horn opposite Constantinople. During the siege it remained neutral (well, not exactly). No land unit may ever enter Galata.

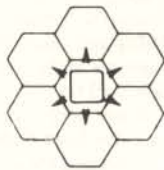
[5.4] EFFECT OF LEADERS ON MOVEMENT

No *Byzantine* combat unit may move during a given Movement Segment unless it begins that Segment stacked with a Leader unit. The Leader unit need not move *with* the combat unit(s); the combat unit must simply start the Movement Segment stacked with the Leader. This rule does not apply to Ottoman units. For the effect of Ottoman Leaders on Movement, see Case 7.2.

[5.5] STACKING

There is no stacking of combat units in *Constantinople* (Leaders, Catapults and Siege Towers are not considered combat units). There may never be more than one combat unit of any type in a given hex at the end of a particular Phase, Segment or Impulse. Leader, Siege Tower and Catapult units may always stack with combat units. The various markers used for informational purposes do not

count in any way for stacking. Friendly units may always move *through* hexes that contain other Friendly units but may not stop in such a hex. Byzantine Catapult units may always stack with *one* other combat unit, but *not* with another Catapult unit.



[6.0] ZONES OF CONTROL

GENERAL RULE:

The six hexagons immediately surrounding a hex constitute the Zone of Control (ZOC) of the combat unit in that hex. Hexes upon which units exert a Zone of Control are called Controlled hexes and inhibit the movement of Enemy units. An Enemy unit must immediately cease movement for that Phase upon entering an Enemy-Controlled hex. Certain terrain may negate ZOCs.

CASES:

[6.1] HOW ZONES OF CONTROL OPERATE

[6.11] All Combat units exert a ZOC.

[6.12] Informational markers, leaders, and Catapults do not exert a ZOC, nor are they affected by Enemy ZOCs.

[6.13] ZOCs extend into *all* land hexes on the map with the following exceptions:

- ZOCs never extend through an all-sea hexside or into an all-sea hex;
- ZOCs never extend through unbreached Wall or Gate hexsides into a hex on a higher elevation than the unit exerting the ZOC. Thus, a unit in hex 1411 would *not* exert a ZOC into hex 1412, but a unit in hex 1412 would exert a ZOC into hex 1411. Likewise, a unit in hex 1413 would *not* exert a ZOC into hex 1412. Remember that a Tower hex is *higher* than any hex in the game;
- ZOCs never extend through City Walls (see Case 5.35) in either direction;
- A unit in an unfilled Foss hex does not exert a ZOC; and
- Units using Siege Towers (see Case 11.3) do *not* exert a ZOC.

[6.14] There is no cost to enter an Enemy ZOC, but a combat unit that enters an Enemy ZOC must stop. It may move no further for the duration of that Segment. However, if a unit begins a Segment in the ZOC of an Enemy unit it may leave that ZOC so long as it does not move directly into another Enemy ZOC. Players should note that this rule prevents Ottoman units from crossing Wall hexsides if the Walls are defended by Byzantine units and/or Byzantine ZOCs.

[6.15] Friendly ZOCs never affect Friendly units. There is no additional effect when more than one unit exerts a ZOC upon the same hex.

[6.16] Ineffective units exert ZOCs.

[6.2] EFFECT OF ZONES OF CONTROL ON COMBAT

[6.21] Units which begin a Melee Portion in an Enemy ZOC *must* attack (within the restrictions of Case 9.1). If there is more than one Enemy unit in a Friendly unit's ZOC, the Friendly Player may choose which Enemy unit is to be attacked. Remember, units may be adjacent and yet not exert a ZOC (see Case 6.13b).

[6.22] Combat between adjacent units, where the defending unit does not exert a ZOC, is voluntary, *not* mandatory. Such attacking units (not in Enemy ZOCs) still may attack only one hex (see Cases 9.13 and 9.16).

[7.0] ASSAULTS

GENERAL RULE:

To win the game the Ottoman Player must get units inside the city. To do so, he must assault the City and its walls. However, to assault the walls with any chance of success the Ottoman Player must first Bombard them (see Section 10.0). The Ottoman Player must decide, for each Game-Turn, whether he wishes to Assault that turn *or* Bombard. He may do one, *not* both. In an Assault, the Ottoman Player secretly deploys his divisions in the given Assault Areas, picks his Capability Chit to determine how many divisions he may use in a given Assault, and then has ten Impulses in which to carry the assault into the City. If he does not achieve victory by the end of those ten Impulses the Assault Phase ends and the next Game-Turn proceeds.

CASES:

[7.1] THE ASSAULT AREAS

[7.11] The land area outside the city is divided into six areas — five of which are Assault Areas. The sixth area, Pera, is used only for Bombardment.

[7.12] In the Ottoman Troop Allocation Segment the Ottoman Player must assign in writing each of his divisions to *one* of the areas. He may assign all of his divisions to one area or distribute them more evenly. However, they must all be assigned to a particular area in this Segment. The assignment is secret; the Ottoman Player does not have to reveal it to the Byzantine Player until the appropriate Assault Impulse.

[7.13] There are six Ottoman Divisions: the Bashi-Bazouks (who have no Leader); Zaganos Pasha's Division (deployed across the Golden Horn in Pera); the European Division (under Karadja Pasha); the Anatolian Division (ten units under Ishak Pasha [Anatolian 1] and ten units under Mahmud Pasha [Anatolian 2] — these count as *two* divisions for play purposes; units assigned to one Leader may not be transferred to the other); and the feared Janissaries (under Sultan Mehmet II).

[7.14] Once a Division is assigned to an area it may not leave that area during a given Game-Turn unless and until it crosses a Wall or Gate hexside. Once it crosses a Wall hexside it may move anywhere within the Parateichion and the City proper. Between turns (in the Troop Allocation Segment) Divisions *may* change Assault Areas (see Case 7.12).

[7.15] Divisions assigned to an area are not required to be placed on the map until an actual assault has begun and they are actually to be used in the assault (see Case 7.2).

[7.16] Zaganos Pasha's Division (in Pera) may not cross the Golden Horn (and thus assault) until the Ottomans construct a bridge (see Case 11.4).

[7.17] No other Divisions may be assigned to Pera until a bridge is constructed.

[7.2] OTTOMAN ASSAULT CAPABILITY

The Ottoman Player may move only a certain number of Divisions per Assault Phase. The medium for determining which Ottoman units may Assault is the various leaders controlling the Ottoman divisions. Each Leader has a total Command Rating which is obtained by adding all his leadership points together. In the Ottoman Assault Capability Segment, the Ottoman Player picks a chit which, when added to the Capability Points listed on the Turn Record Track, gives the total number of Capability Points which may be applied to Leaders in order for them to move their Divisions in that Assault Phase. Thus, it would take seven Capability Points to move Mehmet II (and his Janissaries).

[7.21] In the Ottoman Assault Capability Segment the Ottoman Player blindly chooses *one* Capability Chit from a cup. He *secretly* looks at the number on the chit and adds it to the Capability number on the Turn Record Track. This is his Assault Capability (expressed numerically) for that Assault Phase. He places the picked chit aside until the end of that Assault Phase, when it is placed back in the receptacle. Before it is placed back into the receptacle the Byzantine Player looks at the chit for verification.

[7.22] The Ottoman Player uses his Capability Points to activate Leaders (and the units they control). *He may only activate Leaders (and their divisions) for which he has the necessary Capability Points.* Unused Capability Points may not be accumulated from one turn to the next.

[7.23] Each Ottoman Leader has three numbers on his unit counter (see Case 12.11). When these three numbers are added together they equal the Command Rating of that Leader. **Example:** Mehmet II's ratings are 2-2-3; his Command Rating is 7. It thus takes seven Capability Points to activate Mehmet II and his Janissaries, even if only *one* Janissary unit is moved.

[7.24] The Bashi-Bazouk Division has no Leader. It takes only *one* Capability Point to activate this Division (Exception: see Case 12.4).

[7.25] If a division loses its Leader, ten Capability Points are required to activate that Division.

[7.26] The Ottoman Player does not have to reveal his Capability Points for that Assault Phase — or the units that he has designated as activated — until the end of the Game-Turn. Moreover, Divisions do not have to enter on the first Impulse; they may delay their entry until a later Impulse. However, the entire Division must enter at one time.

[7.27] Until the Ottoman Player constructs a bridge between the mainland and Pera he must subtract *four* Capability Points from his total for that turn. The Game-Turn after construction is completed the Ottoman Player does not have to subtract the four points. The four points represent Zaganos Pasha's division and the problems of maintaining communication with them.

[7.28] The Ottoman Player goes through the procedure above *only* if he has planned an assault that Game-Turn. If he is simply going to bombard the Walls there is no need for recourse to this procedure.

[7.3] WHEN ASSAULTS MAY OCCUR

[7.31] The Ottoman Player may choose to launch an Assault in *any* Game-Turn *except* Game-Turn One (in which he *must* Bombard). Every Game-Turn thereafter the Ottoman Player may *either* Assault or Bombard.

[7.32] The Ottoman Player may Assault any hex that he can reach on land. However, only those units from a division capable of assaulting may Assault. This means that units from Pera may *not* Assault until contact is made with the "mainland" Ottomans.

[7.4] THE MECHANICS OF ASSAULT

[7.41] Having determined which divisions may Assault, the Ottoman Player now has *ten* Assault Impulses (see Sequence of Play, 3C through 3I) within which to get 25 Land Combat Strength Points inside the City proper. Units in the Parateichion do *not* count. If he fails to get the requisite 25 Strength Points inside the City by the end of the tenth Impulse, the Assault Phase is over and a new Game-Turn begins.

[7.42] The Ottoman Player brings his division(s) on through the western edge of the game-map within their designated Assault Areas. Each unit must pay the cost of the first hex it enters. He does not have to bring each division on in the first Impulse; he may delay each division's arrival until he sees fit, with the knowledge that all action ceases after the tenth Impulse. He may thus "stagger" the arrival of his divisions — but not the arrival of units within a division.

[7.43] The Ottoman Player now uses movement rules, combat rules and engineer rules to Assault the Walls and the defenders behind them in an effort to gain the City. See the appropriate Sections and Cases for pertinent rules.

[7.44] If at the end of the tenth Impulse the Ottoman Player has not fulfilled his Victory Conditions (Case 7.41 and Section 14.0), all Ottoman units in the five "mainland" Assault Areas and/or the City are removed from the game-map and are considered ready for the next Game-Turn. Units that have lost a step or been eliminated remain so, of course. If a unit cannot trace a line of hexes that is free of Enemy Zones of Control and/or Enemy units from its hex to the western mapedge, it is eliminated. For this purpose Friendly Combat units and/or ZOCs negate Enemy ZOCs.

[7.45] If the Ottoman Player chooses to end his Assault before ten Impulses are finished, the Assault Phase is ended; the Byzantine Player may not move his units after the Ottoman Player withdraws until the next scheduled Movement Segment.

[8.0] FIRE COMBAT

GENERAL RULE:

Fire Combat takes place during the Fire Combat Portions of the Assault Phase. All combat units have Fire Combat capabilities, as they were mostly equipped with bow and arrow, etc. There are also several Byzantine Catapult units. The Ottoman gun, cannon, and Urban's Bombard units may *not* engage in Fire Combat; they are used only for Bombardment. In general, a unit capable of firing has a range of two hexes, depending on intervening terrain. Each unit simply picks a target hex, rolls the die on the Fire Combat Results Table, and checks to see whether there is any result. Any casualties are removed at the end of the Simultaneous Fire Combat Segment.

CASES:

[8.1] WHICH UNITS MAY FIRE

All combat units are capable of Fire Combat, with the exception of the Ottoman artillery. The latter may Bombard only (see Section 10.0). Byzantine Catapult units may fire *only*; they may *not* melee.

[8.2] HOW FIRE COMBAT OCCURS

[8.21] All fire combat units, including Catapults, have a range of two hexes, not including the hex that they occupy. Thus, a combat unit may fire once at any target (an Enemy unit) up to two hexes distant (exception: see Case 8.33).

[8.22] To engage in fire combat, a unit must not have engaged in *any* movement whatsoever in the immediately preceding Friendly Movement Segment of the Assault Phase.

[8.23] To fire, the owning Player simply announces which hex a particular combat unit is firing at and rolls a die, consulting the Fire Combat Results Table (CRT). If the roll was a 5, the target unit is Ineffective (see Case 9.24 for effects); on a roll of 6, one strength level (see Case 9.25) is eliminated. Ineffective units suffer no additional effects if another result of Ineffective is obtained against them. Any other roll is treated as no effect. Results

are applied at the conclusion of the Simultaneous Fire Combat Segment.

[8.24] Units that fire *may* melee and/or fill in the Foss.

[8.25] Units do not need Leaders to engage in Fire Combat.

[8.26] Fire Combat has no effect on Leader units, Byzantine Catapult units, or units in Siege Towers.

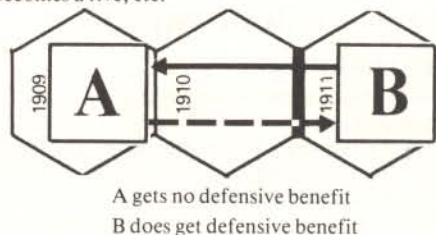
[8.27] A unit may be fired upon by all units in range; thus it may be fired on more than once in a Fire Combat Segment. Remember that no unit may fire more than once in a Simultaneous Fire Combat Segment.

[8.28] If a Leader is in the same hex as a unit that is eliminated by Fire Combat, he may be moved immediately to a hex occupied by a Friendly combat unit that is within his Movement Point Capability. He then cannot move in the next Movement Phase. This should be denoted by flipping the Leader counter to its reverse side. If there is no unit that qualifies for the Leader to move to, the Leader unit is eliminated.

[8.3] EFFECTS OF TERRAIN ON FIRE COMBAT

[8.31] Units may fire only at any Enemy units within range, regardless of their Assault Area.

[8.32] Byzantine or Ottoman unit(s) firing from a hex lower than the target hex through an unbreached Wall or Gate hexside which is part of the target hex subtract *one* from the die-roll; i.e., a six becomes a five, etc.



[8.33] No unit may ever fire through *two* Wall or Gate hexsides.

