

HEAVY WEAPONS FOR TRIREMES

Arms Race in the Mediterranean, 300 BC

By Ralph Slesinski

Those who have played *TRIEME* and read the lead article in the April 1981 issue of *Scientific American* have been presented with a delightful challenge. The article, entitled "Ancient Oared Warships" (Foley and Soedel), is fascinating reading, loaded with archeological information on the evolution of early battle vessels. The inspiration for the variant rules below, however, lies in the authors' examination of the trend toward larger, slower ships after the time of Alexander the Great.

To summarize briefly, the authors postulate that war galleys became heavier and slower after 300 BC due to the introduction of heavy catapults onboard. They hold that ship-to-ship catapult fire was particularly effective when used in the defensive mode against oncoming ships which intended to ram. Such attacking ships presented attractive targets, for their course and speed were fairly steady could be anticipated. Therefore, the popular ramming tactics of the Greeks gave way to the infantry-style boarding tactics perfected by the Romans. Warships no longer needed to be light and fast, but heavier and stable to improve catapult fire and to hold more marines for the hand-to-hand combat (now intended to eliminate the enemy's "fire-power").

Typically, a battle between a light, ram-fitted trireme and a cataphract octares carrying heavy catapults would have occurred in this manner during the transition: the trireme, being much more maneuverable) jockeyed around the octares until, being in position, it goes to full-speed to ram broadside. On the octares, the catapult crews have been watching the activities of the trireme and its commander has been making his mental calculations. They bring the catapult(s) to bear on the onrushing trireme and wait for it to commit itself to the ram course. Once certain of the course of the trireme, the commander barks his orders and the crew looses the missiles which are between the ships and fall among the trireme's top portside rowers. One crashes through to the bottom row. The starboard rowers continue pulling for a few more strokes, but are then ordered to hold until the portside crews can recover. Meanwhile the octare moved to close with the trireme. Should the smaller ship's crew not be able to return to a normal stroke, the octares' marines will overwhelm her, wreaking havoc among the lightly armed oarsmen.

The authors give as the basis for this scenario the existence of a ship-board catapult constructed by Archimedes (287-212 BC) which could hurl stones weighing 78.5 kilos and darts some 5.5 meters long. They further note that Julius Caesar wrote of iron-tipped darts extant since 500 BC which were capable of penetrating a foot of solid oak. And, most to the point, in 332 BC Alexander mounted catapults on ships during his siege of Tyre. These catapults used the superior elastic force of sinew ropes for the first time. To learn more on the effectiveness of these weapons, I'd urge anyone interested to check out this article.

I've always been rather disappointed in *TRIEME*'s system for catapult fire. It functions as an arm of the boarding battle, and has no inherent ship-killing capacity at all (except where flame missiles are used). What a revelation to find a strong argument for the existence of devastating heavy artillery onboard the warships of antiquity. I will stress that the authors believed oncoming ships presented better targets. This point is essential to the variant rules

that follow. Here, then, is my adaptation for heavy catapult fire in *TRIEME*.

