

## **PROPOSAL FOR ADDITIONAL MOUNTED COMBAT SIMULATORS**

--Proposal submitted by Lord David Straker Whittaker, Caid

--Written in consultation with Mistress Arabella da Siena (Society Equestrian Officer), Master Laertes McBride (Society Rapier Marshal), Duke Guillaume de Belgique (Deputy Earl Marshal for Unarmored Combat, Kingdom of Caid), Master Eule and Sir Alexis la Bouche (Test Program Administrator for experimental jousting)

### **PURPOSE:**

Current mounted combat rules permit the use of simulators constructed with foam rubber over a rattan core. These simulators allow for a fairly accurate simulation of tourney batons (i.e. clubs), but for a number of reasons-- shape, balance, and the give of foam rubber-- they do a poor job of simulating mounted sword use. Different simulators will be needed if we wish to have a moderate amount of verisimilitude when reenacting tournament Grand Melees or in exploring mounted combat techniques contained in period manuals such as the Fiore and Ringeck manuscripts.

### **PROPOSED SIMULATORS:**

The Rawlins style plastic simulators as used in the SCA Unarmored Combat program and the various metal cut and thrust blades used in the SCA Rapier Cut and Thrust program have an established record of safety, notably in programs that require minimal armor. We already have extensive amounts of data and reports on these simulators. Importantly for the purpose of this program, they also provide a reasonably accurate simulation of the various swords used on horseback in period.

### **CONCERNS:**

- Experience with mounted combat has demonstrated that the vast majority of strikes are conducted at relatively matched speeds as the riders maneuver to gain advantage on each other, usually at a walk or trot and rarely faster than a collected canter. That said, blows thrown during a head to head pass have the potential for being somewhat stronger than a blow thrown by a combatant on foot, due to the higher relative velocities and mass of the horses. Experience with the jousting program has demonstrated that experienced and controlled riders can exchange blows safely in a head to head pass, but the point remains that this scenario needs to be approached with caution. Initial participants in this program should avoid strikes at high relative speeds until such a time as all riders and horses are completely comfortable with strikes throw at a walk or stand.
- As noted above, the proposed simulators have been proven to be safe when used in conjunction with relatively minimal armor. Current mounted combat armor requirements meet or exceed those of the

Unarmored and Cut and Thrust programs for the most part. The one significant point of difference is with head/eye protection, due to the narrower profile of the Rawlins and cut and thrust blades. Helmets for use in this program will have to meet the requirements recommended below.

- While certainly safe, the proposed simulators lack the padding of current simulators. While not an issue for an armored human, full armor for horses is less practical. That said, the proposed simulators have been tested with participants wearing nothing more than abrasion resistant clothing in non-vulnerable areas. As with the riders, the suggested horse armor is designed to protect the vulnerable areas of the horse, notably eye and head protection. Furthermore, wooden, metal and even sharp weapons are routinely and safely used in mounted games already, and have always carried the risk of horse strikes. It is presumed that all participants in this program will spend the necessary time with their horses desensitizing them to possibility of incidental contact with weapons, as they should with all horses engaged in mounted games of any sort. Riders may want to consider additional armor for their horses beyond just the mandatory minimums (see below).
- While thrusting is a large part of both the Unarmored Combat and Cut and Thrust forms, thrusting is not currently approved for mounted combat, although there is an experimental program. Accordingly, thrusting is prohibited with this current set of experimental guidelines. In the event that this prohibition changes for the regular mounted combat, this ruleset will be subject to review, but the prohibition will remain in place until and if a formal revision is published.

#### ARMOR GUIDELINES

- Unless otherwise stated, armor must meet normal mounted combat standards.
- Helmets
  - i. Helmets must be constructed of rigid materials.
  - ii. Openings on face guards must be covered with 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. Alternatively, 12 kilogram mesh (i.e. standard fencing mask mesh) is sufficient for face protection, so long as the remainder of the head is covered with rigid material.
  - iii. The face guard shall extend at least 1 inch (25.4mm) below the bottom of the chin and jaw line when the head is held erect.
  - iv. All movable visors shall be attached and secured in such a way that there is minimal chance that they will become detached or come open in normal combat use.
  - v. There shall be NO major internal projections; minor projections of necessary structural components shall be padded. All metal shall be free of sharp edges. Face guard bars or mesh

should not attach to the interior of the helm, unless of structurally superior design and workmanship.

