

Kingdom of Artemisia



Missile Weapons Handbook

4th Edition

Section III

Siege Weapons

1st Printing

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Royal Signatures

This handbook section represents the official reference for Target Siege for the Kingdom of Artemisia, SCA, Inc.

Approved this 3rd day of October, A.S. XLIV, being 2009 Gregorian.
During the reign of TRM Sean, Rex Gryphus & Nisa, Regina



Sean Kirkpatrick Tarragon
Rex Gryphus



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This handbook section, titled:

**Kingdom of Artemisia Missile Weapons Handbook
Section III – Siege Weapons**

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and does not delineate SCA policy.

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Introduction

Greetings unto all those brave souls *who are embarking* upon the joyously destructive path of Siege Weapons. In this section, the Siege Weapons specific standards, rules and regulations will be presented.

This handbook lays down the basic rules and guidelines for conducting the sport of Siege Weapons as used in the SCA-Kingdom of Artemisia, in a safe and enjoyable manner.

All Warranted Siege Marshals are strongly requested to have the latest copy of this handbook available at all times, during an official practice or event.

This handbook is obviously not written in stone, and therefore it is a living document. Always under scrutiny, and always open for suggestion, refinement and change for the better.

As Archer General Deputy - Siege for the Kingdom of Artemisia, I am a central point of organization for the sport of Siege that we practice in the Kingdom. I am not all-knowing, just still a work in progress, but I will try my best to answer any question that may arise.

If any member of the populace reading this notices typos, or misstated guidelines or other mistakes, please bring them to my attention.

It is the hope of the Archer Generals Office that through the study and practice of the Target Siege discipline that you will find many hours of enjoyment and enhance the dream just that much more for yourself and others.

I want to give great thanks to the Kingdom Deputy Earl Marshals for Siege in the East Kingdom and Atlantia. With their input and sharing I was able to create this in-depth Handbook for our use in the Kingdom of Artemisia. The main part of this manual came from the East Kingdom and in respect for their help I am leaving their words in here for all to read. The former Deputy of Siege in the East Kingdom said it best in his words and I am looking forward to watching Siege grow for us as well.

Lord Lochliann the Bald

Kingdom of Artemisia Deputy - Siege

Introduction - East Kingdom Deputies for Siege

Greetings to you, the bold, brave, and ingenious siege engineers and enthusiasts of these Eastern Lands!! Siege activities encompass many areas and include Combat siege, Target siege, Flinging just for the fun and distance of it, as well we cannot forget those who find joy in researching and providing A&S projects based on siege principles and historic Battles. These rules that follow deal specifically with the Combat and Target side of our game. These rules meet or exceed the Society standards as well as meet other rules that are specific to us here in the East Kingdom. Siege has grown to be an accepted and valued addition to our martial art and in the future I see army commanders using siege in many battles as a varied and integral part of their tactics to bring the enemies of The Tyger to their knees!!

Ubique !!

Hlaford(Lord) Aethelwulf Stealcere

EK- Siege deputy

Greeting to all with the Heart and Verve to challenge themselves with the skills of Siege. Siege is the Force behind the Powerful Arms of the Soldier. We support and prepare the Field of Honor for the Fighters. Siege brings Castles down, Bursts Gates, and Breaks the Field for the Army. Sometimes at the Front, we are the edge that assures Victory. There are Three Main Goals of Siege in the S.C.A. They are in this order:

Harm No One.

Do not be harmed.

Assist your Fighters in Winning.

This may sound simple but, as you read through these Rules, you will see this is a special responsibility. We operate and service the most powerful and dangerous devices on the Field. It is a serious and intense job but, when done well, very effective and fulfilling. Improperly done it can injure or worse. It is necessary to remember we are Honorable Soldiers as well as Engineers. Skirting this can easily be as dangerous as a Hairdryer in a Bathtub! Learning and understanding the following Rules will not only assure your pleasure but, also that of others who share the challenge of S.C.A. Combat. A few years ago the concept of Siege represented well and safely in the context of Battle was just a Dream. Today, through the efforts of dedicated Engineers throughout the Society, most Kingdoms now can field impressive and realistic Engines both in Combat and Target Shooting. One of the Ideas that opened this field from a few Engines to now Hundreds was creating "Off Battle Activities." You needn't be a Combatant to enjoy Siege. (But, you'll really miss the "Rush" of Field Combat.) Organizing and participating in Target Shoots is a necessary part of Siege. Fighters don't just fight at Pennsic or the other Great Wars. They try their skills in skirmishes even in there own Group. You improve the same way. We of the Siege Marshallate are at your service.

Lord Graywolf the Gonner,

Former Siege General of East Kingdom

Siege Engine Equipment

Inspections

(Note Please refer to the Society Siege rules for a more current and complete specification for inspection procedures, what is listed here is just a guideline.)

Siege engines shall be inspected before combat use. Engine inspection procedures shall include at least the following

