Kingdom of Trimaris

Rapier Rule Book

January 2023

Contents

PREFAC	<u>t</u>	4
l.	THE RULES OF THE LISTS	5
A.	The basic rules for SCA combat are contained in the Rules of the Lists	5
В.	The Rules of the Lists	5
C.	Applications of the Rules of the Lists	6
II.	CONVENTIONS	7
1.	GENERAL INFORMATION	7
2.	BEHAVIOR ON THE FIELD	8
3.	USE OF WEAPONS AND PARRYING DEVICES	9
4.	ACKNOWLEDGEMENT OF BLOWS	9
III.	WEAPONS AND PARRYING DEVICES	11
1.	GENERAL	11
2.	BLADES	11
3.	PARRYING DEVICES	12
4.	PROJECTILE WEAPONS	13
5.	SPEARS / PIKES / POLEARMS	13
4.	TWO HANDED SWORDS	14
IV.	PROTECTIVE GEAR	14
1.	TERMS	14
2.	ARMOR REQUIREMENTS	15
V.	MARSHALLING CONCERNS IN RAPIER COMBAT	18
1.	AUTHORIZATIONS	18
2.	BROKEN BLADES	18
3.	CLOAKS	18
4.	BLADE GRASPING	18
5.	EXCESSIVE IMPACT	18
6.	MELEE	18
7.	MINORS	19
8.	PERIODIC TESTING OF PROTECTIVE GEAR	20
9.	UNFORESEEN SITUATIONS	20
INDEX		21

APPENDIX 22			22
I	. 7	TESTING STANDARDS FOR SCA RAPIER COMBAT	22
	A.	FABRIC TESTING FOR PROTECTIVE GEAR	22
	В.	BLADE FLEXIBILITY TESTING	22
	II.	PROCEDURES FOR EXPERIMENTATION IN RAPIER COMBAT	23
	III.	PROCEDURES FOR CREATION OF A DROP TESTER	24
	PAR	TS LIST	25
	COI	NSTRUCTION TOOLS	26
	CONSTRUCTION		26
	IV.	PROCEDURES FOR USE OF A DROP TESTER	29
	V.	BLADE TYPES AND CONVENTIONS	32
	VI.	EXCEPTIONS TO THE ALLOWED BLADES RULES	32

PREFACE

This handbook is the latest revision of the SCA rapier rules (January 2023), rules that have been slowly evolving since the Board of Directors formally recognized rapier combat as an ancillary activity of the SCA in September of A.S. XIV (1979). Within these pages are a lot of experience, effort and knowledge gathered from all corners of the Known World. But keep in mind that no person is perfect and therefore no rule set produced by a person is perfect. As you will hear over and over, nothing replaces common sense and good judgment.

As you will hear over and over, nothing replaces common sense and good judgment.

Rules are designed to promote safe rapier combat in the Society. However, no matter how clear or accurate, rules cannot replace common sense, good judgment, and concern for the participants. If a question arises when applying these standards, choose the answer that promotes the greatest degree of safety for all participants.

(2023-1-1)

Unmarked rules have been taken directly from Society documents, but may have been renumbered or reformatted to improve readability.

• Rules that are marked with a triskele bullet are specific to the Kingdom of Trimaris.

Any rule that mentions cut and thrust rapier is marked with the crossed sword icon in the right margin.

 $\frac{\chi}{\chi}$

I. THE RULES OF THE LISTS

- A. The basic rules for SCA combat are contained in the Rules of the Lists. While these rules were not originally designed to cover non-tourney field activities such as wars, combat archery, and period fencing, they have been extended to include them. The observance of honor and chivalry and the safety of the combatants are the overriding goals of these rules. The following is intended to bring together the appropriate rules for conducting both tourney field combat and other SCA combat activities.
- B. The Rules of the Lists are reprinted from section IX.B. of the Corpora of the SCA.
 - B.1 Each fighter, recognizing the possibilities of physical injury to themselves in such combat, shall assume unto themselves all risk and liability for harm suffered by means of such combat. No fighter shall engage in combat unless and until they have inspected the field of combat and satisfied themselves that it is suitable for combat. Other participants shall likewise recognize the risks involved in their presence on or near the field of combat and shall assume unto themselves the liabilities thereof.
 - B.2 No person shall participate in Official Combat-Related Activities (including armored combat, period fencing, and combat archery) outside of formal training sessions unless they have been properly authorized under Society and Kingdom procedures.
 - B.3 All combatants must be presented to, and be acceptable to, the Sovereign or his or her representative.
 - B.4 All combatants shall adhere to the appropriate armor and weapons standards of the Society, and to any additional standards of the Kingdom in which the event takes place. The Sovereign may waive the additional Kingdom standards.
 - B.5 The Sovereign or the Marshallate may bar any weapon or armor from use upon the field of combat. Should a warranted Marshal bar any weapon or armor, an appeal may be made to the Sovereign to allow the weapon or armor.
 - B.6 Combatants shall behave in a knightly and chivalrous manner and shall fight according to the appropriate Society and Kingdom Conventions of Combat.
 - B.7 No one may be required to participate in Combat-Related Activities. Any combatant may, without dishonor or penalty, reject any challenge without specifying a reason. A fight in a tournament lists is not to be considered a challenge and therefore may not be declined without forfeiting the bout.
 - B.8 Fighting with real weapons, whether fast or slow, is strictly forbidden at any Society event. This rule does not consider approved weaponry which meets the Society and Kingdom standards for traditional Society combat and/or Society period rapier combat, used in the context of mutual sport, to be real weaponry.
 - B.9 No projectile weapons shall be allowed within the Lists of a tournament, nor shall any weapons be thrown. The use of approved projectile weapons for melee, war, or

combat archery shall conform to the appropriate Society and Kingdom Conventions of Combat.

C. Applications of the Rules of the Lists

- C.1 Application of Rule 1: "Other participants" include Marshals and support personnel whose activities bring them close to fighting in a situation where boundaries are not clearly defined. Heralds, List Pages, and similar officers who leave the field entirely before combat begins are exempt from this requirement, as are water bearers and chirurgeons who remain in fixed support points outside the tournament field or battle area. Water bearers and chirurgeons who take part in mobile support groups within the overall boundaries of a battle area must receive a basic orientation in field safety.
- C.2 Application of Rule 2: The Crown and/or Marshallate of each Kingdom shall establish standards and procedures for the authorization of fighters to participate in combat. These procedures shall adhere to the Combat Authorization Procedures in this handbook. At Kingdom option, these procedures may involve either a general authorization to participate in armored combat or a set of separate authorization procedures for the use of (or for combat AGAINST) specific weapons or classes of weapons.
 - 2.1 The Crown and/or Marshallate of each Kingdom shall establish standards and procedures for the authorization of combat archers and missile users to participate in combat. Kingdoms may establish such additional limitations on the participation of minors as may be deemed necessary. It is usual for authorizations from other Kingdoms to be accepted, although exceptions may prove necessary in the case of specific individuals.
 - 2.2 The Crown may not simply grant an authorization, unless the recipient has successfully completed the authorization process as delineated in Society and Kingdom law.
- C.3 Application of Rule 4: Kingdoms may apply armor and weapons standards that are stricter than the Society standards, should they be deemed necessary, but may not reduce or waive any Society standard.
- C.4 Application of Rule 5: If a fighter regards an opponent's weapon or armor as unduly dangerous to self or opponent, he or she can request that the Marshal on the field re-inspect the item. Either fighter has the option of appealing the decision of the re-inspection Marshal to the Marshal in Charge and ultimately to the Sovereign.
- C.5 Application of Rule 6: Engaging in any Society combat activity with the deliberate intent to inflict bodily harm to an opponent is strictly forbidden.
- C.6 Application of Rule 7: No one is required to engage in SCA combat should he or she prefer not to do so.
- C.7 Application of Rule 8: Since fighting with real weapons is forbidden at any Society event, threatening the use of such weapons is likewise expressly forbidden. At the

