A & A Game Engineering Product Support

Product Support sheets come in the following types:

- Clarifications – these are more general clarifications about game play in response to questions from players.
- Corrections and Amendments – these include corrections to errors in game data, typing errors, and mistakes in game play that have come to light. These may come in two alternatives:
  — applicable to the most recent edition.
  — applicable to previous editions. These items will all have been incorporated into the latest edition on sale.
- New Rules – These rules will have been developed in response to requests from players. They may also have been developed from House Rules (see below).
- House Rules and player suggestions. House rules that are tested and work well may be incorporated into the basic rules if the author(s) approve.

The content of the sheets follows the same order as the rules in the book and the first sheet shows a summary of these sections and indicates those that are affected by the current sheet.

Salamis ad Actium

Rules Clarifications and Expansions
For
Edition 1.1

Date: 23 December 2021

The following Clarifications have come about thanks to questions raised recently.

They cover the following subjects:

1. Weather

There are a number of issues that have come to light regarding the weather and how it affects the game. These have been clarified and there is a correction to the conditions for testing for damage due to the weather.

2. Shooting

We clarify the timing of shooting with Archers or Engines.

3. Rams

There are a number of significant changes to take account of new information and research which shows that rams should be available for use for the whole period of the rules, though early rams are less effective and carry a risk to their owners as well.

4. Crew Tests

There is a typographical error which is corrected.

5. Points Values

This has been updated to take account of the possibility of using early Unsupported Rams.

Weather

The effects of weather in the rules took me some time to get my mind around. The effect in the game is not exactly straightforward, as I discovered while looking at questions raised.

At the start of the game the Sea State is created as a two part process in section 2.5, firstly setting the Wind Strength, and after that the Sea State. The first remark that should be made is that at the outset, there are never Storms or Gales. This is fine, because who in their right mind would go out to fight a naval battle in bad weather ?

The next time we find Weather is in the Turn Sequence, Intermediate Phase (4.5). Here you are asked to test for damage due to the weather if there is a Storm or Gale. This should be changed so that the conditions to test for Damage are that the Sea State is Choppy or worse. The rules in section 10.1 refer to that condition being the cause for the damage test (not the Wind Strength, which is only an additional factor).

Finally, weather is also subject to a possible change at the end of every Intermediate Phase (10.7). As a Game Turn is said to be 5 minutes long, the 20% chance of some change to the wind strength (requiring a roll for Sea State) is rather high. Similarly the 33% chance of a change in wind direction is also high. If you regarded the Action Phases as being 5 minutes long, then the length of a Game Turn will be more variable, and the chances are a bit more reasonable. It would be acceptable if Players decided to ignore the weather change, or ruled that a weather change will only happen if two Intermediate Phase cards are drawn in succession.

A further factor that has come to light is that ships carrying towers and (new) raised fighting platforms are going to be top heavy and should really test at a penalty. The same applies to Roman ships carrying a Corvus. The table of modifiers for Damage due to the Weather (10.1) has been updated to take this into account.

Situation (d10, 6+ to pass)	***Additional Modifiers***
# Oar factors below minimum for full speed	–1
Size of ship	+??
Deduct wind strength	–2 to –6
Ship is drifting	–2
Ship has Light Damage	–1
Ship has Medium Damage	–2
Ship has Heavy Damage	–3
Ship has Severe Damage	–4
Ship has Raised Fighting Platform	–1
Ship has one or more Towers	–1
Ship has one or more Corvus	–1

Shooting

Shooting can be by Archers or using Engines on the ships.

Archery is carried out by the Active Player during the Action Phase (4.3) and (6.1).

Engine Fire is carried out by both Players in the Intermediate Phase, alternating between the two sides if both have Engines. (4.5) and (6.2 – Ballistae) or (6.5 – Heavy War Engines) apply.

Rams

When referring to the Fleet Lists in 11.1 to 11.4, the Special Weapons section says that no vessel may have a Ram Bow.