- Any event allowing siege engines must have an area to conduct proper inspections. This area shall at minimum consist of a field with a firing line and range markers at 30 feet, 40 and 80 yards. There will also be an additional 20 yards beyond the 80 yard mark as well as behind the firing line for safety for a total length 120 yards.
- Preliminary inspection of the engine shall be made before any shots are fired.
- The marshal will check for structural integrity of the components of the engine.
- Siege Engines shall not have any bolts, or other projections, which may reasonably be expected to contact a person should they fall on the engine, extend more than 1/2" into a legal face grill. Any items such as this must be covered with sufficient rigid material, a Tennis Ball, or a suitable rubber stopper, to prevent them from entering a legal face grill more than 1/2".
- Triggers, release hooks, or other firing mechanism components, that would not normally be in a position that could cause injury should someone accidentally fall on the engine, are exempt from this.
- The operational demonstration phase of the inspection shall, at minimum, consist of four shots from the engine configured for the maximum power it will use on the field at that event. These 4 shots shall deliver the ammunition between 40 and 80 yards at a firing angle of between 40 and 45 degrees elevation without mechanical failure, and shall consistently deliver the ammunition in a reasonably straight and stable path downrange (curving due to cross wind is acceptable).
 - After the shots have been fired a static inspection of the engine should be conducted for continued stability and safety of the engine and framework.
 - The crews of direct fire engines should be willing to receive a shot from their engine at minimum range (30 feet), while in armor, should it be requested.
- Siege structures will be inspected before being allowed to participate in an event. Inspection should include at a minimum structural integrity, stability, condition of hardware, and condition of any safety devices (barriers, walls, etc.). Ideally, a maximum load of armored combatants should be on board the siege structure during inspection. Inspection will include a demonstration of mobility if the structure is designed to be mobile.

Siege Engine, Ammunition and Combat Standards

- The Kingdom of Artemisia follows the SCA siege rules and standards.
 - The SCA rules for siege can be found at
 - <http://www.sca.org/officers/marshal/combat/siege>
 - This covers General Siege Engine Regulations, Class A Machines, Class B Machines and Siege Structures and the munitions for each such machine.
 - General rules of the list can be found at
 - <http://www.sca.org/officers/marshal/combat/armored>
- The rules and standards will be held the same for both Target Siege and Heavy Siege. The only difference is Armor Requirements. Target Siege does not have to wear Armor but the Engineers and the Siege Marshals **MUST WEAR** “Impact Rated” eye gear, not just normal safety glasses, and a Hard Hat. Heavy Siege **MUST WEAR** the minimum armor requirements.
- Siege Weapons can be painted but metal parts can only have a clear coat. This allows ease of inspection for damage of these parts.
- Siege Engineers must be Authorized Heavy Fighters. They are allowed to use melee weapons or if an Authorized Combat Archer they may use their bow or crossbow to defend their machines. However, depending upon weapons any fighting **MUST** be at least 6ft or more away from the machine.
- **NO ONE** is to approach the machine from the front. Either from the side, the back or at an angle.
- To destroy a siege engine a Fighter must safely approach the machine and lay their weapon upon it while proclaiming the machine is destroyed. The crew should then unload and render safe the machine. Then follow the rules of the field for dead personal.
- All Siege Engines will have a maximum range of 80 yards (240 feet)
- All Direct Fire Siege Engines will have a minimum range of 30 feet and the crew **MUST BE WILLING** to receive a shot from the machine before use in any melee.
- To render a machine safe either have no tension on arms (ie leaving catapult or trebuchet arms hangs vertical in the rest position) or with ballista leaving in the forward rest position. If there is a way of ensuring the machine can not be used, like lock pins, put them in place.

Siege Rocks

- The "Rock" is equivalent to a 50# stone.
- The shape must be irregular and be at least 12" x 12" x 18". This is to avoid any confusion with cast stones from engines.
- The construction must be of open or closed cell foam and be wrapped entirely in gray\silver tape and may not exceed 32 ounces in weight.

Implementation

- "Rocks" can be dropped by any fighter wearing the minimum armor requirements.
- The rock may NOT be thrown. It must be DROPPED and may not be used unless the wall averages approximately 8 feet in ACTUAL height to the exterior ground level.
- The rock is a SINGLE HIT, SINGLE KILL device.
- Rocks may not be gleaned, but may be recovered between battles.
- Expended rocks have no further effect and are considered non-interactive debris for the duration of the battle.
- There is no limit on stockpiling rocks.

Results and Limitations

- A dropped rock kills only the first contact before ground impact. No multiple kills. Bouncing or deflected rocks (off an object or soldier, living or dead) are harmless.
- Rocks are not selective and kill enemy or friend.
- Rocks making first impact over 6 feet from the wall are considered thrown, therefore do not have any effect.
- These rocks MAY NOT be thrown by siege engines of any kind.
- These rocks may not be used as battering devices against siege structures.

Summary

The intent of the inclusion of "rocks" is to both realistically portray a truly classic form of siege defense and resolve a totally unrealistic situation in current fortification battles. The "queue" that forms at gates waiting for a slowly evolving turn and the ability to literally form a line against the wall out of archer angle and out of reach with no physical response are qualifiedly answered here. The effort is not to create a "super weapon" but it will end the 20-

minute conversation between Eric, Swartzzy and Roderick about how bored they are while waiting to assault the gate. It will stop the dangerous action of "blind strikes" by soldiers hiding against the wall. The "righteous anger" to be expected is answered simply by saying "If you are standing under your enemy's wall and not looking up, don't expect them to drop you a pizza." The physical properties of the weapon limit it to its intended use and leave only soft impact potentials on the field. This is both a field activity stimulator and a further option for realistic siege.

Picket Log (Vallis, Sudes, & Parts)

- Each piece represents a 5 foot by 3 to 6 inch diameter section of log usually sharpened to a point and either implanted in a fortification or assembled into a barricading device.
- Each piece must be at least 2 inches in diameter by 60 to 72 inches in length. Assemblies may be tied (preferred), or taped together, or passed through a foam fitting(s) but joining points may not be made of PVC or metal. This is to avoid the chance of injury in extreme impact.
- The construction must be of open or closed cell foam and should be wrapped in brown tape with the tips covered in yellow tape for 4 to 6 inches.
- Pieces may be assembled into caltrop style devices, barricade fences, or pickets. They may be free standing structures or attached to siege structures including siege towers so long as they do not interfere with the safety railings of either.
- Individual pieces are not to be used in any way as hand weapons!