vi. All parts of the helm that might come into contact with the wearer's head shall be padded with a minimum of ½ inch (12.7mm) of closed-cell foam or equivalent padding, or shall be suspended in such a way as to prevent contact with the wearer during combat.

vii. All helms shall be equipped with a chinstrap or equivalent means to prevent the helm from being dislodged or metal contacting the wearer's face during combat. An equivalent might be, for example, a bevor or a chin-cup suspension system. A "snug fit" is NOT an equivalent. The chinstrap shall be at a minimum a ½ inch (12.7mm) in width and shall not be placed in the helm in a manner that could strangle the wearer.

viii. Fencing masks with a minimum of 12kg mesh protection (standard three weapon masks) meet the above criteria so long as the remainder of the head is protected with rigid material.

ix. Additional helmets not meeting the above criteria may be approved on a case by case basis with the joint concurrence of the KEO and Test Program Administrator.

- Neck Armor: The neck, including the larynx, cervical vertebrae, and first thoracic vertebra must be covered by one or a combination of the following and must stay covered during typical combat situations, including turning the head, lifting the chin, etc.

- i. The helm.

- ii. A gorget of rigid material or heavy leather.

- iii. A camail or aventail of mail or heavy leather.

- The back of the fingers, thumb and the back of the hand require reinforced padding or rigid material. Examples include but are not limited to demi-gauntlets (paired with a guard) Revival sparring gloves, hockey/ lacrosse gloves or a standard metal gauntlet. The weapon or parrying device may provide some of the protection

- Rigid protection is required to cover all three points of the elbows

- Rigid material is defined as 20 gauge stainless steel (0.8 mm), 18 gauge mild steel (1.0 mm) or 14 gauge aluminum, copper, or brass (1.6 mm), one layer of hardened heavy leather (10 ounce). Equivalent materials may also be used, at the discretion of the KEO and Test Program Administrator. Chainmail over a padded gambeson or arming cote has been established as equivalent.

- Suggested additional armor includes rigid forearm protection and padded or rigid torso protection.

- Armor Requirements – Horses

- Eye protection: Acceptable eye protection should stand clear from the eye in all directions by ¾ of an inch. Examples of acceptable protection are:

- A chamfron incorporating pierced metal cups or grillwork.
- Blinker style, such as the lexan/acrylic eye protection used by jockeys and trainers at the racetrack. The blinker must use transparent full eyecups. Partial eyecups are not an acceptable substitute. Eye protection of this sort may be incorporated into a period horse garment providing the garment ensures proper placement of the eyecups at all times.
- Police Riot gear. Full-faced riot protection made of 1/8 lexan attached to the bridle of the horse.
- Pelling Pacifier. Blinker style using a sturdy metal mesh.
- Note that these requirements are very much subject to change, and it is anticipated that part of the experimental program will involve stress testing horse eye protection.

- In addition to the above requirements, use of a chamfron or face protector and poll protection is highly recommended and may be a requirement in the final draft of these rules, pending experimentation. Furthermore, a full caparison can help avoid abrasion from metal weapons. As always, it is expected that riders take full responsibility for the health and well-being of both themselves and their mounts.
- These above requirements reflect the minimum standards needed to avoid serious, permanent injuries for this activity. They will not prevent occasional bruising or abrasions, and no armor is a completely guarantee against serious injury or death to rider or mount.

## WEAPON GUIDELINES

- Cut and Thrust style blades: Any currently approved blade in the Cut and Thrust program is allowable for this program. Additional equivalent blades can be authorized at the discretion of the KEO and Test Program Administrator.

--All blade ends must be capped with rubber, plastic, or leather.

--Tips will have a blunt striking surface, presenting a cross-section of at least 3/8 inch (9mm) diameter.

-- Tips must be firmly taped or glued in place. The tip must be of 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.

- Rawlins Synthetic blades: All Rawlins synthetic blades that reproduce period swords are acceptable. This currently includes their longsword, "short sword" (i.e, arming sword) and basket hilt sword.

--Tips for synthetic swords do not need to be capped.