discretion of the Sovereign and the Marshal in Charge, recognized experts may be permitted to present choreographed demonstrations with real weapons under strictly controlled conditions. No one may wear any real weapon onto the field while participating in combat or present during combat. At the discretion of the Sovereign and the Marshal in Charge, an exception may be made for marshals or other noncombatants to wear knives bonded with peace straps. Posing for still photographs with real weapons is permitted.

C.8 Application of Rule 9: The prohibition on thrown weapons refers to weapons thrown in combat or thrown in a hostile manner. It does not apply to "tossing," defined as a gentle, short-range method of transferring or removing a tournament weapon or item from the list field or area of combat. The use of bows and arrows, firearms, slings, javelins, throwing axes, throwing knives, or any other projectile weapon is forbidden within Tournament Lists, or in any other situation where spectators cannot be separated from the potential line of fire by more than the effective range of the weapon.

II. CONVENTIONS

1. GENERAL INFORMATION

- 1.A Rapier Combat shall be conducted in accordance with the Rules of the Lists of the SCA, Inc., these rules, and such further rules as are established by the Kingdoms.
- 1.B All combatants, prior to every combat or practice, shall ensure their equipment is safe, in good working order and has been inspected by a member of the Kingdom Marshallate authorized to inspect rapier gear.
 - Only an authorized marshal may run practices and events.
 - Only an authorized cut and thrust marshal may run cut and thrust practices and events.
- 1.C At inter-kingdom events, for any given Kingdom's tourney, guest combatants shall meet SCA standards for protective gear, but shall comply with whatever weapons standards are being used by the host kingdom for that tourney.
- 1.D Unless otherwise directed by Kingdom Law, the Crown's representative upon the field and in all matters dealing with Rapier Combat is the Earl Marshal, then the Kingdom Rapier Marshal, then, by delegation, members of the Kingdom Rapier Marshallate.
- 1.E There are three categories of rapier combat, each requiring separate authorization. Each Kingdom can decide which categories of rapier combat they will permit in their rules. These categories are:
 - E.1 light rapier
 - Trimaris does not permit any form of light rapier.
 - E.2 heavy rapier

- The Trimarian heavy rapier authorizations are:
 - Rapier Only (RO) any weapon, blade length more than 18", used singularly
 - Rapier Brace (RB) two weapons, both blade lengths over 18" long
- Defensive Secondary (DS) all non-offensive secondary devices (i.e. cloak, buckler, bodice, cane).
- Dagger (DG) any weapon, blade length 18" or less, used singularly or in conjunction with another blade or defensive secondary.
- Two-Handed Rapier (2H) use of a sword in two hands or use of a sword designated as a two handed sword as defined in section III.5 of this document.
- Rapier Spear (RS) weapons longer than 60" overall, or with a handle longer than 18" which are not configured and used in a manner that a marshal would identify as a "sword" are defined to belong to this category of weapon.
- Rapier Projectile Weapon (RPW) Projectile Weapons include combat archery, throwing weapons, and/or mockgunnery gear (such as rubber-band guns).

E.3 cut and thrust rapier

Except where noted, all rules apply to all three forms of rapier combat.

2. BEHAVIOR ON THE FIELD

- 2.A All fighters shall obey the commands of the marshals overseeing the field, or be removed from the field and subject to further disciplinary action.
- 2.B Disagreements with the marshals overseeing the field shall be resolved through the established mechanisms outlined in the Marshallate Procedures of the SCA, Inc.
- 2.C Each fighter shall maintain control over his or her temper and behavior at all times.
 - Fighters shall also maintain control of their actions and weapons on the field. Any attack that impairs the fighter's ability to maintain calibration is not allowed (for example leaping, running, or acrobatic moves that cannot be immediately halted in case of a hold being called).
 - Fighters are responsible for removing themselves from the field if their physical or mental state impairs their judgment or ability to maintain calibration (for example exhaustion or intoxication).
- 2.D Striking an opponent with excessive force, or with deliberate intent to injure, is forbidden.
- 2.E Upon hearing the call of "HOLD" all fighting shall immediately stop. The fighters shall freeze, check for hazards in their immediate vicinity, and then assume a non-threatening position with their weapons pointed away from their opponents.



- 2.F Conduct obstructive of normal rapier combat, such as consistent ignoring of blows, deliberate misuse of the rules (such as calling HOLD whenever pressed), or the like, is forbidden.
 - Other examples may include repeated running into the boundaries of the field, prolonged entrapment of the blade, or deliberate dropping of your weapon on the field. Any combatant using the body of the rules vs. the spirit of the rules may be grounds for marshal action.
 - Any behavior that takes deliberate advantage of an opponent's chivalry or safety-consciousness, or that takes deliberate unfair advantage of an opponent is prohibited. A fighter shall not deliberately strike a helpless opponent.

3. USE OF WEAPONS AND PARRYING DEVICES

- 3.A Valid blows are struck by: thrusting with the point of the blade (thrust) or sliding the edge of the blade by drawing (draw cut).
 - A.1 Kingdoms have the option of including sliding the edge of the blade by pushing (push cut) and/or placing the tip of the blade upon and then drawing it across an opponent (tip cut) as valid blows.
 - Trimaris allows both push cuts and tip cuts.
 - A.2 Cut and thrust rapier also includes the use of percussive cuts as a valid blow. Percussive cuts must always be delivered with sufficient control so as not to injure the opponent while still delivering the necessary impact for a valid cut.
- 3.B Chopping or hacking blows are not permitted in light or heavy rapier combat. For cut and thrust rapier, they still must be delivered with sufficient control. Fast circular movements (such as moulinets) may be used to place a blade for allowable cuts in all three categories of rapier combat.
- 3.C Parrying devices may be used to move, deflect, or immobilize an opponent's weapon or parrying device, so long as such use does not endanger the safety of the combatants.
 - Prolonged entrapment of a weapon or parrying device is sufficient grounds for calling of a 'hold' and forcing a release of the blade.
- 3.D Striking an opponent with any part of a weapon or parrying device not approved for that purpose is prohibited.

4. ACKNOWLEDGEMENT OF BLOWS

- The validity of any given blow shall be judged by the recipient of that blow.
 - 4.A In judging blows, all fighters are presumed to be wearing common civil attire of the period, not armor.
 - Accessories (including unused weapons or parrying devices) shall not be considered as a defense to the validity of a strike.