One fact immediately brings into this sweeping statement into question: The Battle of Salamis took place in 480 BCE, falling in the period referred to above, and it is known that ships were using rams at the battle.

Ancient paintings and decorations show vessels which have what is the equivalent of a Ram when illustrating battles, so there is something not quite right here.

What might be the case is that a **reinforced** Ram may have been introduced at the later period (11.5 onwards), so these limitations must be corrected, so the simple change that we make at this stage is to delete that irritating last sentence in 11.1 to 11.4.

Our thanks go to our Correspondent Jasper Merendino who has undertaken a lot of work looking at what could be done to widen the use of the Ram, also looking at the implications as to cost, and how the Ramming rules would be modified.

As he rightly says not allowing Rams until the “Corinthian” ram in ca 413 BCE is a bit extreme. Battle accounts back to Alalia (540 BCE) imply vessels sunk by ramming—albeit with ruinous results for the attackers. Therefore we need to have something akin to a ‘Weak’ or ‘Early Ram’. These would also be applicable to the High Rams that are apparent on Egyptian Galleys fighting the Sea Peoples.

These changes appear on the attached pages that follow, which replace the ones in the rules.

Crew Test (2.11)

The Command Level conditions have got interfered with by a too clever computer. It should read “± 0 / 1 / 2”.

15 – POINTS VALUES

The basic monetary unit is the talent.

Basic Hull

+4	Per Size class (normal ship)

Modify the above values as follows

-1	Sail only
+2	Cataphract type
+1	Fitted with Parablemata
+1	Stout Hull
-1	Weak Hull
+0.5	Wooden or unreinforced High Ram, such as Late Egyptian (Note 1)
+0.5	Bronze Ram on unreinforced bow (Note 2)
+1	Ram on Reinforced Bow

Note 1: When calculating the actual hull cost round the final number DOWN.

Note 2: When calculating the actual hull cost, round the final figure UP.

A normal ship with sail only counts 3 talents per size class.
A cataphract ship with a ram and stout hull size would be 6 talents per size class.
A size 3 ship with a Wooden ram would cost 3.5 x 3 = 10.5, but rounded down so the hull costs 10.
A similar ship with a Bronze ram would cost 11 points (10.5 rounded up).

Speed

Add $(\text{speed})^2$ / 10 (rounded to the nearest whole number)

Troops

+1	per oar
+2	Per archer, or marine unit
+3	Per marine if "Fighting Oars", or heavy marine unit
+4	Per heavy marine unit if "Fighting Oars"

Equipment

+5	Per Ballista or "Ferrea Manus"
+2	Phoenician (8thC BCE) raised fighting platform on Large Bireme. This is treated as a single tower.
+2	Per tower
+3	Per Corvus
+5	Fitted with a High Ram
+5	* Per Pot of Rhodian Fire, "Bees", quicklime etc.
+10	** If equipped to carry Greek Fire

* Each Pot provides one attack. Ships can carry multiple pots.

** This weapon can be used once only in a battle.

Heavy War Engines

Heavy War Engines cost 4 x their Damage Modifier (1-6), i.e. they cost 4 to 24 talents.

Heavy War Engines on ships

ONE Heavy War Engine may be put on a large boat. Such a weapon requires two units of space per Damage Modifier of the Weapon. To carry one will require you to sacrifice Troops, Towers and/or Engines from the numbers listed to provide the capacity.

A 3 deck Dekares with three towers and engines and seven troops can take a Heavy War Engine of Damage Modifier 6 at the loss of all its towers and ballistae, as well as 6 of its troops. You may not overload the ship with the Heavy War Engine itself, which therefore limits which vessels can carry the biggest engines. To put troops on board such a vessel to protect the engine may mean that you have to overload it. Remember that you can only overload with troops, and that speed will be halved.

Fortifications and Garrisons

Players can decide for themselves how big they want to make their fortifications on their ports. This is dependent on their funds. Fortifications must be built before the campaign starts.