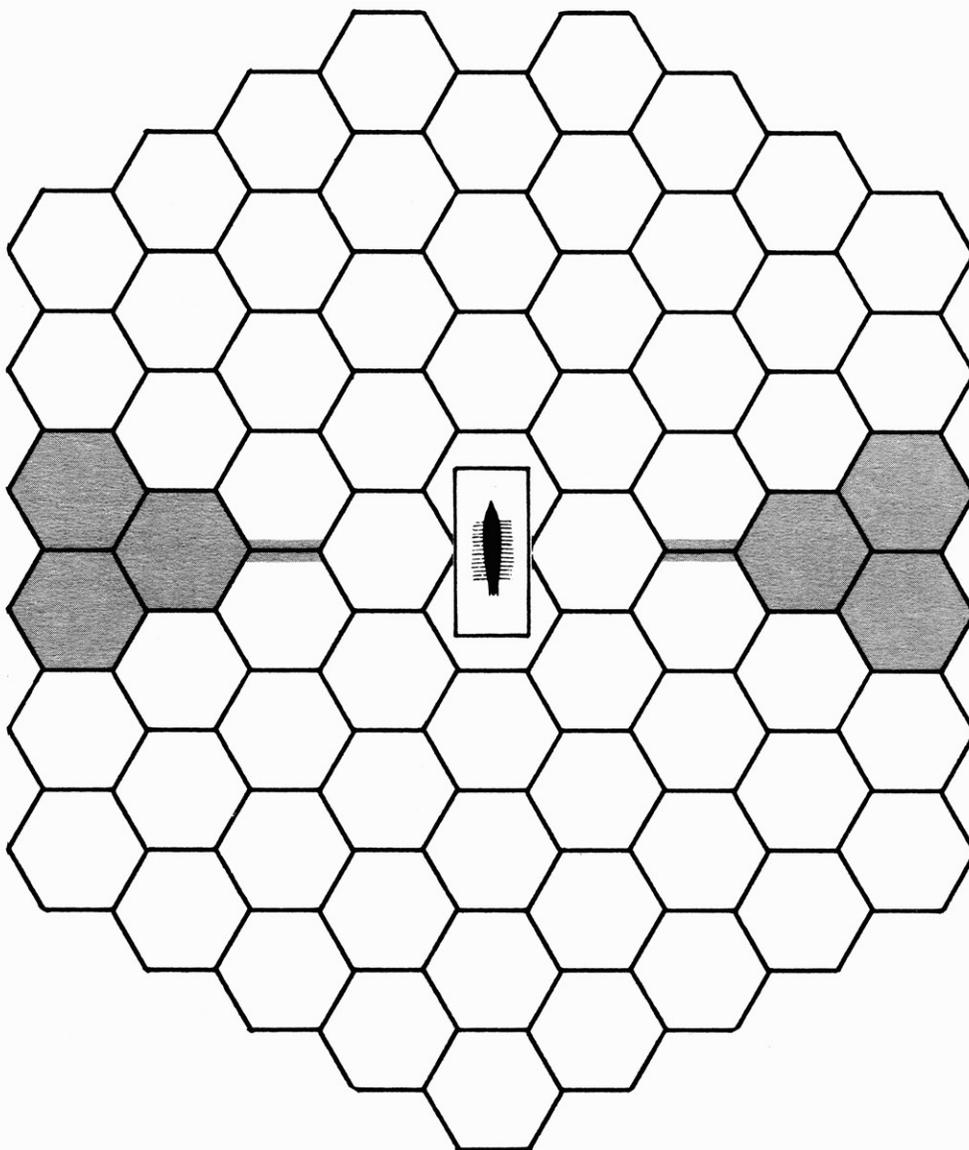
Recommended Use: Heavy catapult fire is best used with the Fleet Game's simpler rules. I leave it to more detail-hungry players to design similar rules for the Ship Game. The following apply to the Fleet Game *only*.

Historical Use: The heavy catapult (hereafter *HC*) may not be used prior to 332 BC. This is the first firm date for their usage (and allows the weapon to be employed in the second Salamis scenario).

Cargo Point Cost: HCs cost three (3) cargo points each. This makes them rather expensive and unwieldy for triremes to carry.

When HCs Fire: Catapults may fire during the owning player's turn or at *any point* during the enemy

player's turn. (Thus, they have the pre-emptive effect envisioned by Foley and Soedel, making the strategy much more intriguing.) They may not, however, fire more than once in a *complete* Game Turn. That is, if a weapon fires during the owning player turn, it may not do so during the subsequent enemy player turn. Mark those weapons unfired (still loaded) with any appropriate counter for ready reference. This helps insure that HCs will not be used to cripple enemy ships during the owning player's turn but will be held at the ready to defend against ramming vessels when their effectiveness is greatest. To further impede the offensive use of HCs, I have made provisions for their use on the *Effects of Fire Table*. Keep track of when catapults have fired on the ship logs. Note that HCs may be used even against cataphract ships, as the large bolts will pierce any deck.



Fields of Fire Bow and Stern fields are indicated by dashed line; overlap area (i.e., able to be struck from either) is indicated by shaded region. Note that no ship in adjacent hex nor further than four hexes may be fired upon.

Effects of Fire

Range
Attitude of
Target

4 hexes

2-3 hexes

Ram ¹	On a roll of 5 or 6, target is reduced to Cruising Speed ³ . Roll for Critical Hit.	On roll of 4-6, target is reduced to Cruising Speed. Target is crippled for one complete turn. ⁴
Non-Ram ²	Same as above on roll of 6.	Same as above on roll of 5 or 6.
Ram at Bow/Stern	No effect.	Same as above on roll of 6.

1. A target is in a "ram attitude" when its keel is aligned with a ship and it is in a row of hexes which passes through any hex occupied by that ship. These effects apply to all ram attitudes *except* bow and stern (i.e., when the hex row occupied passes the length of the ship to be rammed).
2. All other positions.
3. Obviously, if the target has already exceeded its cruising speed, the target ship must halt movement.
4. The target is crippled for one complete game turn. It may then proceed normally, barring results of subsequent attacks. Roll for recovery may not be made as a result of HC fire. All special equipment is lost (tossed overboard), including any HCs.

Resolution of Fire: Should it be the enemy player's turn, all defensive fire against his ships must be announced at the same time before any are resolved. This accumulation of fire applies to only one point in the target ship's movement, however. The moving ship may be attacked in each hex it enters, but only by one of the designated firing catapults; obviously, some catapults may end up being unable to fire should the target sink or end movement. The range at which the target is fired upon is determined at the moment of firing. Offensive fire must be resolved at the end of all movement in the attacker's turn. All possible fire must be completed before any grappling or ramming attacks are resolved.