[8.4] CATAPULT/MISSILE FIRE TABLE (see page R10)

[9.0] MELEE COMBAT (ASSAULT)

GENERAL RULE:

Melee Combat takes place during the Melee Segments of the Assault Impulse of the Assault Phase (see Sequence of Play, 4.0,3C). Only combat units that are adjacent to each other may engage in melee combat. Friendly units in an Enemy ZOC *must* attack *one* of the Enemy units exerting such ZOC; Friendly units adjacent to Enemy units but *not* in an Enemy ZOC *may* attack *one* Enemy unit. A phasing unit may melee no more than one Enemy unit per Assault Portion. Melee combat is resolved by totaling the strengths of the attacking units and consulting the Melee CRT, cross referencing the total attack strength with the defense strength of the defending unit. The numbers listed in that column and row are the numbers needed to be rolled on *two* dice to produce a *chance* of the defending unit having suffered a casualty (dependent on the Morale of the defending unit). If a chance of a casualty has occurred, the Defending Player then refers to the Casualty Possibility Table, rolls *one* die, and applies any resultant casualty immediately — as well as any advances or retreats — before proceeding to the next combat.

CASES:

[9.1] WHEN MELEE OCCURS

[9.11] Any combat unit (remember that Leaders and Catapults are *not* combat units) may engage in melee combat. Friendly units may engage in melee combat with Enemy units in the same Assault Area only if they are in adjacent hexes.

[9.12] Melee combat may be conducted through any hexside, with the exception that units may not melee through an all-sea hexside.

[9.13] Friendly units in Enemy Zones of Control *must* attack *one* (and only one) Enemy unit that is exerting a ZOC on that Friendly unit (see Case 6.21). If a Friendly unit is adjacent to an Enemy unit but that Enemy unit is *not* exerting a ZOC on the Friendly unit (as would happen if the Friendly unit was "above" the Enemy unit in the Parateichion section of the Walls and the Enemy unit were in the Foss) then combat is voluntary for the Friendly unit. (Note that melee combat would be *mandatory* for that Enemy unit as the Friendly unit is exerting a ZOC even though the Enemy unit is *not*.)

[9.14] Only the Phasing Player may attack/melee. The Phasing Player resolves one Individual melee at a time, taking all casualties, retreats, advances, etc., before proceeding on to the next melee. When all melees — both mandatory and voluntary — have been finished, then the Melee Segment is over for that player.

[9.15] No unit may attack more than once per Melee Segment and no unit may be attacked more than once per Melee Segment. However, a defending unit may be attacked by *more* than one unit in a melee. Thus three Friendly units may combine to attack one Enemy unit defending in a single hex, all in one melee.

[9.16] If a Friendly unit is in the ZOC of one Enemy unit and simply adjacent to (but not in the ZOC of) another Enemy unit, the Friendly unit *must* attack the Enemy unit exerting the ZOC.

[9.2] HOW MELEE OCCURS

[9.21] When a Phasing Player wishes to initiate melee attack he notes the Attack Strength(s) of the attacking unit(s). If more than one unit is to be used against a single Enemy unit, the Friendly units' attack strengths are added together to give a total Attack Strength.

[9.22] The Attacker then takes the total Attack Strength, modifying for terrain, for that combat and refers to the Melee Combat Results Table (9.3). He may also add the Melee Rating of *one* Leader present in a hex with one of the attacking units to the total adjusted (see Case 9.23) Strength. Thus, two Anatolian Division units plus *Mahmud* would have a total, unmodified Strength of nine (4+4+1=9). The Leader may *never* add more Strength Points to a total than the total modified (by terrain) strength of the unit(s) attacking. Thus a unit with a strength of 1 could have only one Leader Strength Point added, even if the Leader's Melee Rating were 2.

[9.23] The Attacker now rolls *two* dice, adjusting the Strength of the Attacking units as per the Terrain Effects Chart (5.25). For example, each Ottoman unit attacking a Byzantine unit through an unbreached Outer Wall hexside (Byzantine unit "above" Ottoman unit) would subtract *three* from its Strength, while if the attack were the other way around (Byzantine unit attacking Ottoman unit) and the Ottoman unit were in an unfilled Foss hex, each Byzantine unit would add to its Strength. The Strength of an individual unit may never be reduced below *one*, nor may its Leader-augmented Strength ever be more than twice its modified Strength. Having made such adjust-

ments, the Attacker now cross references his total Attack Strength with the Defender's Strength. The resulting number(s) on the Melee CRT is the number(s) that must be rolled on *two* dice for the defending unit to suffer a *possible* casualty. If this happens, the Defender immediately refers to the Casualty Possibility Table (9.4). If the required number is not rolled there is no loss or casualty. Players should note that if more than one unit is involved in one Melee attack the terrain effects are implemented against each attacking unit individually.

Example: Two Janissary units plus *Mehmet II* in a Foss hex attack a Genoese 2-4-3 through an unbreached Outer Wall hexside. Each Janissary unit subtracts *three* from its Strength (for the Wall) so that the total attacking Strength is 6 (2 + 2 + 2 [the last "2" for *Mehmet II*]). Cross referencing the 6 with the Defensive Strength of 4 we see that the Ottoman Player would have to roll a 6 or a 7 to inflict a possible casualty.

[9.24] If a possible casualty has occurred, as per Case 9.23, the Defending (non-Phasing Player) refers to the Casualty Possibility Table immediately. He checks the *Morale Rating* of the unit attacked and rolls *one* die. He *subtracts* from this die-roll the *Morale Rating* of any *one* Leader unit who is within Range (see Case 12.12) of the Defending unit. The adjusted die-roll is now cross-referenced with the unit's *Morale Rating* to produce one of the following results:

- = No effect, defending units remain unharmed.

Inf = Unit is *Ineffective* until the next Simultaneous Ineffective Removal Segment. Ineffective units may not melee offensively, fire or move. If attacked, each *attacking* unit adds *one* to its Strength.

R = For *Ottoman* units, unit is removed from game-map; affected unit may return next Game-Turn.

For *Byzantine* units, unit either retreats one hex so that the affected unit is not in an Ottoman ZOC, *or* the affected unit loses one combat step.

= Unit affected loses that number of combat steps.

[9.25] All combat units have information printed on both sides of the counter. The front side — the one with the higher strength — is the *original* strength. If a unit suffers a one-step loss (see Case 9.24) it is turned over to its reduced strength side. Thus combat units are said to have *two* combat steps. Note that if a combat unit suffers a Casualty Result of 2 when at original strength the unit is eliminated; likewise a reduced unit suffering a loss of 1 is also eliminated.

[9.26] Certain results on the Casualty Possibility Table are marked with an asterisk (*). This means that if there is a Leader present in the same hex as the unit suffering a combat result there is a chance of the Leader being Wounded or Killed. The Player with the Leader so affected rolls *one* die. If he rolls a 1, 2, 3 or 4 the Leader suffers no casualty. If he rolls a 6 the Leader is Killed. If the Leader is Wounded, the Player rolls again; the number on the second die-roll is the number of Game-Turns that the leader must be out of action, *not* including the Game-Turn in which the Leader was Wounded. Place the Leader unit on the Turn Record Track to indicate the turn on which the Leader will return to play. If the Leader is Killed, the Leader unit is removed from play.

[9.27] If, as a result of melee, a defending unit vacates a hex, an attacking unit may occupy the

hex simply by moving into that hex (however see Case 10.36). This is *not* considered Movement for the purposes of expending Movement Points. Advances after Combat must be taken immediately before proceeding to the next combat. Byzantine units do *not* require Leader units to Advance after Combat. Byzantine units may *not* Advance after Combat into a hex outside the City, though they may melee a hex outside the City.

[9.28] If Catapult or Siege Tower units are alone in a hex and are melee attacked they are automatically eliminated. Note that a unit that melee attacks one of those units may *not* melee attack again in that Game-Turn. However, if the above mentioned units are stacked with a normal combat unit they may remain in the hex until the normal combat unit is forced to leave the hex. If that is the case, the Catapult or Siege Tower unit is eliminated.

[9.29] Leader units attacked alone in a hex are automatically eliminated, unless the owning Player is able to *retreat* the Leader *one* hex into a hex that is not in an Enemy ZOC. Leaders stacked with Siege Towers or Catapults (only) are treated as Leaders alone in a hex.

[9.3] **MELEE COMBAT RESULTS TABLE**
(see page R10)

[9.4] **CASUALTY POSSIBILITY TABLE**
(see page R10)

[10.0] BOMBARDMENT

GENERAL RULE:

Bombardment is the process by which the walls of Constantinople may be reduced and breached. Only the Ottoman Player may Bombard. (The Byzantines had some small cannon, but they did more damage to the Walls of Constantinople than they did to the enemy, so they were used infrequently — to almost no effect — during the siege.) To engage in Bombardment, the Ottoman Player simply allocates his artillery to the various Assault Areas, states which Wall hexside he is firing at for each gun, cannon or Urban's Bombard counter in each Area, and rolls a die, consulting the Bombardment Table (10.61). This gives the Breach Damage Level applied to that Wall hexside. Wall breaches may be repaired by the Byzantine Player after the Ottoman Player has fired or assaulted. Throughout these rules, the term "Walls" is interchangeable with the term "Walls and Gates."

CASES:

[10.1] PLACEMENT OF ARTILLERY

[10.11] The Ottoman Player has nine batteries of guns, two cannon, and Urban's Bombard (see Case 10.4). At the beginning of the game, the various artillery units are assigned to their Areas. For convenience the Players may place the artillery counters on the game-map, although it is not necessary (see Case 10.21). If using this method of denoting placement of artillery, Players should remember to remove the artillery counters when conducting an Assault.

[10.12] As in the allocation of his troops (see Case 7.14), the Ottoman Player may change the location of his artillery counters from one Area to another (exception: see Case 10.15). Each artillery counter must be assigned to a specific Assault Area and may fire only at Wall hexsides within the confines of that Area.

[10.13] Artillery counters are allocated secretly and revealed only when used. Once used, however, they remain revealed until moved again.

[10.14] If the Ottoman Player wishes to move any of his artillery counters he must wait a certain number of Game-Turns — determined by the artillery type — before they may be used after movement. Guns moved from one Area to another may not be fired for the turn they are moved. Thus, if there are four gun batteries in the Mesoteichion Area on Game-Turn One and the Ottoman Player wishes to move one of those batteries to, say, the Pegae Area, he could not fire that particular battery until Game-Turn Three (but the Gun would have fired on Game-Turn One). If *cannon* or *Urban's Bombard* move they may not fire for *two* full Game-Turns.

[10.15] The Ottoman Player may not move artillery (or any other units, for that matter) between the Pera Area and the other five Areas until he constructs a bridge over the Golden Horn (see Case 11.4). In any case, neither Cannon nor Urban's Bombard may ever cross into Pera.

[10.2] HOW TO BOMBARD

[10.21] To Bombard a Wall hexside, the Ottoman Player simply states which hexside in the Area he is firing at (use judgment for Inner Wall hexsides) and rolls a die, consulting the Bombardment Table under the appropriate type of artillery firing: Gun, Cannon or Urban's Bombard.

[10.22] Each Gun, Cannon or Urban's Bombard fires *individually*; they are never combined. Therefore, the Ottoman Player rolls for *each* artillery counter he fires. However, before firing any given artillery he must state which of his units in a given Area are firing at a given hexside. Thus, if he assigns three Gun Strength Points to fire at a given hexside, they must all fire at that hexside, regardless of the outcome of the Bombardment. The Ottoman Player cannot change his Bombardment assignments once allocated, and all allocations must be made before any Bombardment is resolved.

[10.23] There are no Line of Sight problems in Bombardment. The Outer and Inner Walls may be Bombarded at all times.

[10.24] Artillery counters may Bombard Wall hexsides only within the Assault Area in which they have been placed. Ottoman artillery in Pera may fire only at Wall hexsides that are contained in hexes 3612 through 3124. Artillery in the other five Areas may fire at any Inner or Outer Wall hexside in their respective Areas. *No* units may fire at the seaward Walls (Walls facing sea hexes), with the exception noted above for Pera.

[10.25] Artillery counters may not engage in Fire Combat in an Assault Phase. They are used *solely* for Bombardment.

[10.26] Guns firing at Wall hexsides from Pera subtract *one* from the die-roll when resolving Bombardments. Die-rolls less than one are treated as one.

[10.3] RESULTS OF BOMBARDMENT

[10.31] Walls are Breached by Bombardment. Walls are Breached when they reach a Breach Damage Level of *six*. However, as many as *ten* Breach Damage Levels may be accumulated against any one Wall hexside (to account for possible repairs; see below).

[10.32] The Ottoman Player uses the Bombardment Tables (10.6) for each Wall hexside he wishes to Bombard. He notes the type of artillery firing and rolls a die. The resultant number, if any, is the number of Breach Damage Levels applied to that Wall hexside.

[10.33] To denote the present level of Breach Damage a Wall hexside has the Byzantine Player

[continued on page R7]

(continued from page R6)

places a Breach Damage Level counter in a hex adjacent to the Wall hexside in question with the arrow pointing towards the Wall hexside. For example, if the Ottoman Player fires Urban's Bombard at an Outer Wall hexside that has a present Breach Damage Level of three, and he rolls a *four* on the die, the Byzantine Player changes the Breach Damage Level counter to a *nine*, which is the Breach Damage caused by Urban's Bombard (six) plus the original Breach Damage Level (three). That particular Wall would be considered Breached (as its Breach Damage Level has exceeded six; Breached Wall effects may be found on the Terrain Effects Chart, 5.25), although its Breach Damage Level may be reduced by Byzantine repairs (see Case 10.5).

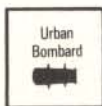
[10.34] The Breach Damage Level may never exceed *ten* for any given hexside. Excess Breach Damage Factors are ignored and are treated exactly as a "No Effect."

[10.35] Breached Inner Wall and Tower hexsides (non-gate) may be crossed by units moving during a Movement Segment. Unbreached Inner Wall and Tower hexsides (non-gate) may never be crossed. Outer Walls may be crossed, Breached or unbreached (see Terrain Effects Chart, 5.25). However, Breaching an Outer Wall hexside facilitates movement across such a hexside and lessens terrain effects on combat.

[10.36] Any Outer Wall hexside, Breached or not, may be crossed as a result of Advance after Combat (see Case 9.27). There is *no* Advance after Combat through the Inner Walls or Towers, regardless of the Breach status of the Inner Walls or Towers.

