

NAAMA Missile Combat Rules

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Definitions

Missile - Any projectile used as a weapon in battle. This includes (but is not limited to) arrows, javelins and siege munitions.

Light Missile Combat - The use of announced and lobbed missile volleys against regularly armoured combatants.

Heavy Missile Combat - The use of unannounced directly fired missiles against combatants with critical area protection.

Critical Area Protection (CAP) - The minimum armour required for any combatant who is a valid target for heavy missile combat.

Siege Engine - For the purpose of rules application, a siege engine is any projectile launcher which is stationary during battle, and would not have been historically used as a hand-held weapon. Siege munitions are any projectiles launched exclusively from a siege engine.

Missile Combat Classes

There are two distinct combatant classes provided for under these missile combat rules – light missile combat and heavy missile combat. The requirements for each are described below.

Light Missile Combat

Before each battle session, all combatants should be briefed on how to protect themselves from incoming missile volleys and what constitutes a kill.

Missiles may only be fired as part of an announced volley. Some sort of signal capable of being heard by all combatants should be used to announce a volley with three to five seconds warning before missiles are launched.

Volley fire constitutes missiles which will arc through the air with at least a 30 degree vertical inclination from the launcher. Missiles must not be fired with a flat trajectory at any time during light missile combat.

Missiles must be launched from a position which can be easily predicted by opposing combatants, such as directly behind a line of melee combatants. No missiles should be launched at combatants that are not prepared and could be hit in the face or neck – for example, a line battle has broken into a skirmish or projectiles are launched from multiple positions simultaneously.

When the volley signal is given, all targeted combatants should immediately protect their face and neck by looking down and raising their shield (if applicable). Upon hearing the volley signal each combatant should take up the call 'arrows'. **Under no circumstance should a combatant look up at volley projectiles.**

Combatants launching missiles may do so either on-field with the appropriate armour or from off-field with no armor but may not change from on-field to off-field or vice versa mid battle. Off-field combatants must 'die' when confronted by an armed combatant.

Heavy Missile Combat

All combatants must meet *critical area protection* standards (see *Armour Standards*).

All heavy missile combatants must be briefed on the inherent risks involved and the key rules as they apply to each battle. Combatants using missile weapons should be competent in their use prior to the battle. Combatants must be reminded not to expose their face or neck until the battle has finished or been paused.

Missiles may be fired at any time, at any opposing combatant, without warning. All projectiles should be launched level with or from above the target (see *Armour Standards*), no rising projectile impacts will be permitted.

Exceptions

At the discretion of the marshals, a battle may be fought where one side possesses missiles, is only lightly armoured and uses heavy missile combat techniques against the other side, which has heavy armour but no missiles.

Combat Authorisations

Combatants

All combatants who wish to participate in a battle where missiles are in use must have the minimum standard of armour for that battle. For light missile combat, this will be standard NAAMA armour requirements. For heavy missile combat this will be critical area protection (see *Armour Standards*).

No combatant will be allowed onto the field unless they meet these requirements.

Weapons

All combatants who wish to use a Missile weapon in combat must have both their launcher and munitions inspected prior to combat.

For archery this means having bows inspected for damage and tested to be under the maximum draw weight, and having arrows checked to ensure they meet arrow standards and are sound. Arrows must be checked before each use.

For javelins this means checking they meet standards and are sound.

For siege this means checking they are sound and ensuring they can be safely used against other combatants either in light or heavy missile combat. Because each siege engine will be different, the definition of what is safe and how to measure this becomes difficult. This decision will be at the discretion of the marshals for each battle. As a guideline, to pass authorisation, the operator of the siege engine should be prepared to be shot at by their own engine, at minimum range wearing the minimum armour requirement for that combat class.

All missiles require re-inspection prior to each use (see *Weapons Use*).

Marshals

Any marshal on the field where missile combat is taking place is required to adhere to the same armour requirements as the combatants taking part.

All normal NAAMA marshal rules and authority will apply during any missile battle.