## PROPOSED CONVENTIONS

- The following are initial set of proposed conventions. They may be changed after the introductory period with consultation from the Society Equestrian Officer.
- Unless otherwise stated, all current guidelines for mounted combat apply.
- Sessions must be supervised by an authorized equestrian marshal. The marshal must be mounted combat authorized.
- Any blow that if missed would contact the horse must be discontinued. For example, if a rider's arm is next to the neck of the horse, striking at the arm is prohibited. Riders should not use this rule to their advantage by using their horse as a shield.
- If a strike carries through to the horse, a hold will be called. Riders should debrief the occurrence before recommencing the session.
- As a general guideline, engagements will be conducted until the first good blow or agreed upon number of counted blows, at which point combatants are expected to cease combat until the next engagement is commenced. Blows will be called by the struck combatant.
- Blow calibration has not yet been established, but current mounted combat calibration levels are a good start. In all events, incidental conduct will not count as a blow. At the other extreme, a fully focused blow such as seen in armored foot combat would be excessive for the current armor requirements. In general, an unobstructed blow thrown at speed with "intent" would meet the envisioned calibration for this program. Participants should keep in mind that occasional minor injuries such as bruises and abrasions are almost inevitable, particularly if only minimal armor is worn.
- Thrusting is not currently allowed.
- Plastic swords can only be used against plastic, foam covered simulators against foam simulators, and metal against metal.

## TEST PROGRAM OUTLINE

Phase One will last for a minimum of twelve months. Subsequent phases will be scheduled based on test results.

## PHASE ONE

- The fighters conducting the test must be approved by the Kingdom Equestrian Officer or the Test Program Administrator .

- Riders conducting the test must report their findings to the Test Program Administrator at the end of the first month and then at three and six months. Any potential hazards or injuries will be reported immediately (See Test Evaluation Report)
- The weapons will only be used at equestrian practices or in individual challenge matches at events.
- Any potentially hazardous issues will be reported to the Earl Marshall and the test program administrator as soon as possible.
- Phase I will last for twelve months. At the end of twelve months:
  1. The Test Administrator will make a report to the Kingdom and Society Equestrian Officer and forward all Test evaluation reports.
  2. If the majority of the fighters conducting the test and the Earl Marshal approve, the testing will proceed to Phase II.
  3. If either the SEO or a majority of riders are opposed to moving to Phase II, at the SEO's discretion Phase I will be extended for six months or the test will be ended.

## PHASE TWO

- The experimental weapons may be used by any appropriately authorized fighter. Depending on input during Phase One, this may become a separate authorization from mounted combat.
- The experimental weapons may be used in tournament with the approval of both combatants and the marshals.
- Riders and marshals will be solicited for commentary on the weapons.

## PHASE THREE

- If the testing warrants, a complete test report will be submitted to the kingdom and Society marshals to peruse legalization as standard weapon types allowed in mounted combat.

Submitted by

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TEST EVALUATION REPORT

Rider evaluating weapon: \_\_\_\_\_

Weapon length: \_\_\_\_\_

Weapon type: \_\_\_\_\_

Material/Brand: \_\_\_\_\_

Armor Worn \_\_\_\_\_

Weapon striking power as compared with rattan/foam:

Weapon durability as compared to rattan/foam:

Feel of the weapon:

Comments & Recommendations:

LIST OF AUTHORIZED PARTICIPANTS (CAID)

TBA

## APPENDIX A

### NOTES FROM HISTORICAL MANUALS

Unfortunately, period discussions of horseback sword work are not as plentiful as, for example, longsword work on foot. However, there are certainly enough to give us a basic understanding of the principals involved. The Fiore and Ringeck manuscripts have been extensively studied and utilized by members of the SCA and Historical Martial Arts groups, so they can provide us with a good starting point. While there are some obvious differences between foot and mounted work, with a basic understanding of their respective systems we can explore and extrapolate from the mounted plays we do have.

#### **Fiore de Liberi (circa 1400)**

The following commentary and plays are based on the horseback section of the Fiore de Liberi manuscript. Great thanks to the Hopologia Association, which has placed facsimiles of the relevant sections online, with translation by Tom Leoni.

<http://hopologia.org/fr/fiori/f-index.html>

Note-- sword types are not specified, but it can be assumed from the illustrations as well as the rest of the Fiore manuscript that the riders in these plays are equipped with what we would call a longsword. The illustrated sword looks no different in length than the typically two handed sword we are familiar with for ground plays, but in these plays is used one handed.