[10.37] Once a Wall has reached a Breach Damage Level of *six*, it is considered Breached for movement and defensive purposes. Note that the Breach Damage Level may go up to *ten* (see Case 10.33). This is so that the Ottoman Player may make it harder for the Byzantine Player to repair the Breach. A Wall hexside with a level of *ten* is no more "Breached" than one with a level of *six*; it is just more difficult to repair.

[10.38] Walls are never permanently Breached by Artillery Bombardment. They may be repaired throughout the game. Consequently Walls that were Breached for Movement and defensive purposes on one turn may be repaired by the next turn's Assault Phase.



[10.4] URBAN'S BOMBARD

Urban's Bombard was an immense cannon constructed especially for the siege by the great Hungarian cannon-maker, Urban. Its barrel was 27 feet long and it fired a stone that stood three feet high! In an age when artillery was relatively new, it was truly a horrifying weapon. Unfortunately, Urban's Bombard had a tendency to blow up (as well as being well nigh impossible to move or fire with any frequency), which it did during the siege, killing its designer. Therefore, each time the Ottoman Player fires Urban's Bombard he rolls an additional two dice. If he rolls a total of 11, the Bombard explodes. It may return after a three turn hiatus (the third turn after it explodes) in the *same* Area in which it exploded.

[10.5] REPAIRING WALL BREACH DAMAGE

[10.51] During any Wall Repair Segment (2B or 3J in Section 4.0) the Byzantine Player may attempt to repair damage done to the Walls of the city by Ottoman Artillery. Players should note that the Byzantine Player has a Wall repair Seg-

ment in the Assault Phase, even though the Ottoman Player cannot Bombard in that Phase.

[10.52] During his Wall Repair Segment the Byzantine Player consults the Repair Capability section of the Wall Repair Table and rolls a die. The resultant number is the *total* number of Breach Damage Levels he is *capable* of removing that Segment. It is not the number he *may* remove; it is simply the maximum he may *attempt* to repair that turn.



[10.53] Once the Byzantine Player has determined his Repair Capability for that turn, he rolls for *each* Wall hexside he wishes to repair. If the Johannes Grant Leader unit is adjacent to any of these hexsides the Byzantine Player adds *one* to his die-roll for that hexside. The Byzantine Player consults the Levels Repaired Section of the Wall Repair Table, cross references the die-roll with that table, and learns the number of Breach Damage Levels he may remove from that hexside that turn. The Byzantine Player need not use all of his Repair Capability on a particular hex, but he may not roll more than once per hex on the Levels Repaired Table.

[10.54] Each time the Byzantine Player removes a Breach Damage Level in repair he must subtract it from his Repair Capability for that Wall Repair Segment. He stops repairing when his Repair Capability reaches zero, when he has run out of Wall hexsides to repair, or when he announces that he does not wish to repair any more hexes that Segment. Unused Repair Capability may not be transferred from turn to turn.

Example: The Byzantine Player is trying to repair a Wall hexside with a Breach Damage Level of *seven* (Breached), and that hexside is adjacent to the Johannes Grant unit. He rolls a die. If the die-roll is *four* he would add one (for Grant) to make it a *five*. This would mean that he could remove up to three Breach Damage Levels, leaving the Damage Level at *four* (unbreached). To indicate this, he simply changes the Breach Level counter, as in Case 10.32. Assume that for the sake of argument in the above example the Byzantine Player chose to remove only *two* Breach Damage Levels, and that the total Repair Capability had been 15 for that turn. After the two Breach Damage Levels are removed, the Repair Capability becomes 13.

[10.55] The Byzantine Player may never remove more Breach Damage Levels than he is capable of repairing in a given Repair Phase (see Case 10.52).

[10.6] BOMBARDMENT AND REPAIR TABLES

[10.61] Bombardment Table
(see page R10)

[10.62] Repair Capability Table
(see page R10)

[10.63] Levels Repaired Table
(see page R10)

[11.0] SIEGEWORKS AND ENGINEERING

CASES:

[11.1] TUNNELLING

The Ottoman Player may dig tunnels in order to attempt to undermine the walls of the city. He may dig *three* tunnel hexes per Game-Turn. It is possible that some of these hexes may be blocked by rock, impeding his advance, or that tunnels may

simply collapse from bad engineering. Furthermore, in certain instances the Byzantine Player may attempt to locate the tunnels and destroy them. A completed tunnel can be used to destroy the Wall hexside above it.

[11.11] In a given Ottoman Tunnel Building Segment, the Ottoman Player may construct tunnels in *any three* hexes. All tunnels must originate from the western edge of the map. They may branch out in any direction the Ottoman Player wishes, as long as all hexes in a given tunnel are consecutive and contiguous. They may cross Assault Area lines. Tunnels may not be built in any hex that contains *any* sea or river hexside. The Ottoman Player notes which hexes have been tunnelled on his Mine Planning Sheet (Players should make copies of this if they wish to use it more than once). Locations of tunnels are secret, revealed only when discovered or activated.

[11.12] For each hex that the Ottoman Player tunnels he must roll a die, consulting the Ottoman Tunnel Table. After any adjustments to the die-roll have been made for the type of terrain being tunnelled the Ottoman Player consults the Tunnel Table to see whether his tunnel has struck rock or collapsed. If either has happened that hex is considered shut down, and no tunnel may proceed through, out of or into that hex. The Ottoman Player should place an "X" in such hex on his Mine Planning sheet. He does not have to tell the Byzantine Player the result of his die-rolls. There is some honesty involved here, so try to keep your baser instincts in line.

[11.13] A Foss hex, a hex "under" the Parateichion, or a city hex counts as *two* hexes tunnelled (but the die is still rolled only *once* for collapse).

[11.14] The object of tunnels is to place charges under the Walls, destroying them for the remainder of the game. Thus, on the turn *after* a tunnel "passes" a Wall hexside — i.e., the tunnelled hex is *east* of the Wall hexside desired to be destroyed — the Ottoman Player may announce the location of such tunnel and then blow any *one* Wall hexside adjacent to the tunnelled hex. *The blown Wall hexside is considered Breached for the remainder of the game and may not be repaired.* Remember, the tunnel must *pass* the Wall hexside, not simply reach it.

[11.15] If there are any combat or Leader units in a hex that is adjacent to a hexside that has been mined and blown (see Case 11.14) the owning Player rolls a die. If he rolls a 5 or a 6 the unit is eliminated; otherwise there is no effect.

[11.16] The Byzantine Player may try to discover tunnels and destroy them. In the Assault Phase the Byzantine Player has a Tunnel Discovery Segment. During that Segment the Byzantine Player may call out any three hexes on the same map *plus* any *three* hexes adjacent to the Johannes Grant Leader unit. Thus, the Byzantine Player can search a maximum of six tunnels in an Assault Phase Tunnel Discovery Segment. Furthermore, in the Damage Repair Segment of the Bombardment Phase the Byzantine Player may guess any three hexes adjacent to Johannes Grant, but only those three hexes. He does not get the additional three hexes as in his Tunnel Discovery Segment. If a hex searched is a hex in which there is a tunnel in existence, the tunnel is discovered and the Ottoman Player informs the Byzantine Player of such a discovery.

[11.17] A discovered tunnel is closed down for three hexes in *all* directions, counting the hex in which the actual discovery was made as the first, etc. Only hexes already tunnelled and connected to the discovered hex are closed down. Closed down hexes are considered destroyed for tunnelling purposes.

[11.18] Ottoman Tunnel Determination Table (see page R11)

[11.2] THE FOSS

In order to facilitate movement across the Foss (see Case 5.32) the Ottoman Player may attempt to fill the Foss (with debris, stones, etc.). A filled-in Foss hex is much easier to enter and is less of a defensive liability than an unfilled Foss hex.

[11.21] During the *Ottoman Engineering Segment* of an Assault Segment (see Sequence of Play, Case 4.0,3F) the Ottoman Player may fill in any non-occupied Foss hex using any combat unit which has *not* moved in the immediately previous Ottoman Movement Phase and is adjacent to a Foss hex. Filled-in foss hexes are designated by placing any "Filled" or blank counter in the Foss hex. Ineffective units may not be used to fill the Fosses. Each unit may fill only one hex per Segment. Units that have fired *may* fill in the Foss. Units in a filled-in Foss hex may fill in an adjacent unfilled Foss hex.

[11.22] In the Byzantine Repair Segment of the Assault Phase — and only in that Segment — the Byzantine Player may *attempt* to empty out filled Foss hexes. He rolls for each filled-in Foss hex. A roll of 1 through 4 indicates that the Foss hex in question remains filled, while a roll of 5 or 6 empties the hex, which the Byzantine Player indicates by removing the counter placed in Case 11.21. The presence of a unit is not required for this. Add *one* to the die-roll if the *Johannes Grant* counter is adjacent to a hexside being rolled for.

[11.23] Foss Debris Removal Table (see page R11)



[11.3] SIEGE TOWERS

[11.31] The Ottoman Player has *five* Siege Tower counters. These represent wooden towers constructed at the siege site for the purpose of facilitating movement over the Outer Walls while protecting the units making such a maneuver.

[11.32] Siege Towers move at the rate of *four* Movement Points per Segment. They *must* be accompanied by (i.e., stacked with) a combat unit, which is placed under the Tower to indicate that it is "pushing" the tower.

[11.33] Siege Towers may not enter an unfilled Foss hex.

[11.34] Siege Towers have no combat Strength in and of themselves.

[11.35] While Siege Towers and their "inhabitants" are not subject to normal Fire Combat (i.e., missile combat), they are susceptible to the famous Byzantine weapon, "Greek Fire." Greek Fire is used to burn down the towers and their inhabitants. Any Catapult unit within *two* hexes of a Siege Tower, or any other combat unit *adjacent* to a Siege Tower may, in a Fire Combat Segment, attempt to burn down a Siege Tower using Greek Fire. To do so, such attacking unit, instead of using normal Fire Combat (see Section 8.0) against a target, opts to use Greek Fire. The owning Player rolls a die. If he rolls a 5 or a 6, the Siege Tower is destroyed by Greek Fire. Any unit stacked with the Tower is eliminated. Siege Towers may *not* be rebuilt.

[11.36] Any unit in the same hex as a Siege Tower and adjacent to Outer Wall hexside crosses that hexside at the rate of +1 MP (not +3 MP). Furthermore, if a combat unit stacked with a Siege Tower is meleed, the *attacker* subtracts one Strength Point from each attacking unit.

[11.37] Siege Towers may be assigned to any Division. Siege Towers may be reassigned to a different

Division each Game-Turn if the Ottoman Player wishes.

[11.38] A Siege Tower may never cross an Outer Wall hexside, Breached or unbeached.

[11.39] If a combat unit stacked with Siege Tower is eliminated, the Siege Tower is also eliminated.

[11.4] CONSTRUCTING A BRIDGE ACROSS THE GOLDEN HORN

Mehmet had a large force stationed in Pera which he could not use because he had no line of communications across the Golden Horn, which was controlled by the Byzantine Navy.

[11.41] Starting with Game-Turn ten there is a bridge between Pera and the Blachernae Assault Area (hexes 3814 to 3613).

[11.42] Once a bridge has been established the restriction of Case 7.27 is no longer in effect. Furthermore, Zaganos Pasha's Division may now be transferred to the other five Areas — and other Divisions and Guns to Pera — with one proviso: the Ottoman Player *must* inform the Byzantine Player when any Divisions and/or Guns are being transferred across the bridge; he need not be specific. Such transfers are accomplished during the Ottoman Troop Allocation Segment.

[11.43] Gun counters may be transferred across the bridge; Cannon counters and Urban's Bombard may not. Players should note that Gun counters in Pera have penalties assessed against them (see Case 10.27).

[12.0] LEADERS

COMMENTARY:

The Leader counters in the game represent actual historical personages present at the siege. Leaders play an important role in both movement and combat. The problems of effective leadership were much greater from the Imperial Byzantine "army" than they were for the well-trained Ottoman fighting force, and the rules reflect this difference.

CASES:

[12.1] LEADERS: The Counters

[12.11] Each Leader is rated for three separate capabilities. The first number on each Leader counter is the Leader's *Combat Rating*. See Case 12.31 for an explanation of the Leader's Combat Rating.

[12.12] The middle number on a Leader's counter is his *Morale Rating*. This number is used in conjunction with the third number on the counter, the *Morale Radius* of a Leader. The Morale Rating of a Leader is subtracted from a Casualty die-roll affecting any unit(s) that is at the same "height" and within the number of hexes in that Leader's Morale Radius. Thus, if a combat unit were rolling to check what type of casualty it would suffer (see Case 9.24) and Justiniani were within three hexes and at the same "height" level of that Byzantine unit (Justiniani's Morale Radius is *three*) the Byzantine Player would subtract three from the casualty die-roll for that unit (*three* being Justiniani's Morale Rating). *Range* and *Morale Radius* are interchangeable terms.

[12.13] Adding all three numbers on a Leader's counter produces that Leader's *Command Rating*, which is used to determine the Ottoman Assault Capability; see Case 7.2.

[12.2] LEADERS AND MOVEMENT

[12.21] Ottoman units may move and fight without a Leader. However, Leaders do affect the ability of the Ottoman Player to launch an Assault on a given turn (see Case 7.2).

[12.22] No Byzantine Combat unit may move during the Movement Segment unless it begins that Segment stacked with a Leader. Byzantine combat units that do not begin a Movement Segment stacked with a Leader may not voluntarily move. This does not apply to Advances after Combat. The *Johannes Grant* unit may not move combat units; it is used only for Engineering purposes.

[12.3] LEADERS AND COMBAT

[12.31] A Leader may add his Combat Rating (see Case 12.11) to any combat unit with which the Leader unit is stacked (excluding Catapults and naval units) to increase such unit's strength on melee (not Fire). The Combat Rating may not be applied to the defensive strength. A Leader may never add more Combat Points to a unit than the unit has Strength Points (terrain adjustments calculated first). An Ottoman Leader may only add his Combat Rating to a unit of his Division.

[12.32] The Morale Rating and Morale Radius of a Leader are used to help in determining the casualty suffered by a defending combat unit (see Case 12.12).

[12.33] Leaders may suffer casualties themselves as a result of melee and/or Ottoman Tunnelling. See Cases 9.26 and 11.15 for details on how this may occur.

[12.34] Leaders are never affected by Fire Combat. If a unit stacked with a Leader is eliminated due to Fire Combat, the Leader is immediately moved to the nearest Friendly unit (see Case 8.28). Leaders can be eliminated by Greek Fire (see Case 11.35).