 \times

××

- 4.B Tourneys may be held which define areas of the body as if armored, and to what degree, so long as all the participants are made aware of these special conditions prior to the start of combat.
- 4.C In rapier combat, blows will be counted as though they were struck with a real blade, extremely sharp on point and edge. Any blow that would have penetrated the skin shall be counted as a good blow. Any blow that strikes a mask, helm or gorget shall be counted as though it struck flesh. Kingdoms shall not alter this standard.
- 4.D A valid blow to the:
 - head,
 - neck,
 - torso,
 - inner groin (to the fighter's hand width down the inner limb), or
 - armpit (to the fighter's inner hand width down the limb)
 shall be judged incapacitating, rendering the fighter incapable of further combat.
- 4.E A valid blow to the arm will disable the arm. A valid blow to the hand shall render the hand useless; Kingdoms may decide whether the arm above the incapacitated hand may be used to parry.
 - Trimaris permits the use of the arm above the incapacitated hand to parry blows
- 4.F A valid blow to the foot or leg will disable the leg.
 - F.1 For light rapier and heavy rapier, the fighter must then fight kneeling, sitting, or standing on one leg.
 - Tourneys/Melee may be held which allow fighters who have been struck in the leg to continue maneuvering by walking on their knees.
 - F.2 For cut and thrust rapier, valid blows to the leg or foot are considered incapacitating, rendering the fighter incapable of further combat.
- 4.G Parries may be performed with weapons, parrying devices, the gloved hand or any other part of the body. Though the gloved hand may be used to parry, it shall not be used to grasp or strike an opponent. Fleeting contact between opponents is allowed, as long as no grappling, deliberate striking or other unsafe behavior occurs.
- 4.H In heavy rapier and cut and thrust rapier, fighters may choose to grasp blades, rather than parry them. If the blade that is grasped moves or twists in the grasping hand, that hand is deemed disabled. Grasping techniques shall be used only to immobilize a blade, not to bend it or wrest it from the opponent's grip. Prolonged wrestling over a grasped blade is sufficient grounds for calling a 'hold" and forcing a release of the blade.
- 4.I If an effective blow is thrown before, or on, the same moment as an event that would stop a fight (a "HOLD" being called, the fighter being "killed" himself, etc.),

the blow shall count. If the blow is thrown after the hold, killing blow, or other event, it shall not count.

III. WEAPONS AND PARRYING DEVICES

1. GENERAL

- 1.A Sharp points, edges or corners are not allowed anywhere on any equipment.
- 1.B All equipment must be able to safely withstand combat stresses.
- 1.C Equipment that is likely to break a blade or damage other equipment is prohibited.
 - C.1 Light rapier does not permit any equipment that has small rigid openings large enough to admit a properly tipped light rapier blade (i.e. small holes in bell guards, small openings in a cage or swept hilt, any design which has acute angles where a blade could easily be wedged and bent). Knuckle bows are deemed safe for use with light rapier blades.
 - Trimaris does not allow any form of light rapier.

2. BLADES

- 2.A IF a blade meets the criteria below, it is considered acceptable for use unless specifically restricted from use by the Deputy Society Marshal for Rapier Combat. If a blade does not meet the criteria established below, it may not be used for any form of rapier combat in the Society, unless it is permitted by the Deputy Society Marshal for Rapier Combat. Exceptions (permitted blades or restricted blades will be maintained in Appendix 6 "Exceptions to Allowed Blades Rules".
- 2.B All blades are subject to the following:
 - B.1 Blades must be made of steel
 - B.2 Blades must be no longer than 48" as measured from the tip to the top of the tang (i.e. where the tang and the forte meet)
 - B.3 Blades must be reasonably flexible as defined in Appendix, section 1B
 - B.4 Light rapier blades longer than 18" must be a foil blade, epee blade, or similar variant (such as a double-wide epee or musketeer blades) from an established commercial manufacturer. Light rapier blades 18" or shorter need only meet the requirements previously listed.
 - Trimaris does not allow any form of light rapier.
 - B.5 Full length blades (i.e. greater than 18" in length from tip to top of the tang) with a cross-section similar to a foil or epee (i.e. foils, epees, double-wide epees and musketeers) are not allowed in Heavy Rapier, nor Cut & Thrust combat. In addition, flexi-daggers are not allowed for Cut & Thrust combat.
 - B.6 Steel blades will not be altered by grinding, cutting, heating, hammering, or other actions that could significantly alter their temper, flexibility or durability.
 Normal combat stresses and blade care do not violate this rule. Exceptions are:

- B.6a The tang of the weapon may be altered
- B.6b Heavy rapier and Cut & Thrust rapier blades may be shortened so long as they maintain acceptable flexibility.
- B.6c A nut or other blunt metal object designed to spread impact may be welded to the tip of heavy rapier and cut and thrust rapier blades so long as care is taken to prevent damage to the temper of the blade. The blunt object will still need some form of coverage, per 2.B.8 below.
- B.7 Rigid steel "parrying-only" daggers such as those made from cut down blades will not be allowed
- B.8 All blade ends must be capped with rubber, plastic, or leather
 - B.8a Tips will have a blunt striking surface, presenting a cross-section of at least 3/8 inch (9 mm) diameter.
 - B.8b Tips must be firmly taped or glued in place. The tip must be a color contrasting with the blade so that the tip's absence is readily apparent. If tape is used, it must contrast with both blade and tip.
- B.9 Any blade with kinks, sharp bends, or cracks shall not be used. Steel blades that develop these defects cannot be repaired and must be retired. Light rapier blades or flexidaggers with "S" curves shall not be used unless they can be properly re-curved.
- B.10 Weapons may use a hand guard such as a cup hilt, swept hilt or quillons and knuckle bow. The ends of quillons must be blunt
- B.11 Orthopedic (or "Pistol") grips will not be used unless the fighter has approval for medical reasons, supported by documentation from their health care provider.

3. PARRYING DEVICES

- 3.A Solid parrying devices will be made of sturdy, lightweight materials, resistant to breakage and splintering.
- 3.B Soft, non-rigid devices such as cloaks may be made of cloth, foam, leather and similar materials. They may be weighted with soft material such as rope or rolled cloth; they shall not be weighted with any rigid material nor with materials which are heavy enough to turn the device into a flail or impact weapon.
- 3.C Devices that predictably cause entangling of an opponent or their equipment, either by design or by repeated mishap, are not allowed.
- 3.D Offensive bucklers will be considered non-standard devices. These devices must be approved on a case by case basis, in accordance with rules established by each kingdom's Rapier Marshallate. An opponent may decline to face non-standard devices without forfeiting a bout. Offensive bucklers shall be made of soft flexible materials such as cloth, tape, foam and golf tubes.





4. PROJECTILE WEAPONS

- 4.A Kingdoms may permit combat archery, throwing weapons, and/or mock-gunnery gear (such as rubber-band guns) to be used in rapier melee combat, as long as safety standards for those arts are met.
- 4.B The use of any projectile weapon is forbidden within formal rapier Tournament lists (single combat), or in any situation where spectators cannot be separated from the potential line of fire by more than the effective range of the projectile weapons to be used.

5. SPEARS / PIKES / POLEARMS

5.A All weapons longer than 60" overall, or with a handle longer than 18" which are not configured and used in a manner that a marshal would identify as a "sword" are defined to belong to this category of weapon.

5.B Use:

- B.1 These weapons can only be used in Heavy Rapier and Cut and Thrust combat.