Armour Standards

Light Missile Combat

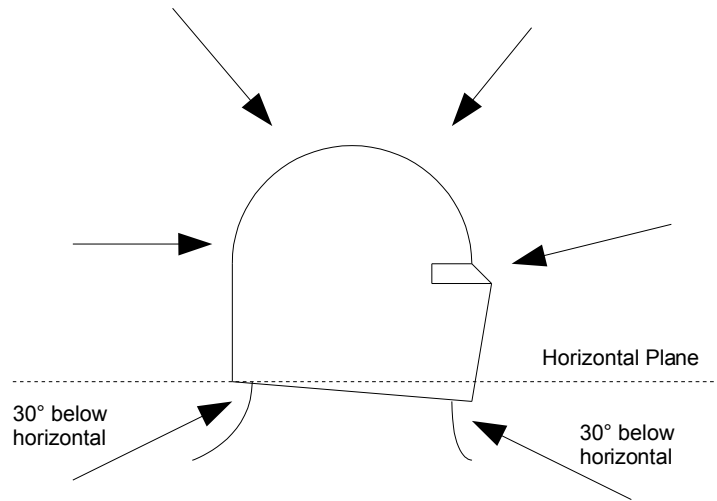
Normal NAAMA armour rules apply during light missile combat. Each combatant must have the ability to cover their head and face during volley fire.

Heavy Missile Combat

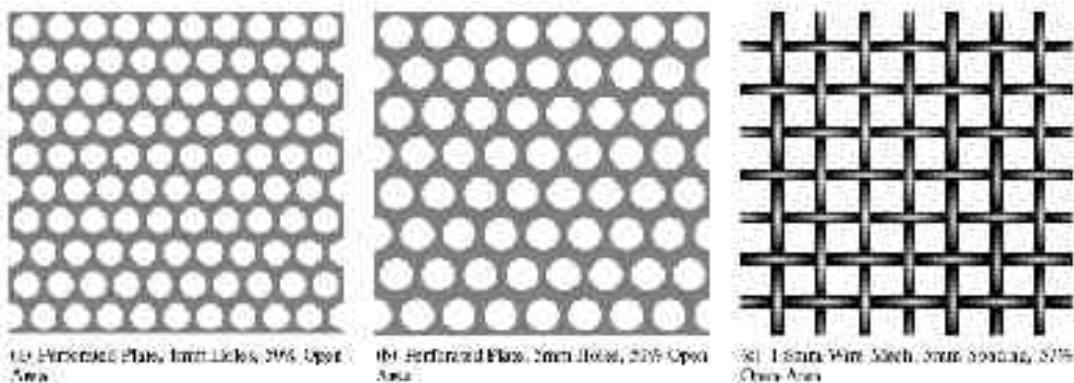
Critical area protection (CAP) is required for all combatants taking part in heavy missile combat. Any person on a battlefield where heavy missile combat is being used must meet these requirements as they are a potential target. There is one exception – see *Weapons Use*.

Critical area protection includes:

- A helmet which completely covers the head in a way that prevents a round shaft of greater than 5mm diameter contacting the head when fired from any angle above the horizontal and up to 30 degrees below the horizontal.



This includes eye protection. Any eye slots or openings must be covered by 1.6mm diameter heavy mesh or 1.6mm thick perforated steel with holes no larger than 5mm and 50% or less open area. Some examples are shown below:



Mesh visors may be temporarily fitted to helmets provided the mesh is secure and cannot be dislodged during combat. Exposed edges of visors must be rounded or covered so as to prevent injury to other combatants.

Note: 'norman nasal' type helms will require special attention – any combatant wishing to modify such a helm to meet critical area protection standards will need to ensure that any mesh is well secured, is sufficiently padded to prevent serious injury (unsupported edges may be bent onto the head by missiles) and that no part of the head is exposed. Alternately any areas of the head not covered by 1.6mm steel should be well padded to the satisfaction of the authorising marshal. Chain over unprotected areas should be well padded as chain by itself does little to stop missiles causing injury. If you are in any doubt about this please contact a marshal before the event you wish to participate in.

Note: safety glasses worn under a helmet instead of a mesh visor may be permitted in some cases but are strongly discouraged unless you know for a fact that they will repel a combat arrow without shattering and cannot be knocked off by a side hit.

- Neck protection must be worn. Appropriate neck protection is a well padded fabric, leather or metal gorget which completely covers the neck where it is exposed below the helmet.

Strongly recommended protection includes:

The following are not mandatory but will substantially reduce the risk of serious bruising and injury.

- Gambeson – full padded jacket, including spine protection.
 - Groin protection (if not already covered by other armour).
 - Joint protection – padded knees, and elbows.
 - Arm and leg protection.
-

Weapon Standards

Bows

For light missile combat, there is no restriction on bow draw weight.

For heavy missile combat, a bow must not have a draw weight greater than 30lbs (14kg). Recurve bows tend to develop more power for the same draw weight and should be lighter than 30lbs to be safe. The draw weight of the bow is to be determined at 28" (711mm) draw length, as measured from the centre of the bow riser.

Compound bows are not permitted.