[12.35] If a leader is with a combat unit in a *melee* and the combat unit is eliminated or otherwise removed from play, then the Leader is *immediately* moved to the nearest Friendly unit (exception; see Case 9.26). If two units are equidistant from the Leader, the owning Player chooses which unit the Leader goes to.

[12.36] Eliminated Leaders (see Case 9.26) may not be replaced. If an Ottoman Leader is eliminated or incapacitated from wounds, his Division has an Assault Capability of 10 (ten) in his absence.

[12.4] SULTAN MEHMET II

The Ottoman commander was the great Sultan Mehmet II — The Conqueror. If Mehmet is killed in battle, the game is over, simply because the Ottomans would have retired and regrouped (possibly) or simply considered their political position, etc. However, for Players who do not wish such a simplistic result, if Mehmet is killed off the Ottoman Player immediately calls off that Assault. He then may not do anything for the next *three* Game-Turns. The Janissaries now have an Assault Capability of ten (as per Case 12.36), and all other Divisions raise their Assault Capability number by *one*.

[12.5] GIOVANNI GIUSTINIANI

While the "Roman" Emperor Constantine XI was nominally in charge of the Byzantine Army, true command was in the hands of the extremely capable Genoese soldier-of-fortune Giovanni Giustiniani Longo. It was Giustiniani whose command skill and daring helped the city hold out for so long. Unfortunately, on the fatal last day Giustiniani received a severe and painful wound; his nerve left him and he fled to Chios (where he died several days later). His Genoese followers likewise deserted the walls and the Ottoman assault carried the city. To reflect this situation, if Giustiniani is killed or suffers a wound that would force him to be out of play for more than four Game-Turns, he

is considered to have fled. Remove Giustiniani from play. At the beginning of the *following* Movement Segment of the Assault Phase, all Genoese combat units are removed from play. As in Case 12.4, these rules should have a profound effect on the outcome; but then, so did Giustiniani's actions.

[13.0] SAILORS

GENERAL RULE:

Byzantine Sailors may enter the game one unit per Game-Turn, beginning with Game-Turn *Twelve*. Sailor units enter in the Byzantine Strategic Movement Segment. The Leaders *Diedo* and *Trevisano* may enter the game with any of these units (Byzantine Player's choice). Sailors entering the game are placed in any land hex within two hexes of the Golden Horn and *east* (i.e., behind) of the Inner Walls. Note that Sailor units are treated exactly as units in reserve.

[14.0] VICTORY

GENERAL RULE:

Victory in *Constantinople* is quite simple: if, at any time, the Ottoman Player places land combat units with a total *attack* strength of *twenty-five* or greater inside the city proper (not the Parateichion or the Towers), and these Strength Points can trace a line of hexes free of Enemy units or Zones of Control (Friendly units negate Enemy ZOCs for this purpose) to the western mapedge, then the Ottoman Player has taken the city and won the game. The line of hexes may *not* be traced through an unbreached Inner Wall hexside or an all-sea hexside. If, at the end of the *27th Game-Turn* the Ottoman Player has not fulfilled the above condition the *Byzantine Player wins*.

[15.0] THE SCENARIOS

CASES:

[15.1] THE LAND GAME

The Land Game scenario uses *all* rules in the game. Play starts with Game-Turn *One* and proceeds normally. The initial placement of units is listed below. The Land Game takes about four hours to play, depending on the number of Assaults launched. While it does not lend itself easily to solitaire play, it certainly is suitable for multi-player gaming, with different Players in command of the various forces.

Initial Deployment of Units

The Byzantine Player always places his units on the map first, then the Ottoman Player secretly allocates his land units to their Assault Areas. Both Players place their units (at least initially) according to the format below. Players should note that a majority of the Ottoman units do not start the game on the map. Leaders are in bold print, and Reserves (5.17) are marked accordingly.

[15.11] The Byzantine Initial Deployment

Unit	Hex
3-4-4 (Greek), Constantine XI	2511
3-5-4 (Genoese), Giustiniani	2912
2-3-3 (Chios/Rhodes),	2811
2-3-3 (Italian), Bocchiardi Bros.	3412

2-3-3 (Greek), Minotto	3213
2-2-3 (Greek), Caristo	3313
2-3-3 (Genoese), Archbishop Leonard	3513
Three 1-3-3 (Genoese), Cattaneo	Within four hexes of 2110, in Parateichion
Three 1-2-3 (Greek), Theophilus Palaeologus	Within two hexes of 1312, in Parateichion
2-4-3 (Venetian),	Within two hexes of 0914, in Parateichion
1-4-3 (Venetian), Fillipo Contarini	Within two hexes of 0914, in Parateichion
2-2-3 (Greek), Manuel	0615
3-2-2 (Greek), Demetrius Catacuzenus	0315
(R) 1-4-3 (Venetian),	In any hex adjacent to the Outer "seaward" wall between 0517 and 1118
(R) 1-3-4 (Venetian),	
(R) 1-4-4 (Venetian), (R) Jacobo Contarini	1621 and 1722
(R) Two 1-2-2 Monks,	
(R) Three 2-3-2 (Turks), Orhan	Within three hexes of 2025, adjacent to the seaward wall
(R) 3-3-4 (Catalans),	2233
(R) Pere Julia	
(R) 2-4-5 (Papal), (R) Cardinal Isadore	3334
(R) 1-2-3 (Greek),	3116 and 3016
(R) 1-1-2 (Greek), (R) Megadux Notaras	
(R) 1-3-1 (Greek),	2619 and 2620
(R) 1-2-3 (Greek), (R) Nicephorus Palaeologus	
Three Catapults	Any three hexes in Parateichion or Towers
Johannes Grant	Any hex in Parateichion

The Sailor units and *Diedo* and *Trevisano* are not deployed at the beginning of the game.

(R) = In Reserve (see Case 5.17)

[15.12] The Ottoman Initial Deployment

Combat Units: The Ottoman Player may assign his Divisions to any area, within the limitations of Case 7.1. However, the Division of *Zaganos Pasha* must be placed in Pera (on or off the map at the Ottoman Player's discretion).

The Divisions, with their manpower, are listed below:

Bashi-Bazouks: Seventeen 3-1-1's; no Leader

European Division: Twenty 3-3-2's;

Karadja Pasha

Anatolian Division #1: Ten 4-3-2's;

Ishak Pasha

Anatolian Division #2: Ten 4-3-2's;

Mahmud Pasha

Pera Division: Ten 3-2-2's; **Zaganos Pasha**

Janissaries: Twelve 5-4-4's; **Mehmet II**

Artillery: The Ottoman Artillery is deployed as follows:

Urban's Bombard: Blachernae Area

Cannon #1: Blachernae Area

Cannon #2: Mesoteichion Area

One Gun Strength Point: Pera

Two Gun Strength Points: Exo Philapation Area

Three Gun Strength Points: Mesoteichion Area

Three Gun Strength Points: Pegae Area

[15.13] The Byzantine Reserve units (those units so noted in Case 16.11) may not be moved until

they are activated. Activation takes place under two different sets of circumstances, with different results:

1. Reserves *may* be activated the first time an Ottoman unit melees *any* Byzantine unit. In such a case, activation is only *possible*, not *definite*. On the Impulse after such event occurs, and in every Impulse in an Assault Phase or Byzantine Strategic Movement Phase thereafter, the Byzantine Player may *attempt* to activate any Leader in Reserve. He rolls two dice for each unactivated Leader; a *two* or *eleven* activates a Leader, who may then move the units — and only those units — assigned to him in Case 15.11. (Monks may be moved by any Leader). The Byzantine Player rolls once for each Leader, per Impulse, until all Leaders are activated; and/or
2. On Game-Turn *fifteen* Leaders begin to be activated automatically (no die-roll necessary) in addition to rolling under (1). One Leader is activated every *two* Game-Turns, starting with *fifteen*. The Byzantine Player chooses which Leaders to activate under this section.

[15.14] An active Leader may not activate combat units assigned to an inactive Reserve Leader.

[15.2] THE ASSAULT GAME

The Assault Game reduces playing time — to about 2 hours — by distilling the essence of the siege. This version is also recommended for solitaire play.

[15.21] All rules in Case 15.1 are in effect, with the exception of the initial deployment.

[15.22] There is no mining or tunnelling (see Case 11.1) in the Assault Game. Players should ignore that section of the rules, and Segments 1C and 3B in the Sequence of Play.

[15.23] Play starts with Game-Turn *Thirteen* and continues normally. The Ottoman Player may Assault on the opening turn of the Assault Game.

[15.24] The Byzantine Player deploys his Reserve units first. All Byzantine units marked originally as Reserves are set up as per Case 15.11. *One* Sailor unit is deployed anywhere within the restrictions of Section 13.0 and is also considered in Reserve. All other Byzantine units may be deployed as the Byzantine Player sees fit *after* the Ottoman Player has determined the Wall Breaches, as per Case 15.26.

[15.25] The Ottoman Initial Deployment is the same as in Case 15.12, with the following exceptions:

1. Urban's Bombard is in the Mesoteichion;
2. One Ottoman 4-3-2 of *Mahmud Pasha's* Anatolian Division is at half-strength.

[15.26] Certain Wall hexsides may already have been damaged. To determine this, the Ottoman Player may designate any *ten* Wall hexsides — but no more than *five* such hexsides per Assault Area — as damaged. All Wall hexsides so designated *must* be in an Assault Area that contains at least *one* artillery counter. The Ottoman Player rolls a die for each hexside and applies the proper Breach Damage Level marker, as indicated in the Assault Game Wall Damage Table, to that hexside.

[15.27] No Fosses are filled at the start of the game.

[15.28] Urban's Bombard does *not* explode during the Assault Game (see Case 10.24). The rule is ignored for the duration of the Assault Game.

[15.29] Assault Game Wall Damage Table (see page R11)

[5.25] TERRAIN EFFECTS CHART

Terrain	Effect on Movement	Effect on Melee Combat
Road, Forum Hex	½ Movement Point	None; use terrain in hex
Clear (Outside City)	1 Movement Point	None
Clear (Inside City)	2 Movement Points	Byzantine Units subtract <i>one</i> from strength when defending in Clear/City hex
River	+ 1 Movement Point	Unit attacking across river subtracts <i>one</i> from strength
Parateichion	1 Movement Point	Depends on Wall type
Outer and Seaward Wall (Unbreached)	+ 3 Movement Points	Attacker subtracts <i>three</i> from strength
Tower or Inner Wall (Unbreached)	No movement across unbreached hexside	Attacker subtracts <i>two</i> from strength
Gate	If controlled (see 5.37) then + 1 MP to cross; otherwise treat same as wall	Treat same as wall hexside
Foss (Empty)	5 Movement Points	If defender in hex, attacker adds <i>two</i> to his attack strength
Foss (Filled)	2 Movement Points	No effect
Palace Hex	2 Movement Points	Attacker subtracts <i>two</i> from strength
Marsh Hex	2 Movement Points	No Effect
Assault Area	See 7.1	See 7.1

[8.4] CATAPULT/MISSILE FIRE RESULTS TABLE

DIE	Effect
1	-
2	-
3	-
4	-
5	Inf
6	L

Explanation:

- = No Effect; **Inf** = Unit Ineffective until next Enemy Fire Segment; **L** = Unit loses one step (see Case 9.25).

Subtract one from the die-roll if the defending unit is fired on through a Wall hexside adjacent to the defending unit.

[9.3] MELEE COMBAT RESULTS TABLE

Attacker's Strength	Strength of Defending Unit	1	2	3	4	5
1	2-4	4	3	2	2	
2	2-5	7	7	4	3	
3	2,4-6	2-4,11	7	6	4	
4	5-8	4-6	3-5	4,5	6	
5	5-9	6-8	4-6	3-5	7	
6	2-9	3-7	2-6	6,7	2-4,11	
7	2-10	3-9	4-7	4-6	2-5	
8	A	2-10	2-7	2-6	4-6	
9	A	2-11	4-8	6-8	3-6	
10	A	A	3-9	5-8	4-7	
11+	A	A	A	5-9	5-8	

Explanation:

= The number that the attacking unit needs to roll on *two* dice in order to produce a chance of a casualty. If such number is rolled, refer immediately to the Casualty Possibility Table (Case 9.4); **A** = Refer immediately to the Casualty Possibility Table.

Note:

A comma (,) means that only the numbers printed are used; i.e. 4, 5 means four or five. A hyphen (-) means that all numbers between the two printed (inclusive) are used.

[9.4] CASUALTY POSSIBILITY TABLE

	Morale Value of Defender				
DIE	1	2	3	4	5
-2	Inf	-	-	-	-
-1	R	Inf	-	-	-
0	R*	Inf	Inf	-	-
1	R	R	Inf	Inf	-
2	1	R	R	Inf	Inf
3	1*	1*	R*	R*	R*
4	1	1*	1	R	R
5	2*	1	1	1	R
6	2	2	1	1	1

Explanation:

- = No effect (no casualty); **Inf** = Combat unit in hex Ineffective for remainder of Impulse; **R** = Retreat (Ottoman units removed from game-map; Byzantine units retreat one hex not in Enemy ZOC or lose step); # = Number of steps eliminated; * = Possible Leader Casualty.

[10.6] BOMBARDMENT TABLES

[10.61] Bombardment Table

DIE	Gun	Cannon	Urban's Bombard
1	-	-	3
2	-	1	4
3	-	1	5
4	1	2	6
5	1	3	6
6	1	4	7

Explanation:

= Breach Damage Levels applied to affected Wall hexside.

[10.62] Repair Capability Table

DIE	Capability (in Levels)
1	6
2	9
3	11
4	14
5	17
6	20

Explanation:

= Total Breach Damage Levels that may be repaired that Game-Turn.

[10.63] Levels Repaired Table

DIE	Levels Repaired (per hexside)
1	0
2	0
3	1
4	2
5	3
6	4
7	6

Explanation:

= Levels repaired for each hexside (Roll for each hexside individually)

Add one to the die-roll if hexside is adjacent to Johannes Grant counter.

[11.18] OTTOMAN TUNNEL DETERMINATION TABLE

After the Ottoman Player has secretly determined the hexes to be tunneled he rolls a die for each separate "tunnel." He follows results for each tunnel.