 They may be used only for thrusting in Heavy Rapier combat.
- B.2 Use of this type of weapon requires a separate authorization.
- B.3 Combatants who use this type of weapon may only strike opponents with the blade of the weapon.
- B.4 For single tournament combat, this type of weapon is considered a non-standard device. An opponent may decline to face a non-standard device without forfeiting a bout.
- B.5 A fighter may not "set" this weapon by bracing the base in the ground or against the foot or body, or locking the back arm.

5.C Approved designs:

- C.1 Steel Headed Spears are no longer allowed in SCA fencing since December31st, 2020 at the direction of the Society Marshal.
- C.2 Rubber Headed Spear Construction
 - C.2a Rubber headed spears are to be made of a rattan haft and a flexible rubber head.
 - C.2b The spear head must be purchased from a commercial vendor as a spear tip or spike with a minimum head length of 4" (10cm) and a maximum head length of 20" (51 cm). The rubber at the tip must be at least 1/4" (6 mm) thick.
 - C.2c The flexible tip must extend at least four inches past the end of the of the rigid haft
 - C.2d The spear head must flex to 90o with hand pressure, and must substantially return to its original shape within 3 seconds.

- C.2e Hafts are to be made of rattan with a diameter between 1 1/8th inch (28.5 mm) to 1 3/8th inch (35 mm).
- C.2f Maximum overall spear length with spear head attached is 9 feet (275 cm).
- C.2g Spear points will be friction fit to hafts according to manufacturer's instructions and be taped to the haft with reinforced tape such as strapping tape, fiber tape, or duct tape. A bright band of colored tape or well-affixed ribbon that contrasts with the spear head and the haft is to be wrapped around the base of the spear head so that it adds visual contrast should the spear head come off the weapon.
- C.2h The haft must have a flat end at the head end of at least ½" (12 mm) diameter. The haft may be rounded on the butt end.
- C.2i The haft must be inserted into the rubber spear tip at least 2" (5 cm)
- C.2j Tape may be added to the haft to help prolong the life of the haft; paint and other decorations may be added so long as they do not degrade the structure of the haft or pose a safety risk to the opponent.

6. Two handed swords

•

- 6.A Any full length sword (18" or longer blade) with handle length including pommel greater than 10" shall be considered as a two handed sword and may only be used in heavy rapier with a 2-Handed Authorization.
- 6.B A two handed sword with handle length, including pommel, greater than 10" and less than 14", used in heavy rapier, may be used in one hand or in two hands.
 - B.1 May only be used as a single weapon, with a dagger, or with a defensive secondary in the other hand
 - B.2 May NOT be used with another full length sword as part of a Rapier-Brace.
- 6.C A two handed sword with handle length, including pommel, greater than 14", used in heavy rapier, must have two hands on the weapon at all times.
 - C.1 If a hand/arm is disabled while playing in a melee, the wielder is considered defeated.
 - C.2 If a hand/arm is disabled while playing in a tournament, the wielder's opponent may allow a switch to a one-handed weapon.

IV. PROTECTIVE GEAR

1. TERMS

1.A Materials are listed in order of increasing resistance.

- 1.B Abrasion-resistant material: material that will withstand normal combat stresses (such as being snagged by an unbroken blade) without tearing. Examples include, but are not limited to:
 - broadcloth
 - a single layer of heavy poplin cloth (35% cotton, 65% polyester; "trigger" cloth)
 - sweat pants
 - opaque cotton, poly-cotton or lycra/spandex mix tights

Nylon pantyhose and cotton gauze shirts are examples of **unacceptable** materials.

- 1.C Puncture-resistant material: any fabric or combination of fabrics that will predictably withstand puncture. Examples include, but are not limited to:
 - four-ounce (1.6 mm) leather
 - four layers of heavy poplin cloth
 - ballistic nylon rated to at least 550 Newtons
 - commercial fencing clothing rated to at least 550 Newtons

Kevlar is not an acceptable material, as it degrades rapidly. These materials need only be tested at the marshal's discretion; all other materials must be tested the first time new gear is used, or if no marshal on the field knows a given piece of gear to have been tested. (Refer to <u>Appendix I</u> on Testing Standards.)

UnderArmor, Spandex, and very stretchy material are not suitable as rapier armor and should not be included in the material tested with a drop tester to determine puncture resistance. Feel free to wear them beneath your puncture resistant material.

- 1.D Rigid Material: puncture-resistant material that will not significantly flex, spread apart, or deform under pressure of 12 Kg applied by a standard mask tester, repeatedly to any single point. Examples of rigid material are:
 - 22 gauge stainless steel (0.8 mm)
 - 20 gauge mild steel (1.0 mm)
 - 16 gauge aluminum, copper, or brass (1.6 mm)
 - one layer of hardened heavy leather (8 ounce, 3.18 mm)

2. ARMOR REQUIREMENTS

2.A The following are the Society norms for protective gear. Kingdoms enacting more stringent standards shall weigh the benefits of more rigorous penetration coverage against the risks of heat illness, exhaustion, and stroke due to heavier or more confining gear.

- All participants on the field shall disguise, cover, or remove modern corporate logos and sport gear unless necessary for medical reasons. Special attention should be paid to appearance and the atmosphere of a medieval event should be maintained. This applies to combatants and marshals.
- Regarding appearance on the field in Trimaris:
 - The fighter should appear as a reasonable example of a warrior from the SCA's period of study (Pre-17th Century focusing on Renaissance and Middle-Ages, per Corpora) to the casual observer. All armor, shields, and equipment on the field are subject to the acceptance of the Crown or Their chosen representatives. These rules are to be enforced for all participants on the field (except as indicated in the following). This includes marshals and fighters. Water bearers are specifically exempt from these rules. Fencing masks, blade tips/blunts and tip tape are acceptable for use on the field for rapier combat.
 - If there are site restrictions regarding use of non-marking soles,
 waivers for modern footgear may be obtained from the Earl Marshal,
 KRM, relevant deputies or the Crown.
 - Participants that are residents of another kingdom are to be considered our guests and are exempt from this ruling provided they meet SCA minimum standards. Newly transplanted citizens of Trimaris are to be granted a reasonable period of time (6 months) to come into compliance with this rule.
 - Marshals are reminded that the intention of the rule is to attempt to improve the field appearance while still allowing folks on the field. If someone is borderline in compliance, allow them to participate, but notify them of the issue and request they rectify it.