Implementation

- Caltrop style devices, barricade fences, or pickets must be assembled and set before a battle commences and may not be reset by the setting army during the battle unless specifically agreed upon in a scenario.
- Caltrop style devices, barricade fences, or pickets may be removed by shielded combatants with a free hand not carrying a weapon or may be hooked and dragged by a pole arm to move the barricade but remain an obstacle wherever moved.
- Caltrop style devices, barricade fences, or pickets may not be overrun either direction, nor retreated over, but, fighting may occur across/over/under them and only block missiles that actually hit them.
- The log points are treated as spear points/ thrusting tips.
- Caltrop style devices, barricade fences, or pickets are destroyed by a single hit from siege munitions and should be removed at the first hold or safe opportunity.
- Unless the scenario specifically states, these barricades are not to be used in gates or on bridges.
- There is no limit on stockpiling but the total number used in a scenario may be restricted.

Results and Limitations

- Caltrop style devices, barricade fences, or pickets block movement on contact. Combatants contacted by the tips should acknowledge the contact as they would a spear thrust but this is not necessarily a killing blow. Shields block the tips.
- Caltrop style devices, barricade fences, or pickets may not be used as aggressive or mobile weapons.
- Caltrop style devices, barricade fences, or pickets are not selective, and kill enemy or friend.
- Caltrop style devices or barricade fences must be placed 12 feet or more from a siege engine.
- Caltrop style devices or barricade fences may not be placed on a mobile siege structure.

Summary

The intent of the inclusion of caltrop style devices, barricade fences, and pickets is to both realistically portray a truly classic form of siege defense and expand tactical situations in battles. The added advantage of being able to realistically mark and defend engine safety zones is a tacit bonus. It will stop the dangerous action of "blind rushing" by soldiers to blind side crews, and kill engines. The physical properties of the weapon limit it to its intended use and leave only soft impact potentials on the field. This is both a field activity stimulator and a further option for realistic siege. Creative application of vallis/sudes will enhance both challenge and safety on battlefields. These giant caltrops can be used as security perimeters for castled troops and fielded engines. One of the things these pieces can greatly reduce or avoid is the incidental incursion into safety areas around engines. Picket posts also can be used to reduce over runs of tactically sealed and standing walls for hay bale type castles. A fertile mind can find many interesting applications. The idea here is not to restrict so much, as to define the use of these devices. The limitations are only to avoid misuse of these items that would constitute a safety hazard. We don't see these as an immovable object but one that will take some effort to overcome. Variants of this concept precede Roman and are still used today to set defenses. We believe this to be a safe and stimulating addition to siege.

Battering Ram

- The "Ram" is equivalent to a 300-pound log with rope handles for carrying.
- The ram should be made of 4 to 7, 3 inch minimum diameter closed cell foam "pool noodles" between 4 and 8 feet in length (the individual color is not important).
- It must be warped at both ends with yellow duct tape and every 2 feet down its length.
- Rope handles should be placed at appropriate intervals for carrying and use. These handles should be long enough for easy gripping with armored hands but short enough to reduce the risk of entanglement.

Implementation

- The ram must be manned by at least 4 soldiers and no more than 8. These soldiers may not carry weapons or shields but may be accompanied by others to both shield them and fight.
- Should the crew be reduced to less than 4 the ram may not strike until the necessary substitutions can be made.
- The ram must be backed off 3 feet between strikes.
- 8 strikes with a 4-foot ram forces the door. The same with only 4 strikes for an 8-foot ram.
- Rams are not damaged by any weapons or missiles.
- Strikes are cumulative and the count continues if the ram is re-crewed.
- Battering rams may only be used against approved siege structures and may never be used against people for any reason.

Boiling Oil

- It must be made of 2-inch square open celled foam.
- Shall be completely covered in duct tape which is not yellow
- Must be contained in “buckets” no larger than 5 gallons
- May not have any loose bits which may get in an eye slot of a helm
- The oil kills on first contact and is no longer effective once it hits the ground
- Oil may not be recovered and reused

Live Stock and Other Animals

- Must be constructed of open and/or closed cell foam. If it is hollow, it must be able to crush with no hard bits.
- Shall be covered in duct tape which is not yellow
- If the animal is to be dropped it must be at least 12 x 12 x 24 inches (similar to rocks) and weigh no more than 32 ounces (2 pounds)
- If the animal is to be fired through a siege engine it must meet the criteria of weight and size as stated previously for a siege missile. This will be an effect weapon and damage will be determined by the scenario rules.
- May not have any loose bits which may get in an eye slot of a helm
- May be constructed in more than one section to create a large animal (IE, a cow in 3 pieces) as long as each section is within the stated guidelines.

Other Siege Devices

- If the device will fit within one of the previously mentioned areas above, use the rules outlined there.
- **B)** If the device does not fit within one of the previously mentioned areas above, talk to a Kingdom Deputy Marshal for Siege about how to implement it or if it needs to have experimental status.
- **C)** New and experimental weapons types and ammunition shall be required to undergo the same approval process as any other battlefield object. Current information on new weapons approval procedures is delineated in the Marshal's Handbook.

Experimental

New and experimental weapons types and ammunition shall be required to undergo the same approval process as any other battlefield object. Current information on new weapons approval procedures is delineated in the Marshal's Handbook.

Youth in Siege

Motivating youth at a young age is a time proven practice and a powerful force in encouraging Youth to become more involved in Siege. Balanced against this is the concern of safety for minors involved in martial arts. The important points involving Youth and Siege Weapons are parental supervision and understanding of the activity by both parents and Youth.