DIE	Result
1-5	No Effect
6,7	Rock — Tunnel is halted; hex may not be worked again
8	Tunnel collapses; may not be worked again.

Note:

Add two to the die-roll if the tunnel hex is under the Parateichion or adjacent to a Wall hexside (e.g., the Foss).

[11.23] FOSS DEBRIS REMOVAL TABLE

DIE	Result
1-4	-
5,6	Emp

Explanation:

- = Foss hex remains filled; **Emp** = Foss hex is considered empty again.

Add one to the die-roll if *Johannes Grant* counter is adjacent to the Foss hex being rolled for.

[15.29] ASSAULT GAME WALL DAMAGE TABLE

DIE	Breach Damage Level
1	3
2	4
3	5
4	6
5	8
6	10

Explanation:

= Damage Level marker applied to target hexside.

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DESIGNER'S NOTES

Siege warfare is not easy to simulate; or, more accurately, it is not easy to simulate in such a way that it can be played as a game. The reasons for this are plentiful: siege warfare is essentially static — and static games have never been popular; the defending forces are usually outnumbered considerably, making counter-mix choices difficult at best; and, worst of all, there are extensive periods of inaction which must be accounted for. Only two previous games had ever attempted any type of historical siege simulation: *Alesia* is more concerned with assault tactics than a true siege of a walled city, and *Siege of Jerusalem* abstracts a good portion of the actual destruction of the walls and, again, concentrates on the assault. *Constantinople* is thus the first simulation of a full siege.

The first problem that confronted the design team was how to simulate bombardment. Initial readings of sources indicated that bombardment of the walls would proceed for long periods before any assault would take place. Then, when the time was ripe, an assault was launched at a portion of the wall prepared by the guns. The way was obvious: divide the game into assault and bombardment turns, with the choice being left to the player.

The Order of Battle and map of the city were fairly easy to come by. We used two main sources: Pear's *Destruction of the Greek Empire* (probably the best work in English) and Runciman's *Fall of Constantinople* (a marvelously readable book). Between the two we derived an accurate rendering of the city (with help from some additional works) in terms of where the gates were, etc. We were forced to abstract, to some extent, the triple wall system facing the west as the scale would not allow for an accurate rendering. The Outer Wall includes the first escarpment and the Peribolos; the Parateichion is too wide in terms of scale and the towers of the Inner Walls are far fewer than in actuality. However, the feel of the walls is maintained.

The OB was another matter. Numbers are hard to come by, especially for the Ottomans. Even for the Byzantine forces we found only general numbers. We never knew quite how many were in each contingent. The ratings given the units were based on subjective feelings gleaned from the telling of the tale. Ottoman numbers are more guesswork than anything, affected greatly by play balance. For example, much of the Ottoman army was cavalry; that is was not used as such during the siege goes without saying, so, *voilà*, none of the game's combat units are shown as cavalry! As for Ottoman numbers, you can use almost any figure: 80,000, 160,000, even 300,000! We gave up a long time ago trying to gain accurate figures. Ottoman units are rated for effect, rather than manpower. The most feared soldiers of the day were the Ottoman Janissaries, and their ratings — and numbers — show why. With a leader such as Sultan Mehmet II, they are hard to stop; if they *can* be stopped, you have a good chance to withstand the other units.

This leads us to a discussion of casualties. The Byzantine defenders actually took remarkably few casualties. As a matter of fact, the first major Ottoman assault produced *no* Byzantine losses. The Byzantines and their allies (mostly the Italian contingents) wore late medieval armor, which protected them to a great extent from the arrows of the Ottoman archers. It wasn't until the Ottomans were able to close in great numbers that the Byzantines finally started to take losses they could ill afford. This is why the CRT seems to be relatively bloodless; it is because sieges *were* relatively

bloodless in this era. It wasn't until the city was actually taken that the killing began in earnest.

Because of the relative paucity of Byzantine defenders, Victory Conditions were easy to determine. All the Ottomans had to do was to get into the city in any semblance of strength to take it; there were simply not enough Byzantines to form a second line of defense. Thus rarely will any fighting take place within the city proper (where the Byzantines are at a stiff disadvantage).

The biggest design decision, however, was to eliminate the naval portion of the battle. Those who read the accompanying article will see that both navies were present, to say the least. And much of the legend of the siege arises from some of the actions surrounding the navies; the great portage arranged by Mehmet and the fantastic naval engagement in which four Genoese galleys beat their way through the entire Ottoman navy. But these actions had little bearing on the siege itself. The portage simply allowed Mehmet to use the Golden Horn to transport troops from Pera, and his navy did little of anything else. The Byzantine navy remained in the Golden Horn throughout the siege.

A naval game *was* designed; it was even play-tested. And it was determined that the time it added to playtime (about 2-3 hours) was not comparable to what it added to the game in terms of strategic decisions. The Ottoman player rarely assaulted the seaward walls because of the currents and shoals upon which his galleys often crashed and the two navies rarely came to grips. The naval rules were also more complex than the rest of the game and were of such length that they, in essence, detracted from the general level of play. They were thus abandoned at the last moment. However, there is a good chance that they will appear in full length in a *MOVES* article — for those interested in such areas of history — and the system did not go for a total loss, as it was the system upon which much of the play of *Tyre* (another siege game to soon appear) is based. *Constantinople* is not a difficult game; it was designed to be fairly smooth in its mechanics. But it does portray the style of warfare with a high degree of accuracy. And for that reason players will sometimes find that the bombardment periods are periods of seemingly little action. However, this is more than made up for by the one big assault, where all the elements of surprise and daring make for a tremendous amount of excitement. Can the overmatched defenders cover all the areas of the walls? Can the strong Ottoman forces gain that one foothold they need before the Byzantines can rally and throw them out? It's all there: a simulation of one of the most heroic stories in all military history, the Siege of Constantinople, 1453.

BIBLIOGRAPHY FOR GAME DESIGN

The Destruction of the Greek Empire and the Story of the Capture of Constantinople by the Turks; Edwin Pears, (Haskell House, New York, 1968)

The Fall of Constantinople, 1453; Steven Runciman (Cambridge University Press, New York, 1965)

OTTOMAN MINE PLANNING SHEET

Players should make photocopies of the Ottoman Mine Planning Sheet prior to playing the game for the first time.



SCENARIOS & VARIANTS

JUST ADD WATER...

Naval Rules for Constantinople

by Richard Berg

Sometimes an S&T game design takes on a life of its own and inevitably grows beyond the parameters of the issue. Happily, in this case, that which filled the bag too full was a completely independent sub-system of the game in question. To make the counters, xerox the art below, color with pencils or magic markers, and carefully double mount them on good cardboard. Note that the art is arranged for backing up along the vertical axis. Got that?

—RAS

As originally designed, *Constantinople* included a rather long and detailed naval game. For a variety of reasons — all given in the body of the rules specific in the issue — the naval game was excised. For those gamers interested in this aspect of the siege, as well as those history buffs desirous of having a complete picture, we are herewith publishing complete rules for the naval actions that took place at the siege. In addition, sample counters are printed for the naval units.

Additions to the Game-Map

The hexes comprising the coast along the seaward walls are dotted with shoals and reefs. These are represented on the game-map by numbers, which correspond to the shoals and are covered in Case 15.53.

Number Hexes

2	3334
3	2234, 2133, 2132, 2131, 1119, 1018, 0124, 0114, 0113
4	3335, 3235, 3136, 3036, 2937, 2837, 2435, 2335, 2233, 2029, 1926, 1724, 1723, 1622, 1522, 1521, 1420, 1320, 1219, 0918, 0818, 0718, 0617, 0517, 0315
5	2737, 2636, 2536, 2028, 2027, 2026, 0316

In addition, The Gate of the Lighthouse (2536) and Gate of the Contoscalion (2129) are missing and should be drawn on the map.

Counters

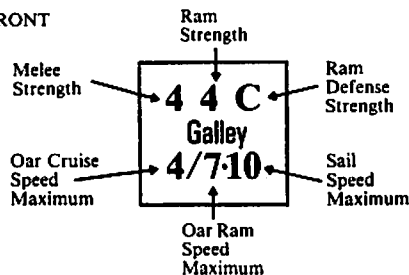
The counters at right have been provided to accompany the Naval rules. Players may wish to mount the cut-out units on cardboard to facilitate play. Players should note that all Byzantine Naval units are galleys.

[2.0] (addition after the eighth line). First, the Players undertake Naval Movement and Combat, one Player moving his ships before the other player, after which there is a mutual Naval Combat Phase. This segment is repeated five times ("impulses") to create one complete Naval Phase. (The Naval Phase is used only in the Campaign Game). After the Naval Phase...

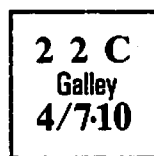
[3.2] (addition) Naval units have strengths for Ramming and Melee, as well as movement capabilities.

[3.22] (addition)

FRONT



BACK



[3.33] (addition) The Wind Direction Table, the Wind Velocity Table, The Naval Melee Combat Results Table and the Ramming Table.

[3.4] (addition) As for the ships, each Byzantine naval counter equals 3-4 galleys. Each Ottoman naval "step" is the equivalent of 5-7 galleys, triremes, biremes, fustae and parandaria (troop barges).

[4.0] (addition, add at beginning of Sequence of Play)

1. The Naval Phase

A. *Wind Determination Segment:* Players determine the wind direction and velocity. Both are rolled for on the first Impulse of each Naval Phase only.

NAVAL IMPULSE (Segments B through E)

B. *Initiative Segment:* Players roll to determine who moves first in each Impulse. High roll goes first.

C. *First Player Movement Segment:* The Player denoted in Segment B to move first moves his ships according to the rules for such. Attempts to Ram occur in this segment.

D. *Second Player Movement Segment:* The Second Player moves his ships, as per Segment C.

E. *Mutual Combat Segment:* Players engage in combat engendered by Segments C-D. Ships sunk are removed from play. Segments B through E are repeated a maximum of five times, each segment being an Impulse. Players may, by mutual agreement, use fewer than five Impulses, but never more.

[5.17] (addition) Begin line 6 "...combat unit, there is a sea assault, or Game-Turn 15, whichever comes first. See Case 1.13 for details..."

[5.39] (addition) Naval units may enter coastal hexes of Galata, even if they are transporting land units, but they may not land such units in Galata.

OTTOMAN UNITS (Front)

4 4 C Galley 4/7-10	4 4 C Galley 4/7-10	4 4 C Galley 4/7-10	4 4 C Galley 4/7-10	4 4 C Galley 4/7-10
3 3 B Trireme 5/8-12	3 3 B Trireme 5/8-12	3 3 B Trireme 5/8-12		
2 3 B Bireme 6/8-12	2 3 B Bireme 6/8-12	2 3 B Bireme 6/8-12	2 3 B Bireme 6/8-12	2 3 B Bireme 6/8-12
1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12
1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12	1 2 A Fustae 6/9-12		

OTTOMAN UNITS (Back)

2 2 C Galley 4/7-10	2 2 C Galley 4/7-10	2 2 C Galley 4/7-10	2 2 C Galley 4/7-10	2 2 C Galley 4/7-10
		2 2 B Trireme 5/8-10	2 2 B Trireme 5/8-10	2 2 B Trireme 5/8-10
1 2 B Bireme 6/8-12	1 2 B Bireme 6/8-12	1 2 B Bireme 6/8-12	1 2 B Bireme 6/8-12	1 2 B Bireme 6/8-12
1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12
		1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12	1 1 A Fustae 6/9-12

BYZANTINE UNITS (Front)

			5 0 D Crete 0/0-12	5 0 D Medtrn 0/0-12
8 0 D Genoa 0/0-12	7 0 D Genoa 0/0-12	7 0 D Venice 0/0-12	6 0 D Impri 0/0-12	6 0 D Impri 0/0-12

BYZANTINE UNITS (Back)

1 0 D Medtrn 0/0-12	1 0 D Crete 0/0-12			
1 0 D Impri 0/0-12	1 0 D Impri 0/0-12	2 0 D Venice 0/0-12	2 0 D Genoa 0/0-12	2 0 D Genoa 0/0-12

[6.12] (addition) Naval units do not exert a ZOC, nor are they affected by Land units' ZOCs.

[7.16] (addition at end of line 3) ...or get their navy into the Golden Horn and use it as a transport. They may embark on ships and assault the Seaward Walls.

[7.32] (addition in 2nd line, after "on land") This includes land units transported to the southern shore of the Golden Horn or landed by Naval Assault on the Seaward Walls. See 15.5.

[7.44] (addition at end of paragraph) Units that may retreat to Ottoman ships may do so, but Players must remember that only one unit may be transported per ship.

[8.26] (addition) Fire Combat does not affect naval units or land units being transported by naval units.

[10.16] (addition) Artillery units may not be transported by ship.

[11.41] (rewrite) On the Game-Turn after the Ottoman Player places at least five naval units in the Golden Horn at the same instant, he may assume that there is a bridge between Pera and the Blachernae Assault Area.

[13.0] THE NAVAL GAME

COMMENTARY:

The naval portion of *Constantinople* is somewhat unusual in that it runs independent of but (abstractly) concurrently with the land portion of the siege. By that, we mean that the naval game is ongoing, while the land game is divided into alternate periods of bombardment and assault. In the land game the combat units retire at the end of an assault period; in the naval game the ships remain in place until the next Naval Phase. Unlike the land game the Naval Phase is divided into five Impulses in which four Segments of the sequence of the Naval Phase is repeated five times (see Sequence of Play, Case 4.1). Thus there are five individual "turns" within one full Naval Phase, although by mutual agreement the Players may use less than five (e.g., if neither side wishes to move that Phase—"turn"). And while the naval game is somewhat independent of the land game it does affect the outcome of the siege simply because the city can be assaulted from the sea, and, furthermore, because possession of the Golden Horn is a key to victory. There are rules for eliminating the naval portion of the game for Players who wish to play a faster game. See Section 19.0 for details.

CASES:

[13.1] THE GENERAL COURSE OF THE NAVAL GAME

At the beginning of each Naval Phase the Players determine the Wind Speed and Direction (the Wind Direction at the beginning of the game is North — blowing North to South; its Speed is initially eight). Each Player then rolls a die; the high die goes first for that Impulse. Thus, a Player could move his units twice in a row, if the die-rolls so indicated. The first Player moves his vessels, followed by the second Player. There is no combat during Naval Movement, with the exception that Ramming takes place during Naval Movement. After both Players have completed Naval Movement there is a mutual Combat Phase, with combat taking place simultaneously. The entire sequence, from Initiative Determination to Combat Phase is then repeated four more times until five Impulses — five repetitions of the Sequence — have been completed, or the Players stop by mutual agreement. The vessels are left where they stand at the end of five Impulses and play proceeds to the land game.