2.B HEAD AND NECK

- B.1 The front and top of the head must be covered by rigid material to below the jaw line and behind the ears. Standard 12 kg fencing masks are known to meet this standard. If built to this standard, fencing helms are also acceptable.
- B.2 The face must be covered by either 12 kilogram mesh (e.g, a standard fencing mask) or perforated metal. Such metal must not have holes larger than 1/8" (3 mm) in diameter, with a minimum offset of 3/16" (5 mm) and shall also meet the definition of rigid material.
- B.3 Masks and helms must be secured to the fighter, so that they cannot be easily removed or dislodged during combat. The combination of snug fit and the spring-tongue in a conventional fencing mask is NOT sufficient, by itself, to secure the mask to the fighter.
- B.4 All parts of a fencing mask or helm that might cause injurious contact with the wearer's head shall be padded or shall be suspended in such a way as to

- prevent contact with the wearer during combat. There shall be no major internal projections; minor projections of necessary structural components shall be padded. All metal shall be free of sharp edges.
- B.5 The interior of fencing masks must have a minimum of ½" (6.4 mm) open-cell foam or equivalent resilient padding to create separation between the mask and the wearer. Modern fencing masks (e.g. FIE and USFA type masks) in good working order meet this requirement without additional padding, but may require additional padding as it ages.
- B.6 For helms that utilize a suspension system which does not, on its own, prevent contact between the wearer and any rigid part of the helm, additional padding must be present. This padding must consist of at least ¼" (6.4 mm) open-cell foam or equivalent resilient material.
- B.7 Helms without a suspension system and which rely on foam must use a minimum of $\frac{1}{4}$ " (6.4 mm) closed-cell foam or equivalent resilient padding which provides progressive resistance to create separation between the hard outer shell of the helm and the wearer.
- B.8 Similarly, parts of the inside of the helm that might come in contact with the wearer's neck or body must be padded.
- B.9 Both modern fencing masks and rapier helms, when inspected, shall comply with the rigid material standard, provisions on facial coverage, and shall show no evidence of impending failure (e.g., rust which weakens the metal involved, dents or other defects which spread open mesh, broken weld points, etc). If there is concern about the face mesh of a modern fencing mask, it should be tested using a standard commercial 12kg mask punch. Marshals doing the testing shall be trained in the use of the punch. The Kingdom Rapier Marshals may elect to designate certain deputies to administer such testing.
- B.10 The rest of the head and neck must be covered by at least puncture resistant material.
- B.11 For heavy rapier and cut and thrust rapier, additional throat protection is required; it shall consist of rigid material, as noted above, covering the entire throat, and shall be backed by either puncture resistant material (as a hood), one quarter inch (1/4") (6 mm) of open-cell foam, or their equivalents. The cervical vertebrae shall also be protected by rigid material, provided by some combination of gorget, helm, and/or hood insert.
- B.12 For cut and thrust rapier, the back of the head must also be covered by rigid material, as noted above sufficient to protect against percussive cuts.

××

2.C TORSO AND OTHER KILLING ZONES

C.1 The entire torso (the chest, back, abdomen, groin, and sides up to and including the armpits) must be covered with puncture-resistant material.

- C.2 Acceptable minimum armpit coverage is provided by a triangle extending from the armpit seam, covering the lower half of the sleeve at the seam, and extending down the inner/under arm, one-third the distance to the fighter's elbow.
- C.3 In addition, any part of the person vulnerable to significant serious injury or disproportionate bleeding, such as external reproductive organs, or hemangioma, must be covered by rigid protection.

2.D ARMS AND LEGS

- D.1 Hands shall be protected by gloves, made of abrasion resistant material, that overlap any sleeve openings as below. Feet shall be protected by boots, shoes, or sandals, comprised of at least abrasion-resistant material.
 - Metal cleats are forbidden in Trimaris
 - In Trimaris, all types of tennis shoes, hiking boots with modern logos displayed, track shoes, soccer shoes, running shoes, etc. are expressly forbidden on the field, unless they have been covered with some period (or period looking i.e. fur, leather, paint, dye, etc.) material to alter their appearance so that they may not be recognized as modern. Combat boots, work boots, or hiking boots that are a single color and do not 'stand out' as visually jarring are acceptable.
- D.2 Abrasion-resistant material is required on arms (save as noted above for armpits), legs, and any area not otherwise mentioned in these rules.
- D.3 No skin shall be bared. There shall be sufficient overlap between separate pieces of protective clothing, regardless of the fighter's stance or movements, that the minimum protection for that body area be preserved.
- D.4 For cut and thrust rapier, elbows must be further protected by a minimum of an athletic pad or equivalent materials.
 - In Trimaris, knees must be further protected by a minimum of an athletic pad or equivalent materials during cut and thrust rapier play. Additional padding or rigid protection for the hands, while recommended, is not required.

V. MARSHALLING CONCERNS IN RAPIER COMBAT

1. AUTHORIZATIONS

1.A Authorization for Fencing must, at a minimum, verify that the candidate understands the requirements for armor and weapons, and demonstrate that they can participate in Fencing activities in a manner that maintains their safety and that of their opponent, including appropriate calibration of blows and comportment on the field. \times

- 1.B Competence in other SCA combat styles does not automatically mean competence in rapier. Separate warrants and authorizations in rapier combat are required. Each Kingdom can decide how they wish to control authorizations for each category of rapier combat.
 - Trimaris weapon authorizations are listed in section II.1.E.2

2. BROKEN BLADES

2.A Marshals and fighters shall pay special attention for missing tips or broken blades.

3. CLOAKS

- 3.A When cloaks are used, "HOLD" should be called if the cloak becomes tangled about either fighter, or about one of the weapons such that the weapon cannot be withdrawn. "HOLD" need not be called if the cloak is merely near the face, deflecting a weapon (assuming that the Kingdom rules allow use of the cloak for blocking or deflection), loosely draped over, or weighting down the blade.
 - Trimaris rules allow the use of a cloak for blocking or deflection.

4. BLADE GRASPING

4.A Blade grasping is allowed in heavy rapier and cut and thrust rapier. When a blade has been grasped by an opponent, "HOLD" shall be called if wrestling about the blade occurs.

5. EXCESSIVE IMPACT

- 5.A Combat in the Society poses risks to the participant. This recognition, however, does not excuse fighters from exercising control of their techniques. If a fighter throws blows which force their opponent to retire from the field, from a real injury (even one which only causes brief incapacitation), the marshal responsible for the field shall take such steps as are appropriate to stop the problem from recurring.
 - Injuries must be reported to the Kingdom Rapier Marshal in a timely fashion (see the Trimarian Rapier Marshal's Handbook for additional information).

6. MELEE

Melee combats present special challenges to all involved. Society norms are as below:

- 6.A In melees, fighters are engaged with all opponents immediately upon the call to lay
- 6.B Fighters may strike any opponent with any legal blow if they are within the 180 degree arc of the opponent's front. A fighter who approaches an opponent from behind shall not deliver a blow until he is within that frontal arc. A fighter may never deliberately strike an opponent from behind.

- A fighter must be within the 180 degree frontal arc before starting to throw their shot. Doing otherwise is commonly referred to as point stalking.
- 6.C Killing from behind is allowed if it has been announced beforehand. The Society norm for "death from behind" in melees shall be: If a melee scenario allows killing from behind, a fighter does so by laying the rapier blade over the opponent's shoulder, to at least a third of the blade, while calling "Dead, my lord" (or other short, courteous phrases) in a loud, clear voice. Reaching around the neck is forbidden. The opponent will be deemed "killed" from the instant the blade touches his shoulder and shall not attempt to spin, duck or dodge away.
 - C.1 If death from behind is not allowed in a given melee, a fighter who deliberately ignores an attacker behind them, or repeatedly maneuvers to keep their back to an attacker (thereby preventing any attack on them) may be considered for misuse of the rules and obstructive behavior.
 - C.2 Daggers may also be used but care must be taken not to punch or strike the fighter with the guard or quillons of the dagger when so used.
- 6.D In special scenario melees (e.g., bridge or town battles), additional restrictions may be imposed by the marshals as needed.
- 6.E Cut and thrust rapiers may not be used in melees.