Combat & Target Siege

- Youth ages 15 and under may **NOT** participate in Combat or Target Siege.
- Youth ages 16 – 17 may participate in Combat & Target Siege provided:
 - They only make up one person of a two or three man crew.
 - They have an experienced and competent (Judged by the MIC) Siege Engineer as the Crew Chief.
 - If the parent(s) are on site:
 - The parent(s) have signed a Minor's Waiver and Informed Consent to Participate Form.
 - The parent(s) are available for medical purposes.
 - If the parent(s) are not on site:
 - The Minor's Waiver and Informed Consent to Participate Form must be notarized.
 - A Consent for Emergency Medical Care for a Minor Form must also be notarized.

These required documents must be presented to the Marshal in Charge at each event in which the minor wishes to participate. **No exceptions.** Copies of the waiver forms are available in Appendix A of the Missile Weapons Handbook.

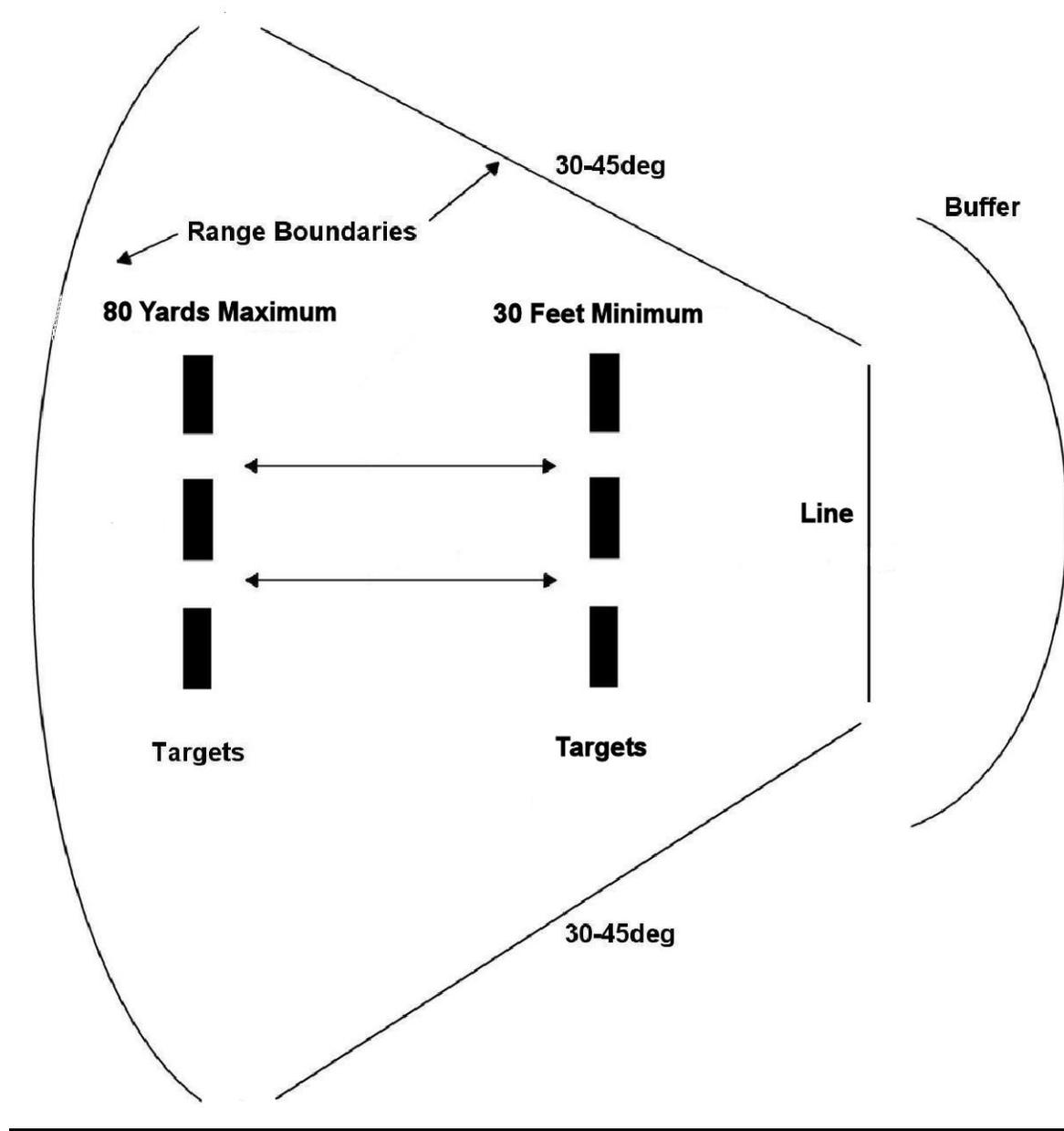
Range Layout and Conduct

Range Layout

A Siege Range is always a difficult piece of property to procure at an event. The physical space required is immense when compared to the fencing or heavy fighting fields.

- You must have a clear field of fire, devoid of any objects that may interfere with shooting.
- A safety zone that extends behind the 80yard target, a minimum of an additional 20 yards for a total of 100 yards.
- A clear area of 30-45 degrees of angle away from the targets, starting on the very outside of the shooting line, left and right.
- A berm or other natural stop behind the targets, can reduce the safety zone yardage required behind the targets, or to the side(s), depending on the nature of the natural stop.

Range Layout Diagram



The Line

There are several duties and rules for marshals and siege crews at the siege line.

Target – The Marshal of the Line (MoL) is responsible for events that take place on the line, line opening and closing, shoots and munition retrieval. Always pay heed to the MoL when approaching or while standing at the siege line. Engine crews must always approach the line in a coherent condition to shoot. NO Engineer is to be allowed to shoot while under the influence of drugs or alcohol. NO Marshal is to be on duty while under the influence of drugs or alcohol.