[13.2] THE NAVAL UNITS

The counters for the naval units represent a wide variety of vessels, both sail and oar. They do not represent individual ships (while the Byzantines had only 30 or so galleys the Ottomans had up to 400 ships of all kinds!); rather they represent groupings of ships with ratings based on capabilities, training, and general seamanship. However, an attempt has been made within the game system to give the Naval Portion of the game a sort of tactical, ship-to-ship feel. Players should note that Ottoman Naval units have reduced strengths on their reverse side, much the same as land combat units. Byzantine ships' counters have a reverse side but it is *not* a reduced strength; it represents a reduced crew level when the sailors are removed for land duty (see Section 16.0).

[14.0] NAVAL MOVEMENT

GENERAL RULE:

Naval units may move either by sail or by oar. Some ships may move by both, switching between the two propulsion modes at the owning Player's discretion. In general, naval units move only through sea hexes. They pay a cost of one Movement Point (or two under certain circumstances) to enter any sea hex and they may pay a cost for maneuvering (turning), dependent on the form of propulsion. All Byzantine naval units are *galleys*; they are *all* sail-propelled. None are equipped with oars. The Ottoman Player has a polyglot collection of *galleys*, *triremes* and *biremes*, and the lighter vessels called *fustae*. The Ottomans use both sail and oar.

Numerically, the Byzantines were outnumbered by the Ottomans almost 15 to 1, but the seamen in the service of the Imperial Navy, the best of which were the Genoese and the Venetians, as well as the excellence of their huge galleys, more than made up the difference.

CASES:

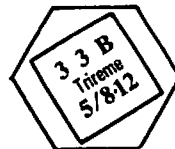
[14.1] OAR PROPULSION NAVAL MOVEMENT

[14.11] Those naval units with Oar Movement Allowances (see Sample Units, Case 3.21) are capable of moving by oar. Naval units move from one hex to another, in a manner similar to land units moving on land. However, naval units may enter only all-sea or partial-sea (coastal) hexes (see Case 15.53). They may never cross an all-land hexside (exception: see Case 17.1). Furthermore, each all-sea or partial-sea hex costs only one Movement Point to enter (exception: see Case 14.24).

[14.12] Naval units are always faced in a specific direction. The top of the counter must always face toward a specific hexside. It may never face — or point to — a junction of two hexsides.



Correct



Incorrect

[14.13] Naval units (oar or sail) must always move into the hex toward which they are facing. Oar-driven vessels may only change facing 60° — or one hexside — for each hex they move. Oar-driven vessels *must* move one hex *before* changing direction (one hexside). Thus for *each* 60° or hexside an oar-driven vessel wishes to change direction it

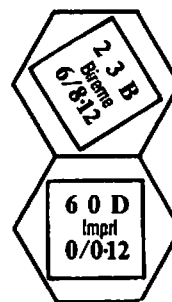
must move one hexside; e.g., to change three hexsides it must move three hexes, adjusting 60° for each new hex entered. An oar-driven vessel may change direction after using its last Movement Point. There is *no* cost to change facing (see Cases 14.26 and 15.1).

[14.14] There are *no* Zones of Control in Naval Movement or Combat; furthermore, naval units never affect land units and vice-versa, with the exception that no Friendly *land* unit may ever enter a hex with an Enemy naval unit — and vice versa (but see Case 14.15).

[14.15] A Friendly naval unit may move through an Enemy-occupied sea hex under certain conditions. For the Friendly unit to so move it must enter the hex through a hexside toward which either the bow or the stern of the Enemy unit is facing. It may not move through a hexside toward which an Enemy starboard or port side is facing. Furthermore, the Friendly unit may not remain in such hex and must leave through a hexside toward which an Enemy bow or stern is pointing (see Case 15.1).



Allowed



Not Allowed

[14.16] Oar-driven vessels have two speeds: Cruising Speed and Battle, or Ramming, Speed. Both speeds are maximums; the Player — as in land movement — is never required to use the full Movement Allowance when moving his vessels by oar. Normally a Player will use his Cruising Speed when moving his vessels, and he is thus limited to the maximum allowance at that speed. However, he may shift to Battle Speed at any time, within certain restrictions (see Case 14.17), and thus increase his speed. Battle Speed is voluntary with the exception that the vessel *must* be in Battle Speed when Ramming.

[14.17] An oar-driven vessel may not use Battle Speed two Movement Segments in a row. Furthermore, a vessel using Battle Speed has a Cruising Speed of *one* in the Segment after the use of Battle Speed — even if that Segment is in the next Game-Turn!

[14.18] Certain Ottoman vessels have the use of both oar and sail. These vessels may change mode of propulsion in any Movement Segment. To change from oar to sail the vessel may move no more than *one* hex (in oar mode) that Segment. The *next* Segment the vessel is considered to be using sail and moves under the rules for sail propulsion with an initial Sail Speed of *one*. To change from sail to oar the ship may not have moved more than three hexes in the previous Movement Segment.

[14.19] Only one naval vessel is permitted per hex, with the exception *during* movement of Case 14.15. Furthermore, Ottoman naval units may anchor at the Double Columns, hex 3931, by placing as many Ottoman naval units as the Ottoman Player wishes in that one hex. Such units at anchor may never be attacked.

[14.2] SAIL NAVAL MOVEMENT

All movement under sail encounters two particular problems: *momentum*, which, in general, means

that sail-driven ships tend to keep moving at the rate of the wind; and *Wind Direction*, which can dictate the speed and maneuverability of a vessel.

[14.21] Each naval unit using sail has a given movement capability for that Impulse. This is the number of Movement Points it *must* expend during that Impulse. Acceleration and Deceleration (see Case 14.22) may change this capability, but the capability for that Impulse *must* be used in its entirety. Movement capability is usually dictated by Wind Direction and Velocity. Ships entering the game at sea (using sail movement) enter the map with a movement capability equivalent to the Wind Velocity for that Game-Turn. Ships starting from "anchor" (thus with a zero Movement Capability) obey the rules for Acceleration.

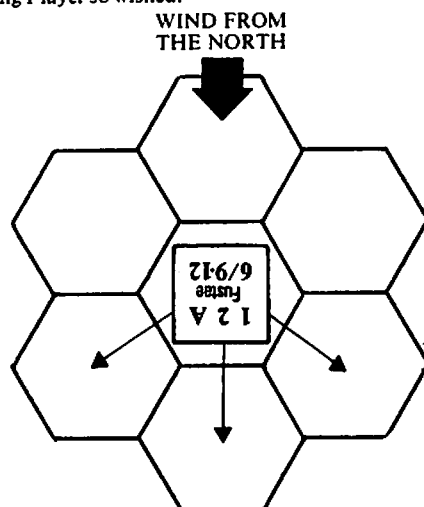
[14.22] A Player may elect to increase or decrease the Movement Capability of his sail vessels (Accelerate or Decelerate). A sail vessel may never Accelerate more than one Movement Point (Capability) per Impulse; it may never Accelerate to a higher Movement Capability than the current Wind Velocity. A sail ship may Decelerate a maximum of two Movement Capability Points per Impulse, regardless of any change in Wind Velocity. A ship that is successfully Rammed (see Case 15.1) has its Movement Capability reduced to zero. If the wind velocity *falls* and the ship Sail Speed is *higher* than the *new* velocity the ship *must* reduce speed, at a maximum deceleration of two points per Impulse. Thus, it is possible for a ship to be moving faster than the wind, although it will eventually slow down. It is not required that a ship increase speed as the wind increases; acceleration is always voluntary.

[14.23] At the beginning of each Naval Phase (*not* each Impulse within the Naval Phase) the Players determine the Wind Direction and Velocity for that entire Naval Phase. To do so a Player rolls two dice and refers to the Direction portion of the Table (14.31). He then rolls two more dice and refers to the Velocity portion of the Wind Tables (14.32). This rolls of *nine* and *seven*, respectively, will produce a Northeasterly wind (i.e., a wind blowing *from* Northeast to Southwest) at a Velocity of *eight*. Players may note Direction and Velocity by placing an appropriate marker on the game-map in the Wind Direction hex (printed on the map) with the arrow pointing in the direction toward which the wind is blowing (in the above example, the counter would be placed with the arrow pointing toward the *Southwest* hex). The game begins with a Northern wind (blowing North to South) at a Velocity of *eight*.

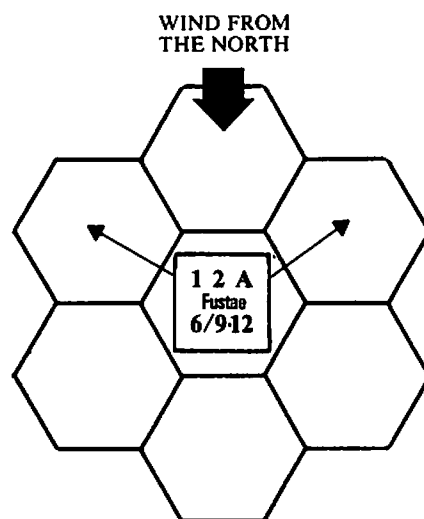
[14.24] According to the facing of the vessel (see below) the wind may be blowing from the stern of the ship (called Running Free) or toward the bow of the ship (Sailing on the Wind). No vessel may ever sail directly into the wind; i.e., a sail ship may not move into a hex in a northerly direction if there is a Northerly wind (blowing from North to South). Furthermore, each hex that a sail ship enters that is "Sailing on the Wind" (wind blowing on the bow of the ship) costs *two* Movement Points. If the Movement Capability remaining to a ship Sailing on the Wind is one it *must* use the remaining Movement Point by *turning* 120° at a cost of one Movement Point (see Case 14.25).

[14.25] Sail ships move through sea hexes in the same fashion as oar-driven vessels (with the exception noted in Case 14.24). However, for sail vessels the ship counter realignment is different from oar vessels (see Case 14.13). A sail vessel may turn one hexside (60°) for each hex that it enters without paying any Movement Points; it may change *two* hexsides (120°) for each hex entered by paying a cost of one Movement Point for its Capability. Sail ships may never change facing more than two

hexsides in a single hex; they must advance at least one hex further before making another turn. When a sail vessel changes facing by two hexes (120°), it may *not* change facing past a hexside through which the ship would be sailing directly at the wind. **Example:** Wind Direction is North (North to South). A sail vessel in hex 1539 is facing toward hex 1639 (Sailing on the Wind). The sail vessel could *not* turn two hexes (120°) to face toward hex 1638 (which would face the sail vessel in the opposite direction of the wind) before it could face toward hex 1538. The sail vessel could, however, turn to face hex 1439, if the owning Player so wished.



Running Free



Sailing on the Wind

[14.26] A ship (sail or oar) that is not moving may still turn one hexside, unless it has been Rammed and pinned. Ships that are not moving always *drift* one hex in the same direction toward which the wind is blowing. If there is no wind, ships drift from North to South.

[14.27] A sail ship which enters a coastal hex in such a way that it may not turn and leave that coastal hex is considered to have *Run Aground*. The ship counter — and any passengers — is eliminated. If a sail ship is forced to attempt to cross a Boom hexside (see Case 15.6) because of its momentum, etc., it stops in the hex adjacent to the Boom hexside and is considered Damaged for the remainder of the game (see Case 15.34). It does not move through the Boom hexside. For the next Impulse, the sail ship's Movement Capability is considered *zero*, and it obeys the rules for Acceleration

(see Case 14.22). A sail or oar vessel that leaves the map — for whatever reason — is treated exactly as a sail vessel that has Run Aground.

[14.28] Sail ships (and oar ships using Sail Movement) are not capable of Ramming.

[14.29] In the event that the Wind Velocity is *Storm*, all ships (sail or oar) in the Golden Horn or at anchor (i.e., in a coastal hex with a "0" movement rate) may *not* move that Game-Turn. For ships at sea (in the Sea of Marmora) the owning Player rolls a die for each ship unit. If the owning Player rolls a six for a given ship unit that unit is eliminated, along with any passengers. For all other numbers (i.e., 1 through 5), the Ottoman Player returns his ships to the Double Columns (hex 3931); the Byzantine Player places his ships in either the Harbor of Eleutheris (hexes 1823, 1924, etc.), hex 2129, hex 2130 or hex 2234. There is no other movement that Game-Turn. Ships that are pinned from Ramming are automatically sunk.

[14.3] WIND TABLES

[14.31] Wind Direction Table
(see page 22)

[14.32] Wind Velocity Table
(see page 22)

[15.0] NAVAL COMBAT

COMMENTARY:

The fifteenth century was a great watershed for naval combat. The advent of sailing vessels of ocean-going capability along with the development of gunpowder and artillery was to change naval warfare forever. Yet, in the Mediterranean, the galley was still Queen of the Sea. The main method of destroying the enemy at sea was boarding. Catapults and Greek Fire were also used, and ramming was still in fashion (but to a much more limited extent than in Greco-Roman days). But hand-to-hand combat was still the staple of the navy and the rules for naval combat, given the scale of the game, reflect this.

CASES:

[15.1] RAMMING

The object of Ramming, primarily, is to pin the opposing vessel so that it may not move making it an easy target for boarding parties. There is a possibility that Ramming will sink an opposing vessel; Ramming can also damage the Ramming ship. Only oar-driven vessels may Ram.

[15.11] For an oar-driven vessel to Ram, it *must* be using Battle Speed and it *must* start the Ram attempt at least *three* hexes from the intended target.

[15.12] Vessels attempting to Ram an opposing vessel may make no more than one 60° (one hexside) turn during the entire course of its Ram attempt, and such turn must be at least two hexes distant from the target hex.

[15.13] In order to Ram an opposing vessel the moving vessel must move into a hex adjacent to the target vessel. That adjacent hex must be either to the port or starboard (the sides) of the target vessel. One cannot Ram a target vessel from the bow or stern (front or rear). Furthermore, the bow of the *Ramming* vessel must point directly toward the side of the target ship (envision Ramming literally and you'll get the idea). Ramming is performed in a Movement Segment; it is not considered combat, per se.