Fiore specifies nine specific plays, all starting from *Coda Lunga*, with the blade held down and back on the left. Plate one discusses it as good guard against an opponent thrusting from the left (as illustrated), and also against *reversi* (cuts from the opponent's off side) and *fendenti* (overhead cuts). Basically, an all purpose guard, with the main response to an attack being to beat the opponent's sword away, taking care to do so to the side, lifting the opponent's blade.

Plate One:



Plate two discusses the first four plays

- Beat aside the blow, put point at chest/head.
- Same play, but cut at the head if he is helmetless.
- If the opponent lets his blade hang statically after being beat aside, grasp it and cut or thrust to the head.
- Disarm followed by a strike. Presumably this is like similar disarms in the Fiore ms

**Plate Two**



Plate Three has the next four plays. It includes a few wrestling moves, which quite obviously are beyond the scope of this program.

--Throw arm around neck after the beat aside and throw him to the ground. Not recommended in armor.

--Disarm to his grip if he turns his sword away and down.

--Strikes to leg from Coda Lunga. Not recommended against armored targets.

--For the eighth play, Fiore describes as how to defeat the various plays from Coda Lunga so far described (i.e, the standard beat aside counter). Throw the thrust or blow, then when they counter with a beat, flip your sword and pommel them to the face. Use this position as a cover as you ride by, then execute a quick *tondo* (horizontal cut) to the back of their head.

Plate Three

**Q**uesto sic lo quinto zozho che fa la caduta  
 cu lo rebattuto de spada. Io gli butto lo braccio al  
 collo alo uolero subito / e un tutta la spada am  
 lubattuto senza dubito. Et lo mio contrario de dredo  
 sic lo sezzendo zozho. Rey che stando armado di  
 spado no a lege.



**Q**uesto sic lo sezzero che uol tore la spada al co  
 pagno. cu lo mantentio de la spada laltre mantentio  
 Leueni in etto / della mano gli cadere la spada p  
 cetro.



**Q**uesto sic lo settimo zozho che cotruio  
 del quinto. Lo fiero chello gli fa in la guarda  
 a quello edesso. Et lo compagno fess armado  
 no te mfidar in esso.

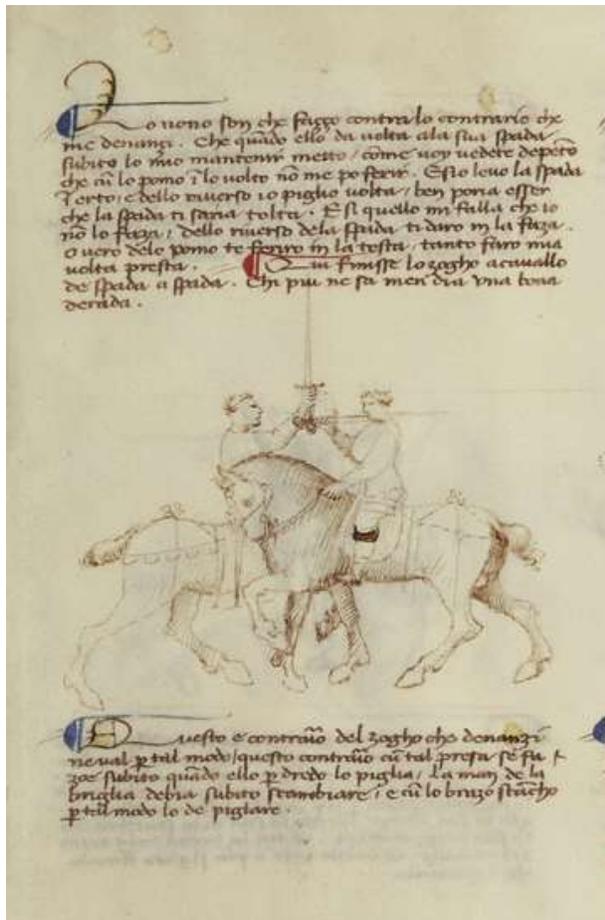


**Q**uesto sic lo ottauo zozho che cotruio di tutti  
 gli zozhi che ma sono denonati. e maxima miera della  
 zozhi de spada adualla. e della ley maire che sono  
 in guarda s'ada longa. Che quando li maire o  
 stola stano in la ditta guarda / e io gli tiro una  
 punta o altro colpo / e subito gli me rebattuto a taglia  
 o punta che fizza. Quando gli me rebattuto subito  
 e io do uolta ala mia spada / e di lo pono mio / io gli  
 fiero in lo uetro. Et poi passo ala mia quarta presta  
 cu lo tuorto tendo gli fiero dredo la testa.