The maximum number of wall sections that are incorporated in these fortifications is HALF the economic value of the port (rounded up). Attacks on wall sections are treated as if they were boarding actions against ships.

A wall section has a maximum capacity equal to the economic value of the port, and each unit of capacity costs 4 talents. Each unit of capacity will accommodate:

- 1 Ballista, or 1 tower or 1 soldier unit of any type
- ½ a Damage Modifier for a Heavy War Engine

  (a Heavy War Engine with a Damage Modifier of 3 requires 6 units of capacity).

A port defence with an economic value of 5 could have 3 wall sections (total cost 60 talents), each with a capacity of 5, which could accommodate a mix of 5 soldiers, towers or ballistae (cost varies), or a Heavy War Engine of Modifier 2 (cost 8), plus one other unit. There must always be a garrison commander (cost 100). This example costs 168 talents excluding troops and modifications for Troop and Command Quality. Fortifications can also use Fire Pots (= boiling oil) and Bees, as well as "Ferrea Manus".

Random Port Defences for Neutral Ports

Before a game starts involving an attack on a neutral port, roll 1d10 per Economic Value of the port, for each wall section. The score determines what is present on that section.

1	1 Damage Modifier for a Heavy Engine (add together to get the actual Engine Modifier, maximum 6 per engine)
2	1 Ballista
3 – 5	1 Archer
6 – 7	1 Marine
8 – 10	1 Heavy Marine

Crew Quality

Modify the total cost of the ship, depending on crew quality:

Elite	x1.2
Veteran	x1.1
Average	x1.0
Poor	x0.9
Green	x0.8

Commanders

Add the following costs for each squadron or fleet admiral

+120	Exceptional
+110	Skilled
+100	Average
+90	Poor
+80	Inept

Training

If using the randomised training rules the same modifiers for Crew Quality or costs for Command are used and thereafter the actual values are randomised.

Allied Forces

Players may opt to have some of their ships provided by allies or client states (this may well be a factor of games involving Greek fleets). The points costs of allied fleets may be increased or reduced by up to 50%. Reduced cost results in lower reliability of those allies (even to the point where they may not actually take part in the battle!), while increased costs mean that the payment being made is attractive to the ally. Allied fleet costs are increased or reduced in increments of 10%. At the start of the game Allied fleets are treated as "Off Table" forces and roll on that table.

7 — RAMMING AND RAKING

When there is a ram attack, for game purposes it is necessary to make some positional adjustments prior to resolving the attack. You will also see that it is necessary to make the right decision which vessel to move first because a vessel moved earlier might block the ramming possibilities of another of your ships.

When a ship comes into contact with an enemy (or friendly) ship both ships stop and remain immobile (unless conducting an oar rake) until separated in a subsequent Action Phase.

7.1 – Attack Aspect

Determine the location where the target vessel has been rammed, and the aspect of the attack. The point of contact by the front (corners) of the ramming vessel's base against the target's base defines the attack.

- If point of contact is on the front edge of the target's base then the contact is with the target's bow.
- If point of contact is on the side edge of the target's base then the contact is with the target's beam.
- If the point of contact is on the rear edge the target's base then the contact is with the target's stern.
- If the point of contact is on the corner of the target's base then the position of the bow of the moving ship determines the attack. If the bow of the attacker points at the front or rear edge of the target's base, then the bow or stern of the target may have been hit, otherwise the beam of the target may have been hit.

In order to be effective as a ram the following conditions must be met:

- The ramming ship must contact the enemy at an angle between 45 and 90 degrees to the edge of the target's base. Angles shallower than this will be ineffective as rams.
- The bow of the attacking vessel must be pointing at the target ship's base. In practical terms this means that at least half the width of the attacker's base must overlap the target ship's base.
- If the whole of the bow edge of the attacker's base is in contact with the side target's base (as ship C below right) then the attacker gets a +2 ram bonus.
- If at least half (but not all) of the bow edge of the attacker's base is in contact with the side target's base (as ship C in top right diagram) then the attacker only gets a +1 ram bonus.