7. MINORS

The minimum age for training and authorization in rapier combat is 14. When fighters under the age of 18 undertake training and authorization, the Kingdom Rapier Marshal (or his designated representatives) shall ensure that the minor's parent or legal guardian has observed rapier combat, is aware of the risk of injury inherent in this martial art, and has signed a statement explicitly acknowledging the above.

- 7.A A youth rapier fighter may participate in melees with other rapier fighters (youth and/or adult) subject to whatever age requirements and other qualifications that are mandated by their kingdom rules.
 - On a mixed field (minors and adults fighting against each other),
 combatants under the age of 18 must have a diamond no smaller than 1"
 on the cuff of the glove worn on their dominant hand.
 - See the Trimarian Youth Rapier Rules for additional information regarding youth in rapier combat.

XX

8. PERIODIC TESTING OF PROTECTIVE GEAR

- 8.A Kingdoms shall require all gear to have been formally tested (including fabric and mask tests, as appropriate) at least once every two years. Compliance is the responsibility of the individual fighter. Any protective gear may be formally tested if there is concern that the gear may have lost protective ability due to age, wear and tear, or other factors. Refer to Appendix 1 on Testing Standards.
 - Only marshals who have been trained in the use of a mask tester should test
 masks, remembering that this test should be done only every two years,
 unless requested by the participants or the mask is in doubt of failure, as this
 test shortens the life of the mask.

9. UNFORESEEN SITUATIONS

9.A Should a situation arise not explicitly covered by Corporate or Kingdom rapier combat rules, the marshals should NOT assume that the situation is forbidden or inappropriate. Again: However, no matter how clear or accurate, rules cannot replace common sense, good judgment, and concern for the participants.

VI. MARSHAL WARRANTS AND TRAINING

1. WARRANTS

- 1.A The Kingdom Earl Marshal's Office has Final Authority on all Authorizations and Warrants.
- 1.B The Kingdom Earl Marshall (KEM) May override the 2 signature requirements to authorize individuals in any area or style. Consultation with the appropriate DEM is highly encouraged.
- 1.C Deputy Earl Marshals(DEMs) may override the 2 signature requirements to authorize an individual, but only for the areas they supervise as a Deputy.
- 1.D All Marshals must be warranted regardless of type.
- 1.E A Roster of each type shall be kept on file by the KEM's office.
- 1.F To be Warranted, you must be a member and have a signed Warrant Form on file.
- 1.G There is no such thing as an "Unwarranted Marshal."
- 1.H A Warrant is required to sign off on any Marshalate paperwork.

2. MARSHAL CATEGORIES

- 2.A There are 3 Categories of Warranted Marshals.
 - A.1 "Field Marshal" (Inspecting Marshal)

- Warrant requires KEM signature and lasts for 4 years
- Can run practice and perform inspections
- Can run a list
- Can be the Marshal in charge of an Event
- Must be renewed with the KEM 's Office by submitting a renewal form at the end of the duration

A.2 "Marshal-at-Large" (Authorizing Marshal)

- Warrant requires KEM signature and lasts for 4 years
- Can run practice, perform inspections
- Can run a list
- Can be the Marshal in charge of an Event
- Can administer a fighter AUTHORIZATIONS
- Must be renewed with the KEM 's Office by submitting a renewal form at the end of the duration.
- Must be authorized in all styles.

A.3 Kingdom Officer Marshals

- Includes Earl Marshal Deputies and Knight Marshals
- Requires signature of at least 1 Crown and the KEM.
- Will have a separate Warrant in addition to one of the Warrants above.
- Lasts for 2 years, but may be extended with KEM approval.

3. MARSHAL TRAINING

Marshal training is a Multistep process that begins with completing all the steps on the field marshal checklist as Described in the Field Marshal Training 101 class.

After the initial warranting process is complete a field marshal may proceed to the Marshal-at-large training as described in the Marshaling 201 class.

Persons who have begun this process are known as Marshals in Training (MiT's).

INDEX

abrasion-resistant material, 13 acrobatic moves, 7 altering blades, 11 appeals, 4, 5 armor, 4, 5, 8, 13, 14, 27 armpit, 15

authorize,4, 5,6, 7, 16 back of the head, 15 behavior, 7, 8, 9, 18 blade flex, 11 blade grasping, 17 blade length, 7

bodily harm. See Physical Injury	ratio, 17
bucklers	masks, 15
offensive, 12	melee, 17
calibration, 7	MELEE
chirurgeons, 5	death from behind, 18
cloak, 12, 17	engagment, 17
combat archery, 4, 5, 12	point stalking, 18
combatants, 4, 6, 8, 14, 17, 18, 23	MINORS, 18
cut and thrust, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18	melees, 18
dagger, 7, 11	minimum age for training, 18
disagreements, 7	moulinets, 8
draw cut, 8	parrying devices, 8
entanglement, 12	participants, 3, 4, 5, 9, 14, 19
entrapment, 8	percussive cuts, 8
equipment, 10	period appearance, 14
excessive impact, 17	physical injury, 4, 7
exhaustion, 7, 14	projectile weapons, 4,6, 12
fleeting contact, 9	puncture-resistant material, 13
footwear, 16	push cuts, 8
forfeiting, 4, 11, 12	quillons, 12
gloves, 16	real weapons, 4, 6
gorget, 15	rigid material, 13
grappling, 9	Rules of the Lists, 4, 5, 6
grasping blades, 9	running, 7, 8, 16
grips, 12	secondaries, 7, see bucklers, cloak, parrying
groin protection, 16	devices
heavy rapier, 7, 8, 9, 10, 11, 15, 17	skin, 9, 16
Heralds, 5	Sovereign, 4, 5, 6
HOLD, 7, 8, 10, 17	tape, 12
hoods, 15	TESTING OF PROTECTIVE GEAR
interkingdom events, 6	use of a mask tester, 19
intoxication, 7	tip cuts, 8
kevlar, 13	torso, 9, 15
kinks, 12	Two-Handed Rapier, 7
leaping, 7	valid blow, 8,9
light rapier, 7, 9, 10	Water bearers, 5, 14
marshal	weapon length, 10

APPENDIX

I. TESTING STANDARDS FOR SCA RAPIER COMBAT

A. FABRIC TESTING FOR PROTECTIVE GEAR

- A.1 Tests known to be acceptable include:
 - 1.1 Cloth or garment manufacturer's commercial certification that a fabric is rated to 550N. (Documentation must be available at the time of inspection.)
 - 1.2 Use of 550N garment punch test devices, manufactured by sources acceptable to the Deputy Society Marshal for Rapier Combat. Such a device shall be used in accordance with its' instructions.
 - 1.3 Use of a drop test device which delivers a force, on dropping, of 1.5 joules to the fabric sample via a dull, flat 5/32" (4 mm) metal rod. As a general example, this rod can be mounted on a 1.0 kg (2.2 lbs) solid weight and dropped down a guide tube from 15.3 cm (6 inches) onto the fabric sample. The sample must be held firmly over a 3" diameter externally threaded frame by clamps when the drop test is applied. More specifically, the drop tester must be constructed and used as described in instructions found in Appendix 3 of these rules.
 - 1.4 Use of a flat-broken foil blade to thrust against the material. To conduct this test, lay the material to be tested on firm ground or penetrable material (not hard packed dirt, concrete or similarly hard surfaces). Holding the broken blade in both hands, punch the material four times, increasing the force each time. After each punch, examine the material. For these tests, if the material in question has been completely penetrated, or penetrated in more than one layer, it fails. If only the top layer has been damaged, then it passes.