Before the shoot begins, the Marshal of the Line will give a short safety briefing. The purpose of the briefing is to familiarize/refresh crews of the rules of the shoot, the commands they will be hearing, and the actions required in response to the commands.

Shooting is done only when the line is “open”. No engineer should be at the line with their machine when the line is closed except when the Marshal of the Line is preparing to open the line for shooting.

No person, engineer or otherwise, should be on the siege field with the line is open. Even if a munition should fall a few steps in front of the shooting line, no person may cross the line to retrieve it until the line is closed. Whenever persons are downrange or anywhere on the Siege field, always un-load any munition and render safe, then stand by your machine.

Heavy Siege – Will follow the Rules of the List and any other rules that are agreed upon between the commanders prior to melees.

Will open fire when the melee has started and stop firing when the battle is over. Render safe any machine after it is destroyed.

Line Commands

A typical set of marshaling commands for a Siege Line are as follows:

Static Rounds

- **“Crews to the line.”** – The command to let crews know to take their position to shoot.
- **“This end is 6 munitions at 30 yards, for practice.”** – This reminds the crews, exactly what the purpose of this round is.
- **“Crews indicate when ready.”** – By the raising of the hand, crews indicate that they are positioned on the line, and are ready to commence shooting.
- **“The line is open.”** – The command indicating that shooting may commence.
- **“The line is closed. You may retrieve and score.”** – Command given when all crews for that round have finished, stepped back and rendered machines safe.

For timed rounds, commands may contain the previous set, but also the following:

Timed Rounds

- **“5, 4, 3, 2, 1 Loose”** – This is the countdown and command given for starting the timed round.
- **“1”**, for a two minute timed round, many marshals may choose to indicate when the round is half-way over. This is at the discretion of the Marshal of the Line.
- **“5, 4, 3, 2, 1 Hold”** – Command started 5 seconds prior to the end of the timed round.

Heavy Siege

- **“Lock and Load”** – crews may prime machines for firing and load munition.
- **“Fire for Effect”** – crews may fire continuously till melee ends or machine is destroyed
- **“Hold”** – unload, render safe and stand by for further instructions

Both Target and Heavy Siege –

If a “HOLD” is called:

Stop and immediately un-load any munitions and render safe the machine.

DO NOT attempt loose any munitions.

Do not step away from the line; the trouble may be behind you.

Look to the Marshal of the Line or Field Siege Marshal for further instruction.

Siege Marshals

Even though the process for the Warranting of Marshals is discussed for all disciplines in the Missile Weapons portion of this manual, it was felt by the Archer Generals office that Siege required an additional section to discuss this very important process.

Marshals trained in siege activities will oversee the inspection of engines and operators, and will be present on any field where siege engines are in use. During combat there will be a minimum of 1 Siege Marshal for each end of the field that has a siege engine. It is recommended that there be 1 Siege Marshal for every 3 engines in use. The same Siege rules will apply to both Target and Heavy Siege Marshals.

All Siege Marshals Shall:

- Successfully complete the warranting procedure.
- Be members of the Society for Creative Anachronism
 - A marshal's warrant is voided by a lapse of membership and will not be renewed until the appropriate proof is provided to the Kingdom Deputy - Siege
- Have a basic understanding of all major engine types (Ballista / Arbalest, Catapult/Onager, Trebuchet - both counter weight and man-powered)
- Know how to inspect engines and ammunition
- Know the current siege engine regulation
- Have at least 4 events of experience as an engineer.
- Exhibit a minimum level of activity.
 - Marshals that report little or no activity for a prolonged period of time will not have their warrants renewed.
 - Marshals who fail to report for a prolonged period of time will lose their warrant.
- Be of legal age in their state or province of residence.
- Have at least 4 events of experience as a heavy list siege engineer.
- Be an Authorized Heavy Marshal
- Know how to inspect armor
- Be able to conduct a Heavy List Siege Authorization

Warranting Procedure

- Before beginning training as a siege marshal the candidate must be qualified according to the guidelines of the SCA Siege Rules. The candidate must send a letter of intent to the Kingdom Deputy - Siege. The letter must include the following:
 - Legal and SCA names, address, phone number, e-mail, proof of age, region and local group. If possible also include the name of the siege marshal who will be responsible for your training.
- A copy of your membership card must be included with the letter. If you have just applied, a letter of good standing will be acceptable until you receive the actual card.
- Unless warranted or rostered by the Kingdom Deputy - Siege as an officer of the kingdom, a siege marshal may not be the siege marshal in charge of an event or sign the paperwork to authorize a heavy list siege engineer.
- Only the Kingdom Deputy - Siege or designated deputy siege marshals may perform a Marshal's Authorization. They must witness the authorization and execute the appropriate paperwork to ensure that the authorization is registered. Once registered the candidate will receive a marshal's card in the mail.
- At a minimum, a Siege Marshal's Authorization shall include the following:
 - A Siege Marshal may be authorized after demonstrating the ability to oversee combat, judge a siege authorization, and inspect siege weapons, ammunition and armor. They must also be able to conduct classes.
 - The candidate must have a good working knowledge of the Rules of the List, the Society Conventions of Combat, the SCA Siege Rules and any additional Kingdom of Artemisia rules or conventions.
 - The candidate must be willing to enforce the Rules of the List, the Society Conventions of Combat, the SCA Siege Rules and any additional Kingdom rules or conventions.
 - The candidate must have a good working knowledge of the Siege Weapons standards, Society Minimum armor standards, a reasonable knowledge of rattan weapon standards and any additional Kingdom of Artemisia Armor and Weapons standards.
 - The candidate must demonstrate the ability to conduct an inspection of armor, siege ammunition and engines. The ability to inspect rattan weapons is not a requirement, but having a basic knowledge of how to inspect them is strongly suggested.
 - The candidate must demonstrate the ability to safely control SCA siege combat and the interaction between other heavy list combatants, spectators and siege.
 - Upon successful completion of the marshal's authorization by a candidate, the warranting marshal will submit the following information to the Kingdom Deputy - Siege
 - The candidate's SCA and legal names in full.
 - The candidate's contact information including street address, phone number, and if available, e-mail address and fax number.
 - The candidate's region and local group.
 - The date and site of the warranting procedure.
 - The name of the warranting marshal.
 - Any further comments or recommendations regarding the candidate