Failed rams to the side may be resolved as oar rakes (qv.) and/or boarding attempts. Others remain in contact and may allow a boarding action. On contact the moving ship is immediately aligned to conform to the base of the target in the cases where there is a Ram attack or an Oar Rake. If you are ONLY boarding, which may be all you are able to do, then you do NOT realign the model. The following two diagrams show the resolution of various attack types.

In the first pair of diagrams (bottom left), the left section illustrates the position after movement. Ship A has been contacted by ships B and C. Both ships have contacted the Beam of ship A.

The right section shows how the ships are aligned. Diagram Ship C has impacted at an angle greater than 45 degrees to the ship's beam, so she is aligned to the side of the target, pivoting on the point of contact. Ship C will get an attack bonus of +2. Ship B has impacted at an angle shallower than 45 degrees and so she is aligned to be parallel to the side of the target and an oar rake and/or boarding action could be follow.

In the second pair of diagrams (bottom right) ship A has been rammed by ships B, C and D. B and C are in contact with the front corners of B's base. The bow of B is closer to the front of A's base so it will be resolved as a bow ram. The bow of C is closer to the side of A's base so it rams A's side. It will get an attack bonus of +1, being in contact with the side but not over its entire front base edge. The bow of D is not pointing at the target's base, therefore it is not a ram, but the ships do count as in contact, so there could be a boarding attempt. Note that in this case the ship is NOT realigned.

7.2 – Types of Ram

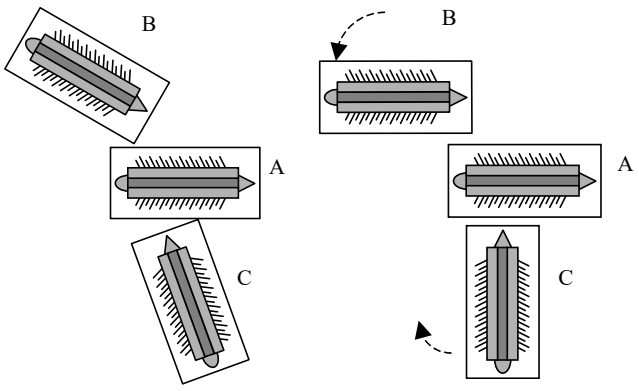
There are two possible types of Ram.

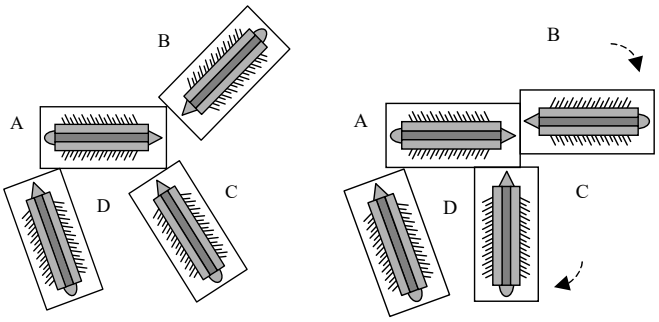
- Early Rams made of wood or bronze were fitted to ships but without the benefit of a reinforced bow, so these are referred to as Unsupported Rams.
- Later Rams (referred to elsewhere in the rules as introduced with the 'Corinthian Bow' in ca. 413 BCE) are Supported Rams.

7.3 – Bow Rams

Ramming the bow of an enemy ship could be an unpredictable business. There was always the chance that the target ship might outmanoeuvre the ramming ship, which would itself become the target. Furthermore, before the introduction of bows designed for the purpose of ramming a bow to bow collision could leave both vessels dead in the water.

When conducting a bow ram, both sides roll a d6 and modify this as if taking a Crew Test. If one side exceeds the score of the other by 2 or more (3 or more if using unsupported rams) they are the ramming vessel. If the scores are the same or differ by only 1 ((1 or 2 if using unsupported rams) then BOTH ships conduct rams on each other.