[15.14] Once the precepts of Case 15.13 have been satisfied and the Phasing Player has announced that he is making a Ram attempt, he checks his Ramming vessel's Ram Strength against the Ram

Defense Strength of the target vessel. He cross-references these on the Ramming Table (15.42). The result is the number that the Phasing Player must roll on a die for the Ram to succeed. If the Ram does not succeed the Movement Segment is ended for the Ramming vessel in the hex adjacent to the target vessel. Such vessel may *not* engage in boarding and melee (as he is faced in the wrong direction; see Case 15.22).

[15.15] If the Ram attempt is successful the two ships are considered "engaged," both dead in the water (see drifting, Case 14.27). However, under certain circumstances the target ship may be sunk and/or the Ramming ship Damaged. Consult the Ramming Table (15.42).

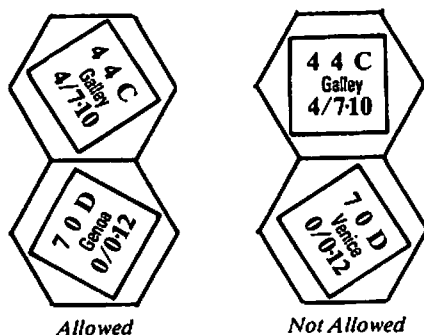
[15.16] Once Rammed both ships may attempt to free themselves, if so desired. At the beginning of a Movement Segment the Player with the Rammed ship rolls a die; if he rolls a 1, the ship breaks free but is considered Damaged. It may then move. Otherwise, it is still engaged. If the Player with the Ramming ship desires to free the Ramming ship, he rolls a die. If he rolls a 1, 2, or 3, he breaks free with no damage; otherwise, the ships remain engaged.

[15.2] NAVAL MELEE COMBAT

Naval Melee Combat represents all close, ship-to-ship actions, including short-range catapults, Greek Fire, and, of course, boarding.

[15.21] Naval Melee Combat takes place in the Mutual Combat Segment of the Naval Phase. Only Friendly vessels *adjacent* to Enemy vessels may engage in melee. There are no Zones of Control at sea, and combat is purely voluntary. Melee is simultaneous; i.e., the Friendly vessel is attacking the Enemy vessel and vice-versa at the same time.

[15.22] To engage in naval combat ships must be adjacent to each other. Moreover, *both* of these counters must either be engaged (15.15) or adjacent through a port or starboard facing hexside. If both ships are not so situated the melee combat is impossible.



[15.23] Combat is voluntary. To determine the results of combat the attacker adds the Melee strengths of all his attacking units and subtracts the Melee strength of the defending unit. The result is the Combat Differential.

Example: two ships with a strength of 4 each attack a ship with a strength of 5. The differential would be +3. If the ship with the Melee Strength of 5 attacked one of the ships with a melee strength of 4 (see Case 15.24) — remember, melee is simultaneous — the differential would be +1.

[15.24] As many as *four* Friendly ships may attack an Enemy vessel. Four is the maximum because of the restrictions in Case 15.22. If a Friendly ship is adjacent to *more* than one Enemy ship it must either attack all of them or none of them (simultaneously with the Enemy attack, of course). To do this it may split its melee strength in any way it sees fit. When splitting, the lowest

voluntary differential is -3. However, if a ship is adjacent to more enemy ships than it has melee points it must attack the strongest ship(s) at 0 and the rest at 1 or not attack at all. When one Friendly ship is adjacent to a sole Enemy ship it always uses its maximum strength.

Example: A Byzantine Galley with a melee strength of 8 is adjacent to, and capable of melee with, three Ottoman ships with melee strengths of 5, 3, and 2. The Ottoman attacks the Byzantine at +2. Simultaneously, the Byzantine uses two points to attack the 5 at -3, one point to attack the 3 at -2, and the remaining five points to attack the 2 at +3. Remember, when splitting strength the lowest differential you may voluntarily attack at is -3.

[15.25] Combat is mutual and simultaneous; both Players engage in melee at the same time. Losses are taken only after both Players resolve their individual battles. Thus a ship Damaged by Player A's die-roll may still fight at its normal strength in the same Combat Segment that it was Damaged. All Melee Combat Results are applied after *both* Players have finished their attacks.

[15.26] Leaders have no effect on Naval Combat, with the following exception. Any Byzantine naval unit commanded by either *Diedo* or *Trvisano* (stacked with the ship counter) adds one to the ship's Melee Strength for *defensive* purposes only.

[15.3] EXPLANATION OF COMBAT RESULTS

[15.31] All Melee Combat takes place using the Naval Melee CRT (15.41). The attacker determines his total strength and subtracts that of the defender in order to obtain a Combat Differential (see Case 15.24). He then rolls a die and refers to the Naval Melee CRT to obtain a result, if any, of that battle. Remember, because of simultaneous combat, the roles of attacker and defender will often be reversed.

[15.32] *No Effect* means that nothing has happened in the way of casualties.

[15.33] *Ineffective* means that the ship unit suffering such result is halved in movement (rounding down) for the next Movement Segment. It may not attack/melee in the next Mutual Combat Segment, it may defend.

[15.34] *Damaged* means that the affected ship unit is *permanently* halved in Movement Allowance (or maximum Movement Capability for sail ships). In addition the Damaged ship's Ramming defensive strength is permanently halved (but not its Ramming Capability). Melee is not affected.

[15.35] *Lose One* means that, for Byzantine ship counters, the unit is eliminated. For Ottoman ship units it means that the naval unit is flipped over to its reduced strength level, unless said naval unit is already at reduced strength level, in which case the Ottoman naval unit is eliminated. The Ottoman Player should note that a Damaged ship that is flipped over retains its Damaged status.

[15.4] NAVAL COMBAT TABLES

[15.41] Naval Melee Combat Results Table (see page 23)

[15.42] Ramming Table (see page 23)

[15.5] NAVAL ASSAULTS

The Ottoman Player may use his ships to carry land combat units in an attempt to assault the seaward Walls of the city — those Walls his land army cannot reach by normal means.

[15.51] The Ottoman Player may transport land units on his ships. He may transport one land combat unit for each full strength naval unit; naval

units not at full strength may *never* transport land units. Land units may be embarked in coastal hexes. To pick up a land unit, a naval unit spends one full Naval Movement Segment (of an Impulse) in the same coastal hex as the Friendly combat unit. In the next Segment the naval unit plus the land unit may move on.

[15.52] Ships carrying land combat units are not *affected in terms of movement or naval combat*.

[15.53] There are certain coastal hexes along the eastern and southern shores of the city that have numbers in them. These numbers represent the difficult currents in the Sea of Marmora and the dangerous reefs and rocks along the city Walls. For any ship (Ottoman or Byzantine) to safely enter one of these hexes the owning Player must roll a number *higher* than the number listed in the hex. If the owning Player throws a number equal to or lower than the number in the hex the ship counter (and any land unit on the ship counter) is eliminated. **Exception:** Byzantine units (only) moving into any of the hexes listed in Case 14.29 *do not* have to roll for possible elimination.

[15.54] Naval units may debark land units in *any* coastal hex with two exceptions: (a) land units may not debark in a hex which they must cross a Wall hexside to reach (see Cases 15.55 and 15.56); and (b) land units may not debark in Galata. Remember that stacking rules prohibit more than one land combat unit in a hex (though there is no limit to the number of Leaders).

[15.55] Ottoman land combat units and Leaders placed in coastal hexes may not move or attack until an *Assault* Phase. (Siege Towers may *never* be transported by sea, as is the case with all Ottoman artillery.) Regardless of the configuration of the hex and the Wall, such units are considered to be outside the city until they can move across the Wall in an Assault Phase. Ottoman combat units in hexes such as 2028 where the Wall runs along the edge of the geographical city are considered to be ships waiting to climb the Walls. Such land units are *considered* to be — for combat and assault purposes — in an unfilled Foss hex. Combat units landing in a clear hex (e.g., hex 1521) treat that hex as normal clear terrain. Remember, it costs three *additional* Movement Points to cross an Outer (or seaward) Wall.

[15.56] Land units (on ships) in sea hexes adjacent to Walls that run along the edge of the city (e.g., hex 2028) may not move into any hex except across a Wall hexside into a city hex. They may not move laterally along the Wall (outside the city). They may, of course, move out to sea again.

[15.57] The previous two rules (Cases 15.55 and 15.56) must be interpreted in the light of the laws of nature and common sense. Most of the seaward Walls were literally built up from the sea, and Players should remember this when interpreting the rules.

[15.58] Ottoman units assaulting Seaward Walls that receive an R result are eliminated, unless there is a ship available for them to retire to *or* they are three hexes from the Inner Wall and may trace a line of hexes exclusive of enemy units or ZOCs (for this purpose friendly units negate enemy ZOCs) though normally passable terrain to any hex outside the city. Furthermore, if they are to use a ship for retreat, such ship must be within three hexes of the retreating unit and must not contain another combat unit.

[15.59] Ottoman units that gain entry to the city by Sea Assault count as *only* one point each for Victory purposes, regardless of their actual attack strength. Furthermore, such units must be able to trace a line of hexes as per Case 15.58 for them to be counted for victory (although they may be more

than three hexes from the walls for this purpose). In addition, if at the end of the last Impulse victory has not been achieved, Ottoman units making sea assaults may be removed only if they satisfy Case 15.58; otherwise they are eliminated.

[15.6] THE BOOM

A huge "boom," from Galata to the Acropolis, effectively hindered entrance into the Golden Horn and greatly aided any galleys defending behind it. Ottoman ships wishing to enter the Golden Horn must try to force the Boom (which is represented by the "wall" hexsides running from hex 3429 to hex 3334). The two smaller booms on the southern portion of Constantinople are permanent and unforceable. Only Byzantine ships may cross such hexsides.

[15.61] At the beginning of the game the Byzantine Player controls the Boom. To control the Boom a Player must be the last Player to occupy hexes 3430, 3429 and 3330. (Note that as the Byzantine Player already controls the Boom he does not have to satisfy any of the requirements, unless the Ottoman Player gains control of the Boom.) Passage through the Boom — unless it is broken — is through hexes 3430 and 3429 *only*. Only the Player who controls the Boom may make such passage.

[15.62] Ships may not Ram through a Boom hexside.

[15.63] Ships that are melee attacked through a Boom hexside add one to their defensive melee strength, but not to their offensive melee strength.

[15.64] The Boom may be broken or set on fire. To do this a Friendly ship must spend one full Movement Segment adjacent to a Boom hexside which, in turn, is not adjacent to any Enemy ship. At the end of the Movement Segment the Boom is considered destroyed and the entire Boom is no longer in existence.

[15.65] Ships adjacent to the Boom are not subject to drift rules. They may remain in such hex without moving.

[15.7] ARTILLERY BOMBARDMENT OF SHIPS

[15.71] Only the Ottoman Player may Bombard ships. Only ships in the Golden Horn may be Bombarded.

[15.72] For each Gun Strength Point that the Ottoman Player has in Pera, he may Bombard one Byzantine ship. He Bombards ships in his Bombardment Phase only. He may not Bombard ships in a Naval Phase or an Assault Phase. Guns used to Bombard ships may not be used to Bombard the Walls in the same turn that they Bombard the ships.

[15.73] To Bombard, the Ottoman Player rolls two dice. If he rolls a 2 or a 12, the target ship is sunk. If he rolls an 11, the target ship is Damaged.

[16.0] SAILORS

GENERAL RULE:

The Byzantine Player has the capability of stripping the crews from his galleys to add extra men to his land forces. In doing so he will correspondingly reduce the melee effectiveness of his galleys. To assign crews to "shore duty" simply start a Plan-

ning Phase/Byzantine Strategic Movement Segment with the chosen galley counter in any coastal hex on the Southern shore of the Golden Horn. During the Strategic Movement Segment, the galley is flipped over (to reveal its reduced strength) and a Sailor counter is placed in the same hex. The Sailor counter may not move in the Strategic Movement Segment that it disembarks but may move in any succeeding Movement Segment. To restore the sailors to the ship simply reverse the process. The two naval Leaders, *Diedo* and *Trevisano*, may be assigned to land duty, one for each two sailor combat units. Players should note that the reverse side of the Byzantine ships are for stripping the crews *only*; they do not represent lost effectiveness due to combat, as in Cases 13.2 and 15.35. Byzantine Sailor units are treated *exactly* as normal Byzantine land combat units.

[17.0] THE GREAT PORTAGE

COMMENTARY:

When Mehmet found that he could not break through the Byzantine naval defenses at the Boom (see Case 15.6) he realized that he had to find some way to contest the Byzantine control of the Golden Horn. Otherwise he was virtually restricted to a land assault from one direction. Therefore, on April 23, having failed twice at the Boom, he literally *carried* a portion of his fleet overland (from right behind Galata to approximately hex 3624)! By the next evening the Byzantine fleet no longer was in some command of the Golden Horn. The rules below attempt to recreate this highly unusual feat.

CASES:

[17.1] WHEN THE OTTOMANS MAY PORTAGE

The Ottoman Player may not attempt to Portage (transport over land) his ships until *one* of the following two requirements are met:

1. The Ottoman Player has spent at least two successive Naval Combat Segments assaulting the Boom in an effort to get through. On these two successive Segments the Ottoman Player must use at least three ship units to attack. However, the Ottoman Player may never attempt Portage before Game-Turn Six; *or*
2. Game-Turn Twenty. The Ottoman Player may *attempt* to Portage automatically starting with Game-Turn Twenty, regardless of whether or not the first requirement has been met.

[17.2] HOW PORTAGE OCCURS

[17.21] Once the Ottoman Player has satisfied the requirements of Case 17.1, he may attempt to Portage certain of his ships. The Ottoman Player may Portage only triremes, biremes or fustae. He may not Portage any of his galleys. He may Portage as many triremes, biremes and/or fustae as he wishes.

[17.22] Starting with the Planning Phase after Case 17.1 has been satisfied, the Ottoman Player rolls a die. He adds to this die-roll the Assault Capability Number on the Turn Record Track for the Game-Turn he is rolling in (see Case 7.21). If the total (die-roll plus Capability Number) equals five or more then the Ottoman Player simply places the ships he wishes to move in any Pera coastal hex within five hexes of 3623 (Remember, Ottoman ships may not be placed in Galata coastal hexes).

[17.23] Ships to be Portaged must start the Planning Phase in any Pera coastal hex in the Bosphorus.