Responsibilities of the Marshal in Charge

- No siege weapon activity shall take place at an event without a warranted siege marshal present for the planned activity whether target or heavy list, hereafter referred to as the S-MIC.
 - In the event of any disagreement, the S-MIC shall resolve the dispute.
 - The Siege Marshal's commands are to be followed explicitly by the entire siege weapon operators while on the siege field.
 - Failure to follow direction will result in the siege weapon and crew being removed from the field for the day.
- The S-MIC may request the assistance of other Siege Marshals in observing siege activities and inspecting equipment, but the responsibility for safety remains with the S-MIC.
- The S-MIC or the assisting marshals shall inspect all siege equipment and ammunition for damage and/or improper materials.
 - Equipment that does not adhere to the standards set forth in the equipment section of this handbook shall not be used in Siege Combat.
 - Equipment deemed dangerous by the S-MIC shall not be used.
- The S-MIC shall be responsible to amend any and all reductions of the minimum range requirements should they be deemed necessary by the S-MIC to insure safe operation of any siege equipment.

Siege Engineers

Authorization Procedure

This authorization procedure requires two warranted Authorized Siege Marshals, and an experienced authorized engineer (or 2 if using class A engine) be present. This outline is general and does not deal with the specifics of armor and weapons rules, since these rules are changed as the need arises. The warranted Authorized Siege Marshals will be trained in the specifics as they change.

- Prior to authorizing the candidate and the authorizing marshal will properly complete a Waiver for SCA Combat-Related Activities (THE WAIVER FOR SCA COMBAT-RELATED ACTIVITIES IS THE SAME AS THE GENERAL MEMBERSHIP WAIVER).
- The persons conducting the authorization must verify that the candidate is familiar with the Rules of the Lists and the current rules that specifically govern within the kingdom of residence and present proof that they have completed the safety course.
- The candidate must present himself/herself on the field in armor for inspection. The armor must be inspected on the body and must pass the current armor requirements for combat. This inspection must be complete and exacting and any deficiencies must be permanently corrected before the person may be authorized.
- The candidate should be familiar with the siege weapon being used and demonstrate the familiarity by answering questions about siege and the engine. Specifically how to charge the mechanism, engage the safety, load and launch ammunition, gage minimum range and lines of site, and safely remove the engine from the field in combat situations. The candidate should also be able to answer questions about the conventions of combat and field safety in regards to melees. If the Candidate cannot answer the majority of the questions, they should not be allowed to continue as they pose a safety risk.
- The Candidate and the experienced engineer shall be in armor and prepared to engage in melees. Have the candidate stand 30 feet from the engine while 5 shots are shot at them. Of those 5 shots the candidate must receive one impact. The candidate may hold a shield during this phase if desired. The Candidate will receive 2 telling blows from a rattan weapon (one to the head and one to the body) and call good. They will die defensively and explain how to exit the field both with and without the engine. If the engine is not movable, they must demonstrate how to render the engine safe. If this portion of the authorization is not satisfactorily completed the authorization procedure shall be stopped. The candidate shall be told of the problems observed and instructed as to how to correct the problems.

- The candidate must perform a pre-battle safety inspection of the engine before taking the field. Both the experienced authorized engineer and the candidate shall operate the siege engine in a simulated combat environment, switching positions to evaluate the candidates overall understanding of siege in the context of combat. Using a war practice or small melee is acceptable with the approval of the Marshal In Charge. During this phase of the authorization the marshals should observe the candidates control, reaction to blows, the ability to defend himself/herself, and ability to cope with pressure.
- The Marshals and the authorized engineer shall confer to decide if the new engineer exhibits adequate performance in the minimum criteria for authorization listed below
- Does the authorizing engineer know and apply the Rules of the Lists, the
 - Conventions of Combat and Siege Rules?
- Does the authorizing engineer exhibit safe behavior on the field, both for him/herself and for others?
- How does the authorizing engineer react to pressure? Does he/she fight back, or does he/she become disoriented and confused?
- Can the authorizing engineer defend him/herself?
- Is the authorizing fighter able to feel and judge blows, in the context of siege?
- Does the candidate know how to die safely on the field and within the confines of the engine? Can they safely exit the field both with and without the engine?
- If the Marshals and experienced fighter agree that the engineer meets these requirements for authorization, the Marshal will notify the fighter that he/she is authorized. The fighter and marshal will properly complete any paperwork required by the kingdom in addition to the previously completed Waiver for SCA Combat-Related Activities. **(THE WAIVER FOR SCA COMBAT RELATED ACTIVITIES IS THE SAME AS THE GENERAL MEMBERSHIP WAIVER)**
- The fighter will send these properly completed forms to the kingdom official responsible for issuing authorization cards. Upon receipt of these properly completed forms, an authorization card will be issued. The fighter shall be issued a temporary card or keep a copy of the authorization form and waiver if he intends to fight prior to receiving his authorization card. The card should be received within one month. If the card is not received the fighter should contact the authorization official and forward any information or paperwork required.