7.4 – Determining the effect of a Ram

Roll a d10 and modify as shown below to determine damage. The actual score rolled on the die may also have an effect on the ramming vessel if this is already damaged and the score is 4 or less (See Special Effects of Ram Damage).

Note regarding Speed Modifiers:

The speed modifiers are only applied if the ramming ship is fitted with a ram. Which is applied depends on the angle of approach:

- Use the Rammer's speed modifier if from the beam;
- Use the sum of the two ships' speed modifiers if from the bow;
- Use the Rammer's speed modifier MINUS Target's speed modifier if from astern.

NB: Speed modifiers are based on the current normal speed of the target vessel and the actual distance moved in a straight line by the ramming vessel when it contacted the target. Round fractions of cm UP to the next whole number.

Damage to Ramming Ships with Unsupported Rams

These ships must always test for damage as if they had been rammed, treating the testing ship as if it were the target in the table below, EXCEPT that the speed modifier is assessed based on the speed of the actual TARGET ship, with the maximum modifiers as shown in the table. Modifiers marked with '(+)' are ignored

It is believed that the primary way that these ships crippled their owners was due to lateral stress when striking relatively fast moving targets in the side.

The damage effect is applied using the Ramming Damage Table. Rolls on the Casualty Table treat a result of 6 or more as having no effect.

If the ship had an Egyptian Style High Ram, this is destroyed and the ship is treated as ram-less for the rest of the game.

Ram Effects	***Modifier***
Relative Sizes (Attacker to Defender): (Attacker bigger than defender use + modifier; defender bigger than attacker use – modifier)	
One vessel is larger than other	+/– 1
One vessel is at least two times size of other	+/– 2
One vessel is at least three times size of other	+/– 3
This modifier is open ended, so if a vessel is 6 times the size of the other the modifier is +/–6	*etc.*
Speed effects: (Only if ramming ship fitted with a ram and see note above)	
4 or less, Moving ship is drifting	+0
5 – 7	+1*
8 – 9	+2**
10 or more	+3
Target drifting or stationary (see note below) (+)	+2
* Maximum Bonus for Unsupported Wooden Rams or Unsupported Egyptian Style High Wooden Rams ** Maximum Bonus for Unsupported Bronze Rams	
Aspect: Bow edge of attacking vessel base	
- completely in contact with side of target vessel base	+2
- only half in contact with side of target vessel	+1
Crew: (+ - do not apply to self-inflicted damage caused by an unsupported ram)	+/- 0/1/2
Add own Crew Quality	+/- 0/1/2
Deduct target Crew Quality	-1
Captain of ramming ship wounded	-2
Captain of ramming ship killed	-3
Rammer demoralised	
Target vessel damage state:	
Light	+1
Medium	+2
Heavy	+3
Severe (Crippled)	+4
Other Modifiers:	
Target has Stout Hull	-1
Target has Weak Hull	+1
Ram is High (Imperial Roman, Byzantine or Arab)	-1
Target is overloaded	+2

Stationary Vessels

A target that has been rammed or contacted by another vessel prior to the resolution of this ram attack is treated as stationary.

Damage Inflicted to target

The final score in the table below indicates the damage caused to the target ship. The effect of this damage is established by looking at the Ram Damage Effect Table, which in turn tells you the number of Casualty dice to roll. All ramming hits on ships all use Column A on the Casualty Table.