B. BLADE FLEXIBILITY TESTING

B.1 The definition of "reasonably flexible" is dependent upon the length of the blade and the weapon class it is to be used in. To determine if a weapon meets the standard of being "reasonably flexible": Hold the weapon parallel to the ground, supporting the handle against a table or bench if necessary. Hang a 6 ounce weight (170 grams) – one inch (25 mm) or less from the end of the tip. If the blade flexes as indicated in the following table then it is deemed "reasonably flexible" for that weapon class.

Weapon Class	Blade Length	Minimum	Weight
		Deflection	
Light Rapier	> 18" (45.72 cm) <= 48" (121.92 cm)	1" (25mm)	6 oz (170 grams)
Heavy Rapier			
Light Rapier	<= 18" (45.72 cm)	½" (12mm)	6 oz (170 grams)
Heavy Rapier			
Cut & Thrust	> 48" (121.92 cm)	½" (12mm)	6 oz (170 grams)

II. PROCEDURES FOR EXPERIMENTATION IN RAPIER COMBAT

- A. Before any new weapon or technique can be used in Society Rapier Combat, a test plan must be submitted to and approved by the Deputy Society Marshal for Rapier Combat. This plan shall describe:
 - A.1 The new weapon or technique
 - A.2 Specifics of materials used and construction of the weapon (as appropriate);
 - A.3 In the case of new blade types, a sample of the new blade-type for direct evaluation by the Deputy Society Marshal
 - A.4 The proposed uses of the new weapon or technique
 - A.5 All restrictions that will be imposed during the experimental period
 - A.6 How long the test period will be
- B. It is the prerogative of the Kingdom Rapier Marshals, subject to the above, and to approval of their Earl Marshals, to allow testing of new weapons or techniques within a kingdom. Testing means the weapon or technique may be used at fighter practice, tourneys, and in small melees after all combatants and marshals have been informed the weapon or technique is being tested and that it is not approved for general SCA use. All combatants and marshals must consent to the use of the weapon or technique before combat begins. If any of the marshals or combatants object to the use of the weapon or technique, it may not be used.
- C. At regular intervals the Kingdom Rapier Marshal shall report to their Earl Marshal, and the Deputy Society Marshal, on the progress and results of the experiment. At the end of the test period the Kingdom Rapier Marshal will provide the Deputy Society Marshal with a test summary, to include a list of any injuries that resulted from the use of the weapon or technique, and any concerns from fighters and marshals arising from the testing. The Deputy Society Marshal, after consultation with the Kingdom Rapier Marshals, shall determine if the weapon or technique seems suitable for SCA Rapier Combat. He shall then report to the Society Marshal for final adjudication.

III. PROCEDURES FOR CREATION OF A DROP TESTER

- A. It is important not to deviate from the construction specifications given below without approval, as seemingly minor changes can affect the test results.
- B. There are three major parts to the tester, the drop probe (the weighted piece), the guide tube, and the round frame (3" flange, below) over which the fabric to be tested is clamped. The actual test method is detailed in Appendix 4 of the Society Rapier Combat Rules but here is a brief overview:
 - 1.1 Clamp the fabric over the 3" flange, balance the guide tube over the center of the fabric, and drop the weighted drop probe down the middle of the guide tube, as shown in Figure 1, below. If the rod on the end of the falling drop probe punches through, the fabric fails, if it doesn't punch through the fabric passes.



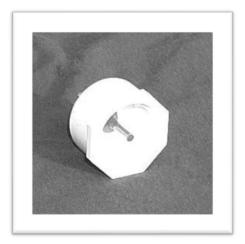
Figure 1 -Drop tester (pipe end sticking out of white guide tube) ready to use on some fabric clamped onto the 3" flange.

These instructions describe how to build a drop tester for carrying out these tests. It won't take very long to build, and will not be very expensive, but does need one special part.

PARTS LIST

- 1" nominal diameter 18" long Black Pipe stub from any do-it-yourself/hardware store, plumbing supply house, etc, this is heavy, iron pipe used for natural gas.
- 1" nominal plastic cap for pipe above (screws onto end of pipe)
- 0.156" (5/32") "plus tolerance" diameter gage pin, 2 inch length, such as from Meyer Gage Company, CT, 860-528-6527, Class ZZ, \$2 each, \$10 minimum order

(http://www.meyergage.com/products/english_gage_sets.htm)



NOTE: As of 2006, Meyer replaced their Class ZZ gauge pin with a Class Z gauge pin. This pin is also acceptable for use.

- drill bit stop or collar (piece that goes on to a drill bit to set the depth of a hole)
- epoxy (the solid grey type such as JB Weld works well, clear epoxies do not hold up as well)
- 2" nominal diameter PVC or equivalent (material doesn't matter for this), at least 30"
- • 3" PVC 3" Male Adp. DWV (short section of PVC, has *external* threads on one end)



• • 2 hose clamps, 2.5" to 4" range (large enough to fit over 3" adapter above)



• screwdriver or nut driver (to operate test)

CONSTRUCTION TOOLS

- Power drill with 5/32" drill bit
- scale capable of measuring to about ½ oz or 10 g (can go to post office and use theirs)
- (optional) saw (some way to cut the PVC pipe above, or can have it done at hardware store)
- (optional) file, sandpaper, to smooth PVC

CONSTRUCTION

Step 1: Make the Guide Tube

- 1. Cut the 2" nominal diameter PVC tube to 23.6" (60 cm) in length. Try to make the ends square (so when it is placed on a flat surface on either end, it stands up straight). A wood saw is fastest for this, a hack saw will work as well, or get it cut at the store you buy it at.
- 2. Drill three holes with the 5/32" drill bit near the bottom end of it for air release when the probe drops, the location doesn't matter as long as they are within a couple of inches of the bottom.

Step 2: Make the Drop probe

1. First get a gage pin, at the supplier above. Do not modify the end, these pins are used because they are consistently manufactured. Make sure that the pin is clean of any oil or other chemicals that would keep the glue from sticking properly.

- 2. Drill a hole in the center of the 1" plastic cap with the 5/32" drill bit.
- 3. Now put the drill collar on the gage pin with about half of the gage pin sticking out of one side, and apply epoxy. Before it dries, put more epoxy on the gage pin, and shove it into the hole in the cap, with the drill collar on the outside, curved side of the cap. The exact type of drill collar isn't important, it is just to provide some extra grip to keep the gage pin from breaking loose and sliding up into the drop probe with repeated impacts, since the PVC hole alone isn't a great glue surface.
- 4. When you have it put together and the epoxy is still wet, put it on a flat surface and slide the gage pin down until it bottoms out where the plastic cap sits on the flat surface. It will look something like Figure 2, below, when done. Make sure the gage pin doesn't dry at an angle (it should be parallel to the iron pipe, keep checking visually as it dries). If the pin isn't sticking straight out of the cap, your drop tester will not work properly.