Kingdom Siege Officers

Archer General Deputy – Siege

- General
 - Appointed by the Kingdom Earl Marshal and Archer General.
 - Must be a warranted Siege Marshal
- Responsibilities
 - As defined by Kingdom Law and the Earl Marshal and Archer General.
 - To develop and monitor the training of Siege Marshals.
- Reporting
 - Compile Monthly reports, due the 20th of each month, that will account for the status of siege within the Kingdom and forward this information to the Earl Marshal, Archer General, Society Siege Marshal and on request the Crown of Artemisia.

Regional Siege Marshal

- General
 - Must be a warranted Siege Marshal.
 - Must have been added to the official roster by the Kingdom Deputy - Siege.
- Responsibilities
 - As determined by the Kingdom Deputy - Siege
 - To act as a distribution point for the Kingdom Deputy - Siege orders
 - To collect reports from the Unit Siege Marshals and get them to the Kingdom Deputy - Siege in a timely manner.
 - To act as the central authority for the inspection of Siege Engines.
 - Training the marshals within the region and administering the warranting procedure.
 - Organizing an annual regional siege weapons war practice and overseeing the muster of siege weapons engineers in time of war.
 - Receiving and monitoring the reports of the Baronial/Provincial/Shire Siege Marshal and any other Siege Marshals residing within their region
 - Reporting the regions marshallate status to the Kingdom Deputy - Siege as defined below.
 - Keeping the files of the office in good order.
- Reporting
 - Responsible for the formulation of inspection reports due on a monthly basis
 - Report to the Kingdom Deputy - Siege on or before the 14th of month.
 - The report shall contain a detailed listing of the Siege Marshals who did and did not file reports.
 - Marshal roster updates should also be included. (I.e.; new addresses, membership, etc.)
 - The report must also contain a detailed letter on the status of siege in the area. Any problem areas should also be defined.

Baronial/Provincial/Shire Siege Marshal

- General
 - Must be a warranted Siege Marshal.
 - Appointed by the governing body of local group.
 - It is strongly recommended that the siege weapons operators and any Marshals-at-Large in the group approve of the appointment.
- Responsibilities
 - As defined by Local law, and otherwise as Regional Siege Marshal.
 - Promoting siege activities at local events.
 - Arranging a practice site for the group's siege weapons and administering regular practice.
 - Representing the interests of the group's siege engineers at local meetings.
- Reporting
 - Shall report to their Regional Siege Marshal on, or before the 1st of the month.
 - The report shall contain SCA and legal names, address, e-mail address, phone number, proof of membership, local group, office held and a brief letter detailing recent and upcoming activities. (Valid membership number and expiration date).

Ranking and Recognition

Royal Round – Siege Weapons

Siege Crews who show skill on the siege target field are recognized with a rank. This ranking is based on the average of three (3) Royal Rounds, shot with a one year time period. Once a person achieves a ranking, it is a lifetime recognition that cannot be changed unless the engineer increases his/her ranking. If a gentle achieves a ranking within another Kingdom, they maintain this ranking from another Kingdom, but must earn an Artemisian rank separately.

Throwing for scores may occur if you have the following:

- A Siege Target Range which meets Kingdom of Artemisia Safety Guidelines.
- A Warranted Siege Marshal with one witness present for scores to be official (four to five people minimum depending on class of machine). The witness needs to be an SCA Members in good standing and be able to discuss the Siege Weapons Scoring System if asked by the Archer General or a Deputy at some point in the future.
- An official practice or event.
- Royal Round score sheets indicating the date, event, Marshal, and scores for the crews seeking ranking should be submitted to the MiC. Once the MiC has recorded the scores they should be passed on to the appropriate Missile Weapons Captain and in turn to the Archer General.

Royal Round Rankings

Royal Round Rankings and what they encompass for a Siege Engineer are important to the Siege participant as an individual. They are the way that each participant can rate themselves against their previous scores and assess their improvement over time. A Siege Engineer cannot shoot more than one Royal Round in a day to count toward their ranking. Engineers who achieve a ranking of Master Siege Engineer or higher may have their ranking presented to them in Kingdom Court.

Rankings can be earned in three different categories:

- Catapult
- Trebuchet (both man-powered and counter-weight)
- Ballista

The rankings are:

- **Siege Crewman:** A Siege Crewman is a gentle who understands the basics of Target Siege, knows the rules of the line, and is familiar with different competitions. A Siege Crewman must have three Royal Rounds with an average of 20 - 39 points.
- **Siege Crew Master:** A Siege Crew Master is able to take the skills of a Siege Crewman to the next higher level. A Siege Crew Master must have three Royal Rounds with an average of 40 points.
- **Siege Engineer:** A Siege Engineer exhibits all of the qualities of a Siege Crew Master and is encouraged to become a Warranted Siege Marshal. A Siege Engineer must have three Royal Rounds with an average of 100 - 119 points.
- **Master Siege Engineer:** A Master Siege Engineer is the same as a Siege Engineer with three Royal Rounds averaging 120 - 139 points.
- **Grand Master Siege Engineer:** A Grand Master Siege Engineer is the same as a Master Siege Engineer with three Royal Rounds averaging 140+ points.

Ranking Identification

The identifying item for a ranked thrower is a colored tassel encompassed by a brown strand. Tassel Colors are as follows:

- White for the Siege Crewman
- Black for the Siege Crew Master
- Blue for the Siege Engineer
- Red for the Master Siege Engineer
- Gold for the Grand Master Siege Engineer
- Youth 16 to 17 may use a purple thread encompassing the tassel in addition to the color above.

Types of Shoots

Target Siege uses marking poles like a clout shoot for Target Siege. Ranges are set at 20 yards, 60 yards and 80 yards. A pole with flags attached serves as the aiming point at which to shoot at. Scoring is determined by a series of concentric rings around the flag or pin. Each ring is 2 yards in width working away from the flag for a total of a 20 Yard Diameter Target. These rings are scored at with the following point structure 5, 4, 3, 2, 1.