--For the ninth and final play, Fiore describes how to defeat the eighth. As your opponent attempts to strike with the pommel, lift and block with the hilt of your sword. Fiore notes that if at this time you throw a *riverso* (offside shot), you might disarm him (presumably, your hilt lifts his up). If that doesn't work, *riverso* to the face or pommel him since "the turn of my sword will be very quick". Note that the remainder of the plate is the beginning of Fiore's horseback wrestling section.

#### Plate Four



That's all for sword vs sword work. Fiore also has a number of plays with lance, lance vs. sword, ground vs. horse and wrestling, all well worth looking at. But for now, to quote him "With this ends the play of mounted sword against sword. If you know any more, give me a good portion of your wisdom."

## **Ringeck Manuscript (circa 1420-1440)**

The Ringeck manuscript is well known for its treatment of 15<sup>th</sup> century German Longsword technique. It also includes a short section on mounted combat. While lacking the beautiful illustrations of the Fiore manuscript, it lists multiple guards and a few plays.

Many of Ringeck's plays involve finishing with a thrust to the face or a wrestling take down, both understandable moves if one is facing an armored opponent. Since there is an experimental program for thrusts, these plays are included here, but for now, thrusting is not permitted in this program. Wrestling take downs are not permitted, either, and unlikely to be so. Ringeck's discussion of moves including wrestling is included here strictly for historical interest.

Notes based on the translation and commentary provided by Christian Tobler in his book *German Medieval Swordsmanship* (Chivalry Bookshelf, 2001)

### **Guards**

*First Guard:* Sword angled across the saddle, resting on left arm. Preparatory position for the *Taschenbau* ("pouch strike")

*Second Guard:* Right hand held "high above head", with point dropped to threaten the face of the opponent. Note the similarity to the foot combat guard of Ochs, as well as the opponent's position in the first image in plate one of the Fiore horseback section.

*Third Guard:* Sword held at right side by leg with the point rising up to threaten the opponent. Note similarity to *Pflug*.

*Fourth Guard:* Place the sword pommel on saddlebow, with the point upwards as with the third guard.

*Fifth Guard* Hold the sword across the saddle, grasping the middle of the blade with the left hand. This is the basic horseback halfsword guard. Tobler notes that while there are no Ringeck plays utilizing this guard, other contemporary German manuals use this guard in plays that hook the opponent's neck as he rides by. Such maneuvers are outside the scope of this program.

*Mounted Nebenhut:* Like the fourth guard, but drop the tip so the sword is "at ease", resting against the right leg.

### **Plays**

--*Taschenbau:* Start in First Guard. Ride right to right. In response to a cut or thrust to the face, displace with the strong of your sword while rotating to Third Guard and thrusting from below to his face. If he displaces the thrust by moving "high up" with his sword, change the rotation to a cut at his left hands or reins. Ringeck adds that if you desire to distress his horse,

you can cut at his right leg to send the horse running. Distressing horses is a prohibited maneuver in this program.

--A variant of *Taschenbau* that finishes with the hilt of the sword against the opponent's neck, grasping the pommel from behind to pull the opponent off his horse.

--If your point is displaced in *Taschenbau*, grasp his right hand with your left and thrust to his face.

--*Oberhau* (overhead strike). If your sword is displaced from an *oberhau*, use the momentum to rotate your pommel to his face. Ringeck finishes from here to grasping the helmet and throwing the opponent..

--If your *Oberhau* is displaced by a *Zwerchau*, move up high with your sword and thrust to his face (a basic *winden* move from German longsword). If he rides past you, move your right arm over his right, pressing his arm against you and take his sword.

--From *Nebenhut*, as the opponent approaches, raise your sword into *Langen Ort* (Long Point, basically pointed straight at the opponent).

--If from the previous play, the opponent displaces the thrust, wind up to the Second Guard and hang the point at his face. If he continues to ride at you, thrust to his face.

Note: the last play was referred to as "the first play in *Nebenhut*" in the manuscript, but unfortunately, the mounted combat section ends abruptly here.