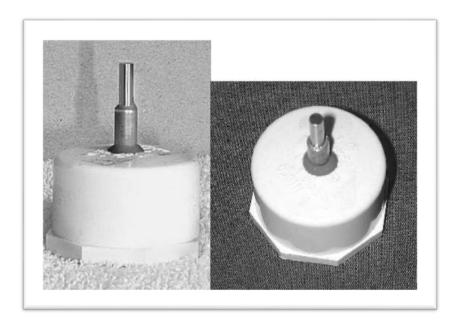


Figure 2 -Plastic cap with gage pin and drill collar sticking out, all epoxied together (gray)

- 1. After the epoxy dries, screw the cap on to one end of the pipe (make sure not to get epoxy on the threads, you may want to remove it later!).
- 2. Weigh the drop probe assembly, using a good scale. It should be able to measure to half an ounce or 10 grams, a postal scale at the post office could work for example. If possible, try to use metric units -it will make calculations easier later on.
- 3. The height from which the probe will be dropped is directly dependent on the weight of the probe. Since not all cast iron pipe will weight the exact same amount, and the length of the pipe

may be off by a small portion, calculate the exact drop height for the probe being constructed. Use the formula below for a 1.5 Joule drop energy to calculate the drop height for your tester.

In Metric units: 15306 / (the probe weight in grams) = drop distance (in cm) or, in American units, 212.6 / (the probe weight in ounces) = drop distance (in inches)

Plug the measured drop probe weight into one of the formulas and calculate the drop distance. It should be between 10 and 20 cm (4 and 8 inches), if not, you found a really unusual pipe stub and should not proceed further.

8. Lay the probe next to the PVC tube from the first step, slide it "up" next to the PVC guide tube until you have that calculated drop distance from the bottom of the PVC tube to the gage pin sticking out of the drop probe, and mark the top end of the drop probe where it lies next to the top of the PVC guide tube (tape, etc.). That is the mark you will want to line up with the top of the PVC tube when you drop the probe. Some of the probe will stick out of the top end of the tube when you have it all together vertically and give you a place to grab it. (The reason metric units are easier is that it's easier to measure fractions of a centimeter than it is fractions of an inch.)

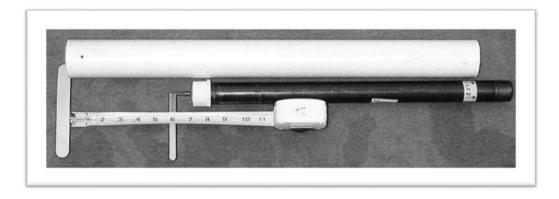


Figure 3 -Lay drop probe assembly (pipe and cap) next to PVC guide tube, and measure your calculated distance from the probe tip to the bottom of the PVC guide tube.

Step 3: The Clamps and Frame

No modifications needed here, you just need the two hose clamps and the threaded flange, along with a screwdriver or nut driver to tighten the hose clamps. Do not substitute other parts for the flange with outside threads, as the grip on this surface has a big impact on fabric slippage, which has a big impact on whether the test passes or fails armor.



Figure 4 -Clamps and "frame" (3" flange) showing how these are assembled to carry out a fabric test.

It is suggested that you get a nut driver (like a screw driver, but with a socket head) for tightening and loosening these hose clamps, it is much easier to use than a screw driver as well as being safer.

IV. PROCEDURES FOR USE OF A DROP TESTER

The basic idea behind this test is to drop a known weight a known distance to give a known impact, giving a pass/fail verdict to "unknown" fencing armor. This document will tell you how to use the tester to test armor. See Appendix III (Building a Drop tester) for how to choose and build these items. You should have all six pieces shown in Figure 5, below, including a guide tube, drop probe (unique to your tester), 3" threaded PVC flange, two hose clamps and a screw driver or nut clamp to tighten the hose clamps.

You should only use your probe with the guide tube it was designed for. Interchanging these items between testers may produce inaccurate results.



- 1. You need a hard surface to work on. Surfaces such as pavement, an extremely sturdy table, concrete, etc are good choices. Carpet or grass are bad choices; they absorb impact and make the test too easy for armor to pass.
- 2. "Start by setting the threaded PVC flange thread side up and laying the test fabric over it, and loosen the first hose clamp so that it will fit easily over the fabric and flange but pull the fabric somewhat taut as it is pushed down. Tighten that hose clamp, put a second one on and slide it down to touch the first then tighten the second one. It should look something like Figure 6. You may want to invest in a 5/16" nut driver (like a screwdriver with a socket head). It will prevent gashes on your hand from slipped screwdrivers. Note that if you didn't push the first hose clamp far enough down (you may want to lean on it a bit with the screwdriver or nut driver), the second hose clamp won't stay on when you tighten it; it will just barely fit if you do everything right.



Figure 6 -Fabric clamped onto flange with two hose clamps. Notice that the second one will protrude a bit above the level of the fabric with thicker fabrics, but it should still be tight if you push everything down enough.

- 3. Then, place the guide tube on the center of the clamped fabric. Steady it with one hand, trying not to push downward on the fabric.
- 4. Put the drop probe into the guide tube, lowering it to roughly the mark that shows where to drop it from, and slowly tilt the guide tube back and forth until the drop probe seems to hang freely, not lying against a side. (You are using the drop probe like a plumb bob to get everything vertical.) Line up the mark exactly with the top of the guide tube, and drop the probe. It should look like Figure 7 below just before you drop it.



Figure 7 -Drop Tester just before making a test drop. Note that the guide tube is centered on the clamped fabric, and the drop probe is being used as a plumb bob to make the guide tube vertical.

5. Let go of the probe.

Now examine the fabric. If the pin punched through anything beyond the top layer of fabric, the material fails. If the pin did not punch through, recheck the top hose clamp with a gentle tug to be sure it is still tight. If there was slippage it will often get loose, so this is a good check to be sure the fabric didn't slip. If it's loose, you need to redo the test. If it's not loose, the fabric passes. Always be sure to check the tightness of the fabric after the drop.

V. BLADE TYPES AND CONVENTIONS

Due to the continual evolution of blades being developed that are appropriate for use in rapier combat, Appendix 5 (which formerly contained a specific list of approved blade models and manufacturers) has been retired in favor of the objective criteria for acceptable blades as specified in the body of this document. For current information on kingdom specific rulings regarding allowed blades and conventions related to rapier combat please refer to the appropriate kingdom Marshallate and website.

VI. EXCEPTIONS TO THE ALLOWED BLADES RULES

Section 6 of the appendix lists blades that are explicitly permitted for or restricted from use in rapier combat. Blades on the "Restricted Blades" list may not be used in any Society rapier activities. Blades on the "Permitted Blades" list may be used as described within the list.

If a blade does not meet the criteria established in "Weapons and Parrying Devices", section 2.B above, but a participant wishes to use it in SCA rapier combat, that blade must be evaluated by the Deput Society Rapier Marshal's office. If the blade is found to be acceptable, it will be added to the list in Section 6 of the appendix.

The latest version of Section 6 is maintained on the SCA web pages under Society Marshal – Rapier (http://ww.sca.org/officers/marshal/combat/rapier/index.html).