Fields of Fire: There are two fields of fire. These cover the stern and bow, and may strike enemy ships in the fields as indicated in the accompanying diagram. Catapults may be mounted in either the stern or bow, and range is calculated from the appropriate hex. Note that there are two areas where the fields of fire for stern and bow overlap on each side. Though these hexes are "non-ram attitude" hexes, they do afford a defender better fire opportunities.

There are two ranges (as shown in the *Effects of Fire Chart*)—four-hex range and the 2-3 hex range. The HC is a long-range weapon; there is *no* fire into adjacent hexes. If a target is partially or totally obscured by other ships or land masses, it may not be fired upon. A ship may never fire upon an enemy ship to which it is grappled.

With these proposed simple rules as a start, a player of *TRIEME* can get a feel for what Foley and Soedel envision as ancient combat on the seas. I would here suggest that HCs not be used in any scenarios where artillery engines are called for, or that they be used in place or—and not in addition to—those machines. If, after a few games, it appears that the addition of HCs weights the scenario too heavily in favor of the "host with the most", reduce that side's boarding factors accordingly.

Ancient buffs may go wild with these rules, and wish to develop "artillery duel" scenarios or assaults on fortified cities (as Alexander employed it). One could even develop rules for different types of "shot". The possibilities are endless. The use of HCs requires a little extra bookkeeping (but not enough to be troublesome). I hope that this variant has stimulated some thought on one of the finest tactical naval games around. You may well put away that copy of *WS&IM*.



A TRIP TO THE SQUAD LEADER OPEN

As the sun rose over Charlotte on a Saturday morning, players began to break out their boards and rattle their dice. It was the morning of the 4th Annual **SQUAD LEADER** Open. Players had come from near and far to test their mettle against some of the nation's best. Players had flown in from as far north as New York and as far west as Texas. They had driven in from Ohio, Florida, Tennessee, New Jersey, Maryland, South Carolina. And some had even come from North Carolina. They wanted to match their abilities on the cardboard battlefield against tough competition for over \$200.00 in cash prizes.

The first round of competition began at about 0900, and the last shot echoed at 1230. The players broke for mess (an outstanding roast beef buffet laid on in the hotel dining room). The second round began after lunch and lasted until 1730. Players who finished early made full use of the hotel swimming pool for some much-needed R&R. The third round of competition began after supper and lasted into the night. For those players eliminated and wanting some diversion, the hotel offered a band and dancing with lots of friendly Southern belles.

Sunday morning began with chow (another excellent buffet). The fourth round began at 0900 with only three undefeated players still active. At the end of that round, there was only one undefeated player remaining—Bill Conner. The tournament wasn't over, however. Bill still had to fight off one more challenger. Bill successfully defended his undefeated string of tactical victories in that final round and ended up with a perfect score of 5-0. Three other players were tied at 4-1 for the second through fourth places; the final standings were determined based upon Solkof Tie Breaker Points.

Some of the highlights of the tense competition include Bill Conner's devastating single-turn victory over Don Munsell in the first round, and the unique third-round draw between Doug Johnson and Ed Fritz. The latter scenario was so close that it came down to a contested building and a desperate close assault; the close combat failed to kill anyone leaving both players' troops locked in melee and the winning building contested by both. The last three scenarios had been specially designed for the competition, so were new to all players. Inevitably, there were many cries that they were not evenly-balanced (by the losers on both sides); but after the dust had settled, the results seemed to prove our playtest results—the scenarios were indeed balanced.

At the end of five rounds of competition, every bit as tough as any at ORIGINS, the standings were as follows:

1st	Bill (Sgt) Conner	Ohio
2nd	Bob Weissbard	New York
3rd	Bill Thomson	Florida
4th	John Harrison	North Carolina
5th	Mike Mihalik	Texas

Our congratulations to all. They earned it.

The 5th Annual **SQUAD LEADER** Open will be held at Charlotte NC again next year by the United States Wargaming Federation. We are interested in your input as to the dates, facilities and structure for the event. Please help us to serve your needs. Contact D.R. Munsell, 6101 McBride Street, Charlotte, NC 28215.

Critical Hit Table

Die Roll

- 1-2 Ship in confusion. Target ship still retains full boarding strength, but can only move one hex next turn, either directly forward or directly back.
- 3 Steersman hit. If target ship is moving, it swings to port on a die roll of 1-2, starboard on a die roll of 4-6, and proceeds to the limit of its remaining movement. If it should strike another ship, treat as a collision. If the target is not moving, no effect.
- 4 One-third of boarding strength eliminated (round down).
- 5-6 HC on target (nearest to firer if more than one) eliminated. If equidistant, choice is firing player's.

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