Crossbows

There is no restriction on crossbow draw weight for light missile combat. Bolts must be lobbed into battle, which is difficult on most crossbows because they cannot be 'half-drawn' to alter their range. For this reason crossbows may not be suited for light missile combat. Compound crossbows are not permitted.

A crossbow used in heavy missile combat must not exceed 600 inch pounds (6.77 Newton meters). The number of inch pounds of a crossbow is determined by multiplying the length of the power stroke in length, e.g. inches (centimetres) by the weight, e.g. pounds (kilograms) of pull at the locked position on the string. The pull weight is to be measured at the nut, i.e. string position when the crossbow is nocked. The power stroke is the distance from the strings rest position to the locked position.

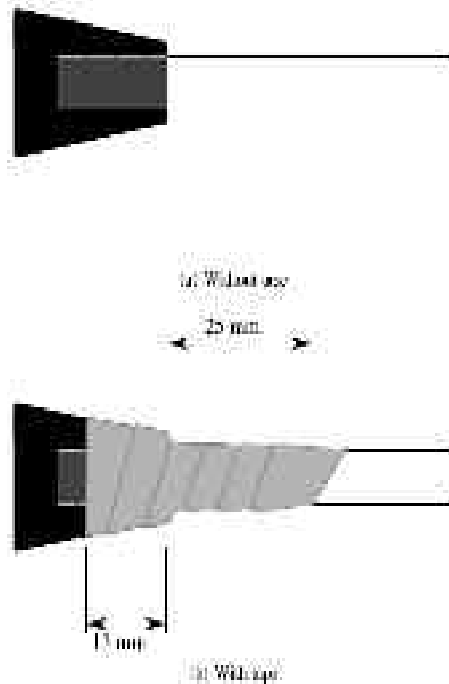
If a crossbow is struck by missile fire or other weapon, the bow must be inspected off the field before being used again.

Arrows

Shafts must have a diameter of 8mm or 5/16 inch and be no longer than 28 inches (711mm) when measured from the bottom of the nock slot to where the blunt joins the shaft. Port Orford Cedar is strongly recommended. Some other good options are Ramen, Silver Ash, or Tasmanian Oak.

Arrows must be tipped with an approved combat archery blunt. 'Riverhaven' Mk II or Mk III blunts,

as used by the SCA, are highly recommended. 'Redhead' or similar blunts as used in the UK are also allowed. If you're not sure please ask a marshal prior to an event. Blunts must be taped onto the shaft so that they will not come off on impact or if the arrow is broken, as shown in the diagram below:



To allow inspection of possible punch-through the face of the blunt must not be covered.

The shaft of the arrow shall be spirally or longitudinally wrapped with transparent-fibreglass filament tape, totally covering the surface from the front of the fletching to the tip of the shaft. The taping must be in good condition without any sign of the fibres lifting from the shaft.

Target or hunting tips should NEVER be used for combat archery. Points of any sort must be removed and the shaft cut-off flat before fitting the blunt.

Feather fletching should be either full flu-flu or partial flu-flu. Speed blunts are prohibited. Recommended fletching is with three or four full-height feathers each measuring 5 to 6 inches (12 to 15cm), either straight or helically fletched. Equivalent spiral flu-flu fletching is also allowed.

Arrows and bolts may not be used as hand-held thrusting weapons.

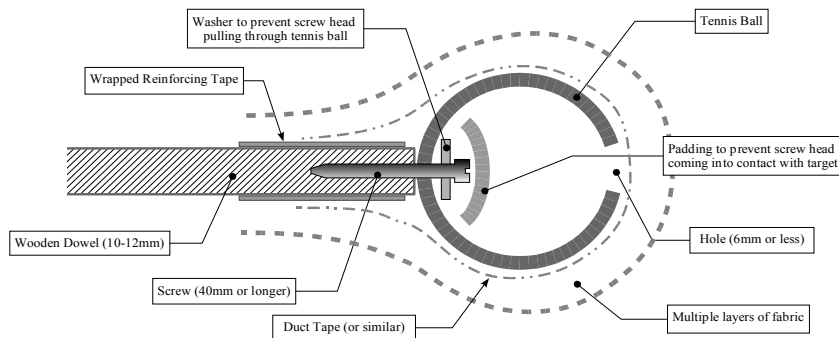
Arrows and bolts may be used only after inspection, supervised by a marshal. Archers shall be responsible for rechecking the safety of their arrows or bolts at the time of use.

Bolts

Crossbow bolts must adhere to the same standards as for arrows (above), with the exceptions that there is no set length and they can be fletched with only two feathers, provided they can be demonstrated to be safe. A suitable demonstration is being shot by your own bolts while wearing the minimum armour requirement at the minimum distance.