[17.24] Portaged ships may move the Game-Turn *after* they have been Portaged across Pera.

Players should ignore Section 13.0 as now printed in the rules book. Also, Section 14 (in rules) now becomes Section 18.0. Section 19.0 (formerly Section 15.0) now covers the scenarios, of which there are three: The Campaign Game, the Land Game, and the Assault Game.

[19.1] (*change*) This Case is now The Campaign Game. It takes about six or so hours to play. Additions to Deployment:

1. All Byzantine Naval Units, except the Genoese 8-0-D Galley, are placed in any hex in the Golden Horn. The Genoese 8-0-D Galley arrives in any all-sea hex along the southern edge of the game-map on any turn the wind is favorable, starting with Game-Turn *Four*. It may not arrive before then; it may delay its arrival awaiting a favorable wind, etc. It may arrive at any time during a Naval Phase.
2. All Ottoman naval units arrive Game-Turn One along the south edge of the game-map, in any all-sea hex, in oar mode.

[19.2] The Land Game (*addition*) Byzantine Sailors may enter the game one unit per Game-Turn, beginning with Game-Turn *Twelve*. Sailor units enter in the Byzantine Strategic Movement Segment. The Leaders *Diedo* and *Trevisano* may enter the game with any of these units (Byzantine Player's choice). Sailors entering the game are placed in any land hex within two hexes of the Golden Horn and *east* (i.e., behind) of the Inner Walls. Note that Sailor units are treated exactly as units in reserve (see Case 15.13). Remember, the Land Game is now the original 15.1.

[19.3] (*addition*) This case is now the Assault Game. This corresponds to 15.2 in the original rules. There are no naval units in the Assault Game.

NAVAL RULES TABLES

[14.3] WIND TABLES

[14.31] WIND DIRECTION

DIE	Direction (from)
2	SE
3	SW
4	S
5	NW
6	NW
7	N
8	N
9	NE
10	NE
11	S
12	SW

[14.32] WIND VELOCITY

DIE	Velocity
2	Storm
3	9
4	2
5	10
6	7
7	8
8	6
9	12
10	4
11	No Wind
12	11

[15.41] NAVAL MELEE COMBAT RESULTS TABLE (Boarding)

Combat Differential
(Attacker minus Defender)

DIE	-3	-2	-1	0	1	2	3	4
1	-	-	-	-	-	-	I	I
2	-	-	-	-	-	I	D	D
3	-	-	-	-	I	I	D	D
4	-	-	-	I	I	D	D	L
5	-	-	I	D	D	D	L	L
6	-	I	D	D	D	L	L	L

Explanation:

- = No effect; I = Ineffective: for the next Impulse, the ship's Movement Allowance is halved, and the ship may not melee attack, only defend; D = Ship permanently damaged: ship's Movement Allowance is halved, as are its Ram and Melee Strengths; L = Lose 1: for Byzantine ships, the affected ship is eliminated. An Ottoman ship loses one step (i.e., it is flipped over to the reduced side unless the ship is already on its reduced side, in which case the Ottoman ship is eliminated). Differentials less than -3 (greater than +4) are treated as -3 (+4).

[15.42] RAMMING TABLE

Ram Defense: Non-Phasing Ship	Ram Strength of Attacking (Moving) Ship			
	1	2	3	4
A	1-2	1-3*	1-4*	1-5*
B	1	1-2	1-3*	1-4*
C	1	1	1-2	1-3*
D	-	1	1-2	1-2

Explanation:

= Die Roll Needed to Pin Defending Ship;
* = Roll again; if a 5 or 6 is rolled, the defending ship is sunk; - = No Effect. The Defending ship may not be pinned.

If a 6 is rolled at any time, the Ramming ship is considered Damaged (Movement Allowance halved, Ram and Melee Strengths halved).

CONSTANTINOPLE COUNTERS (FRONT)

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Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1
European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2

Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	Basibazuks ☒ 3-1-1	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2
European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	European ☒ 3-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2

OTTOMANS

Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 1 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2
Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4

Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Anatolian 2 ☒ 4-3-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2	Pera ☒ 3-2-2
Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Janissary ☒ 5-4-4	Zaganos Pasha ☒ 1-1-2

Karadja Pasha 3-3-2	Ishak Pasha 2-1-0	Mahmud Pasha 1-2-2	Sultan Mehmet II 2-2-3	Siege Tower ☒	Siege Tower ☒	Siege Tower ☒	Siege Tower ☒	Siege Tower ☒	Gun ☒
Gun ☒	Gun ☒	Gun ☒	Gun ☒	Cannon ☒	Cannon ☒	Urban Bombard ☒	Assault Capability ☒	Assault Capability ☒	Assault Capability ☒

Gun 	Gun 	Gun 	Gun 	Cnstntine XI 1-1-3	Giovanni Gustniani 2-3-3	Bochiardi Brothers 1-1-2	Minotto 1-1-1	Caristo 1-1-1	Archbshp Leonard 1-2-2
Assault Capability 	Assault Capability 	Assault Capability 	Cattaneo 1-1-1	Theophs Palolus 1-2-1	Filippo Contarini 2-2-2	Manuel 1-1-1	Dmetrius Cntczmus 1-2-2	Jacobo Contarini 2-2-2	Orhan 2-1-1

↑ 1	↑ 1	↑ 1	↑ 2	↑ 2	↑ 2	↑ 3	↑ 3	Pere Julia 1-1-2	Cardinal Isadore 2-2-2
↑ 3	↑ 4	↑ 4	↑ 4	↑ 5	↑ 5	↑ 5	↑ 6 Breached	Greek ☒ 2-2-3	Genoese ☒ 2-2-3

MARKERS

↑ 6 Breached	↑ 6 Breached	↑ 7 Breached	↑ 7 Breached	↑ 7 Breached	↑ 8 Breached	↑ 8 Breached	↑ 8 Breached	Greek ☒ 3-2-2	Venetian ☒ 1-3-4
↑ 9 Breached	↑ 9 Breached	↑ 9 Breached	↑ 10 Breached	↑ 10 Breached	↑ 10 Breached	Impulse	Game Turn	Greek ☒ 1-1-2	Greek ☒ 1-3-1

Megadux Notaras 1-1-1	Nicphrus Palolus 1-1-1	Diedo 2-2-2	Trevsano 1-2-2	Johannes Grant ☒	Greek ☒ 3-4-4	Genoese ☒ 3-5-4	Chios/Rds 2-3-3	Italian ☒ 2-3-3	Greek ☒ 2-3-3
Genoese ☒ 1-3-3	Genoese ☒ 1-3-3	Genoese ☒ 1-3-3	Greek ☒ 1-2-3	Greek ☒ 1-2-3	Greek ☒ 1-2-3	Venetian ☒ 2-4-3	Venetian ☒ 1-4-3	Venetian ☒ 1-4-3	Greek ☒ 2-2-3

BYZANTINES

Venetian ☒ 1-4-4	Monks 1-2-2	Monks 1-2-2	Turks ☒ 2-3-2	Turks ☒ 2-3-2	Turks ☒ 2-3-2	Catalans 3-3-4	Papal 2-4-5	Greek ☒ 1-2-3	Greek ☒ 1-2-3
Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Sailor ☒ 2-2-2	Catapult ☒	Catapult ☒	Catapult ☒

Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective		
Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled
Ineffective	Filled	Filled	Filled	Filled	Filled	Filled	Filled
Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective

Greek ⊗ 1-1-1	Greek ⊗ 1-1-1
Greek ⊗ 2-1-1	Venetian ⊗ 1-2-2
Greek ⊗ 1-1-2	Genoese ⊗ 1-2-1

Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1	Sailor ⊗ 1-1-1				
Venetian ⊗ 1-2-2	Monks ⊗ 1-1-1	Monks ⊗ 1-1-1	Turks ⊗ 1-1-1	Turks ⊗ 1-1-1	Turks ⊗ 1-1-1	Catalans ⊗ 1-2-2	Papal ⊗ 1-3-3	Greek ⊗ 1-1-2	Greek ⊗ 1-1-2	
Genoese ⊗ 1-1-2	Genoese ⊗ 1-1-2	Genoese ⊗ 1-1-2	Greek ⊗ 1-1-2	Greek ⊗ 1-1-2	Greek ⊗ 1-1-2	Venetian ⊗ 1-3-2	Venetian ⊗ 1-2-2	Venetian ⊗ 1-2-2	Greek ⊗ 1-2-2	
					Greek ⊗ 2-4-4	Genoese ⊗ 2-4-3	Chios/Rds ⊗ 1-2-1	Italian ⊗ 1-2-2	Greek ⊗ 1-2-2	

							2	11	13

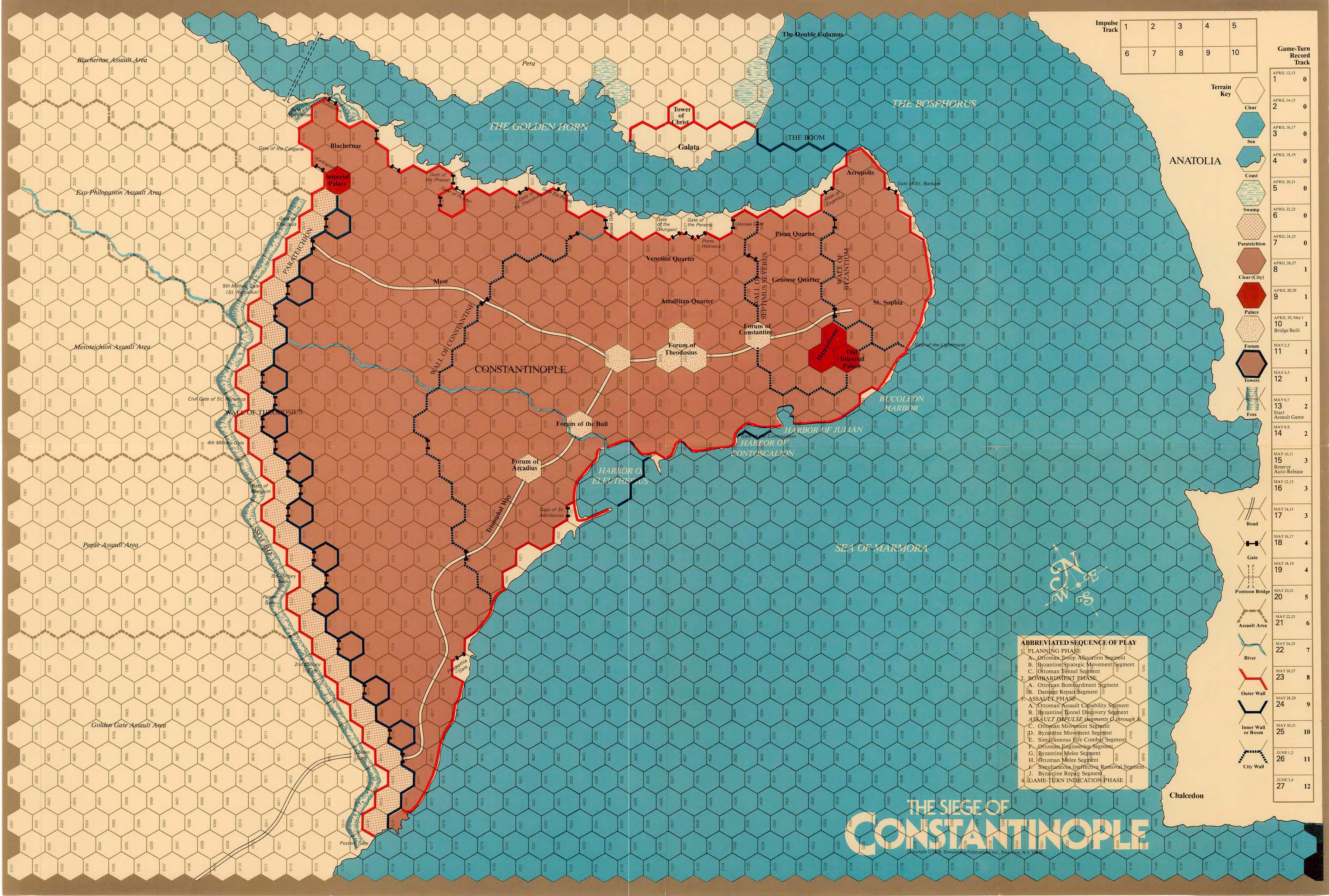
							15	17	20

Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4
Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2

Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Janissary ⊗ 3-3-4	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1	Pera ⊗ 2-1-1
Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2	Anatolian 2 ⊗ 2-2-2			

European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1
Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1

European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2	Anatolian 1 ⊗ 2-2-2
Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	Basibazuks ⊗ 1-1-1	European ⊗ 2-2-1	European ⊗ 2-2-1	European ⊗ 2-2-1



Impulse Track	1	2	3	4	5
	6	7	8	9	10

Game-Turn Record Track		
1	0	
2	0	
3	0	
4	0	
5	0	
6	0	
7	0	
8	1	
9	1	
10	1	
11	1	
12	1	
13	2	
14	2	
15	3	
16	3	
17	3	
18	4	
19	4	
20	5	
21	6	
22	7	
23	8	
24	9	
25	10	
26	11	
27	12	

- Terrain Key**
- Clear
 - Sea
 - Coast
 - Swamp
 - Parateichion
 - Clear (City)
 - Palace
 - Forum
 - Towers
 - Foss
 - Road
 - Gate
 - Pontoon Bridge
 - Assault Area
 - River
 - Outer Wall
 - Inner Wall or Boom
 - City Wall

ABBREVIATED SEQUENCE OF PLAY

1. PLANNING PHASE

- A. Ottoman Troop Allocation Segment
- B. Byzantine Strategic Movement Segment
- C. Ottoman Tunnel Segment

2. BOMBARDMENT PHASE

- A. Ottoman Bombardment Segment
- B. Damage Repair Segment

3. ASSAULT PHASE

- A. Ottoman Assault Capability Segment
- B. Byzantine Tunnel Discovery Segment
- C. Ottoman Movement Segment
- D. Byzantine Movement Segment
- E. Simultaneous Fire Combat Segment
- F. Ottoman Engineering Segment
- G. Byzantine Melee Segment
- H. Ottoman Melee Segment
- I. Simultaneous Ineffective Removal Segment
- J. Byzantine Repair Segment

4. GAME-TURN INDICATION PHASE

THE SIEGE OF CONSTANTINOPLE

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