You can choose from four of different shoots for competition. Following is a list of some of the more popular shoots you will find. Each “end” is shots of munitions unless specified otherwise. Timed rounds are 2 minutes, unless specified otherwise.

- Royal Round – Flagged pole with marker rope set with knots set at 24 inch intervals to make five rings.
 - 1 static end @ 80 yards
 - 1 static end @ 60 yards
 - 1 static end @ 40 yards
 - 1 timed round @ 40 yards.

- Grouping
 - Six rounds of munitions are shot at a flag marked 60 yards away, one per a machine. A string is then wrapped around all six munitions. The shortest string wins. Munitions that miss the target add 3 inches to the string.

- Tic Tac Toe
 - A target, 60 yards distance, is sectioned off into 9 equal squares. 3 in a row wins.

- Duel
 - Two flags are placed at 60 yards. Scoring range is the first two “rings” closest to the flag
 - 2 machines compete head-to-head. Using a well shuffled deck of poker cards, each machine Crew Chief draws 1 card. The highest face value gets the first shot that round. Each round that both machines are still operating will result in a new draw.

Glossary

- **Glossary**
- **Arbalest** - A tension-powered ballista (giant crossbow)
- **Ballista** - A two-armed torsion or tension-powered arrow or rock throwing, direct-fire siege engine.
- **Ballista Javelin or Bolt** - A 48 inch long projectile that resembles a short spear and is shot from a ballista or arbalest.
- **Braced** - When the engine cocked and ready to fire.
- **Catapult** - A single-armed torsion or tension-powered rock throwing, indirect-fire siege engine.
- **Closed-cell foam** - Stiff, resilient foam similar to sleeping pads.
- **Direct fire** - Delivery of a missile in a straight, flat trajectory directly into the target.
- **Effect weapons** - Mostly novelty missiles with no real damaging ability, such as simulated animal parts.
- **Eyebolts** - Hardware resembling a bolt formed into a circle on the non-threaded end.
- **Footprint** - Ground area covered by an engine as viewed from directly above, measure as length times width for engines with a square base and length times ½ the width for engines with a triangular or diamond shaped footprint.
- **Indirect fire** - Delivery of a missile in a high, arcing trajectory ending at the target.
- **Light-density foam** - Under 1/2 pound per cubic foot.
- **Mangonel** - A man powered Trebuchet.
- **Man Powered** - An engine in which the mechanical energy to launch the projectile or munitions is supplied directly by people, pulling on ropes for example, rather than being stored mechanically (IE, by a spring or raised counterweight) for later release.
- **Mechanical trigger device** - A device used to hold the engine in a braced state and to activate (shoot) the weapon.
- **Medium-density foam** - Between 1/2 and 4 pounds per cubic foot.
- **Onager** - See catapult.
- **Open-cell foam** - Light, sponge-like foam, such as upholstery or pillow foam.
- **Perrier** - A manpowered trebuchet.
- **Siege Bolt** - See Ballista Javelin.
- **Siege engines** - Missile-launching devices designed to deliver missiles larger than the already established small arms ammunition.

- **Siege structures** - Devices such as towers or ramps that are used to support personnel but are not fitted with active weaponry.
- **Specialty munitions** - Special-purpose ammunition, such as simulated flaming missiles.
- **String Length** - The length of the string from tip to tip when stretched to its fullest potential.
- **Trebuchet** - A gravity- or man -powered sling-type, rock-throwing, indirect-fire siege engine.
- **Turnbuckle** - Hardware consisting of two eyebolts fitted to a threaded barrel, used for adjusting the length of cables.
- **Winch** - A winding device usually geared and equipped with a ratchet.
- **Windlass** A winding device, usually consisting of a spool with double crank handles, a set of pulleys, and hooks, but not normally equipped with a ratcheting device.

Siege Information

Books

- Book of the Crossbow
- Besieged – Siege Warfare in the Ancient World by Duncan B. Campbell
- Medieval Siege Warfare by Christopher Gravett

Websites

- <http://www.sca.org/officers/marshal/combat/siege/> - SCA Siege Information
- <http://www.sca.org/officers/marshal/combat/armored/> - SCA Armored Combat Information
- <http://www.siege.eastkingdom.org> - East Kingdom's Siege page
- <http://members.iinet.net.au/~rmine/seemore.html> - The Grey Company Trebuchet page
- <http://www.legionxxiv.org/trebuchetpage/> - Legion XXIV Trebuchet page
- <http://www.legionxxiv.org/catapulta/> - Legion XXIV Catapult page
- <http://www.legionxxiv.org/ballista.htm> - Legion XXIV Ballista page
- <http://ballistaplans.historicorigins.com/index.html> - Docmo Kincaid's Ballista plans
- <http://www.thesiegeshop.com> - JP's Siege Shop
- <http://www.fryerskits.demon.co.uk/treb/index.htm> - Free Paper Trebuchet
- <http://siege.atlantia.sca.org/charter.php> - ASSWHIP Charter (Atlantian Society for Siege Weapons and Heavy Infantry Projectiles)
- <http://siege.eastkingdom.org/Frames.php> - East Kingdom Siege Engineers Website

Yahoo Groups

- <http://groups.yahoo.com/group/SCA-Artemisia-Siege/>
- <http://groups.yahoo.com/group/medievalengineering/>
- <http://groups.yahoo.com/group/SCA-Siege/>
- <http://groups.yahoo.com/group/SCA-SiegeDesign/>
- <http://groups.yahoo.com/group/EKSouth/>