Javelins

Javelins are hand-launched only. They should be approximately 1.4m to 1.6m in length with about 12mm in diameter. The end must be covered by a suitable blunt that provides adequate cushioning and is able to survive repeated use. An example of a suitable blunt is shown below:



In the above example, a tennis ball has a 6mm hole in one side to allow a screw and washer to be inserted, attaching it to the shaft. If possible additional padding should be inserted to cover the head of the screw. The shaft should be firmly taped surrounding the screw to help hold shafts together in case of breakage. The whole end should then be wrapped in duct tape and covered with a few layers of fabric to make it a little softer. The screw may not be needed if you secure the ball well with tape.

An even easier design is to wrap the end of a wooden shaft in numerous layers of soft fabric until you have a ball the size of a fist or bigger. Finish by taping it all firmly onto the shaft.

Other blunts may be permitted, but all javelins should be submitted to a marshal prior to an event for approval.

Siege Engines

While historical siege engines made up for their lack of mobility with their great range and/or hitting power, missile combat versions must not hit any harder than the other weapons in play. This means that their range is likely to be no greater than hand-held bows etc., and possibly less.

For machines based around a bow as motive power and using arrows or darts as projectiles the standard crossbow power restriction (i.e. 600 inch-pounds) applies. This also applies to bow-like devices such as ballistae etc. using twisted rope bundles (or even rubber bands).

Due to the huge variation between siege engines, their safety cannot be estimated without practical testing. A siege engine may be demonstrated to be safe by its operator if that person is prepared to be shot by it wearing minimum armour at minimum range.

To avoid argument, a siege engine is any projectile launcher which is stationary during battle, and would not have been historically used as a hand-held weapon.

Siege Munitions

To help avoid arguments over killing blows from small siege engines, the minimum size of siege munitions is one tennis ball or equivalent. Other munitions may be used provided that:

- No part of them is capable of fitting through a 5mm opening in a helmet.
- They are sufficiently padded to minimise impact injuries.
- They have no sharp edges or points.
- They can be demonstrated to be safe to the satisfaction of the inspecting marshals.

All Weapons

All missile weapons, including those not specifically described above must adhere to the following rules:

- Projectiles must not weigh more than 500grams, except siege munitions where they have been demonstrated to be safe.
- Any launcher or projectile not specifically described in this document must be approved for use, inspected by a marshal and shown to be safe before use. Approval prior to an event is recommended to ensure a weapon can be used at that event.
- Any projectiles not classed as *siege munitions* fall under the classification of *hand-launched projectiles*.

Weapons Use

Siege Engines

Siege engines are regarded as impossible to destroy by arrows, bolts, melee weapons, etc. However, they can be put out of use by:

- Killing the crew - only the authorised crew can use an engine - no crew, no engine.
- Crew can be killed by any combatant if they are on the field.
- Artillery strike - a siege engine is considered destroyed if it is hit by another siege engine's projectile.

Siege Munitions

Since a missile combat siege engine actually has low power and mobility, its "game-play power" is often boosted by making any hit a killing one. Siege engines are assumed to kill regardless of shields and armour.

They may also fire more than one projectile (e.g. a trebuchet may launch a "cloud" of imitation rocks, tennis balls, etc., provided each projectile meets siege munition standards (see earlier)).

Projectile Reuse

All missiles must be inspected prior to reuse. For arrows and bolts this means inspecting them under the supervision of a marshal.

Arrows and bolts must be inspected

- After being fired
- If an archer falls on their quiver
- If a non rigid quiver is hit with anything (weapon/arrow/flying pig)

Other missiles may be field-inspected and reused without a marshal present. Damaged missiles must not be reused until repaired.

It is polite for 'dead' combatants leaving the field to grab any projectiles they can as they go to prevent damage.

Minimum and Maximum Range

The minimum range for any projectile, except javelins, is 5 meters.

A javelin (not thrown by engine or sling) may be used at any range provided it has a well padded blunt. Javelins should only be used as a throwing weapon, **not** as a spear or other melee weapon.

The maximum range for any projectile is 60 metres, except siege munitions which is 100 meters.

Projectiles must not land outside the field of battle.

Voluntary Death

Any combatant has the right to yield and die at any point during any combat. For example, an archer on the field may choose to voluntarily die rather than be struck by an opposing combatant when they get within melee range and risk damage to their bow. Combatants attacking archers and other missile combatants who have not yielded should be mindful of the fragility of equipment and either announce their presence before striking or strike in such a way as to minimise damage to equipment.

If a missile combatant is on the field and has appropriate armour, they may participate in melee combat with non-missile weapons if they choose to.