Ramming Damage Effects Table	
Final Score	***Damage inflicted***
High Rams cause additional casualty rolls depending on the relative sizes of the vessels. The number of rolls is shown in the next section (7.5).	
5 or less	Glancing Blow, no damage
6 – 8	Light Damage: Slight damage to the Hull. Roll 1d10 on Casualty Table.
9 – 10	Medium Damage: Some light flooding and structural damage. Roll 2d10 on Casualty Table.
11 – 12	Heavy Damage: More significant damage. Roll 3d10 on Casualty Table.
13 – 14	Severe Damage (Crippled): Ship badly damaged. Roll 4d10 on Casualty Table.
15 – 16	Wrecked and sinking: Speed now 0. (model stays in place – see sinking ships): Roll 5d10 on Casualty Table.
17 or more	Smashed to matchwood (remove model) The target is shattered and removed immediately, all crew are killed including any special passengers (such as admirals)

7.5 – Special Effects of Ram Damage

Effects of High Rams

Imperial Roman and later Byzantine ships had their rams mounted higher in the ship. These tended to cause more damage to the upper works and crew, but caused less underwater damage. To simulate this, ships fitted with High Rams have a –1 modifier when ramming, but cause an additional rolls on the Casualty Table as follows:

- Attacker is smaller than target 1 extra Casualty roll
- Attacker is same size as target 2 extra Casualty rolls
- Attacker is larger than target 3 extra Casualty rolls
- If the attacking vessel is using an UNSUPPORTED High Ram, the number of damage dice is reduced by 1.

  This means that smaller attackers will not cause an additional casualty roll.

Damage inflicted on ramming ships

If a ramming ship is already damaged it may progress to one level of damage WORSE than its current level. This happens if the d10 used to resolve the attack comes up as follows:

- Light 1
- Medium 1 or 2
- Heavy 1 – 3
- Severe 1 – 4

From this you can see that there is a risk of taking more damage as attacker if you are already damaged. In this case the level of damage gets worse but no casualties are rolled for.

Effects on target ships that are already damaged

If a rammed ship suffers further ram damage equal to or less than its current damage level it suffers no further actual damage but you still roll the effects of the damage inflicted.

> *A rammed ship which had earlier suffered Heavy Damage, causing three rolls on the Casualty Table losing 1 speed, 1 oar and a marine, is rammed again for Medium Damage. In this case the effect rolled for using 2d10 but there is no change to its damage level.*

If a rammed ship suffers worse damage than has already been inflicted, then the full amount of damage is inflicted and the effects of the new damage level are applied.

Effects of Ramming to ships under Sail

If a ship conducts a ram or is itself rammed whilst under mainsail or full sail the mast falls on a d10 roll of 1 – 5 (1 – 3 for Hemiola, Trihemiola, Saxon and Viking vessels and others that operate only under sail). No further movement under main or sail can be made. The vessel drifts until the sail can be cut away.

This does not apply during Oar Rakes or collisions (accidental or deliberate).

Effects of Contact when moving astern

If a vessel contacts an enemy vessel when moving astern, this counts as a collision and movement stops. If the moving vessel contacts the bow of the enemy then this counts as a ram and is resolved as such.

7.6 – Oar Rakes

To conduct an oar rake the ramming ship must contact the side of the target's base at an angle of 45 degrees or less. As described above the ship is aligned so that the raking vessel ends its movement parallel to the target vessel. The moving player announces whether he is attempting an oar rake, which is resolved by ship, by carrying out a Crew Test (qv.), with the following additional modifiers:

Situation (d10, 6+ to pass)	***Additional Modifiers***
# Oar factors below minimum for full speed	– 1
Turn class of raking ship	+ ???
Attacker did fast move this Action Phase	+ 1
Deduct crew quality of target ship	–/+ 0/1/2
Deduct turn class of target ship	– ???

If the oar rake is successful, roll 1d10 per oar on the target. If the score is 8 an oar is lost; if the score is 9 or 10 the target ship loses 1 speed.

It may now also attempt to initiate boarding, though the chance of success is reduced by the oar rake. If undertaking a boarding attempt the models are placed in contact. The Boarding Action is resolved in the next Intermediate Phase.

If not attempting to board, the raking ship may move off normally in its next phase (as may the target vessel if it is still capable of movement). In this case the ship models should be separated on the table.