Small Unit Tactics for Light Weapons

(This document is also available in [PDF format](#)).

The Blue Company

Tristan Grey
Randal the Malcontent
Alexandre Bernajoux
Robert de Marchet
Constance de Marchet
Regan Davis
Iain MacGhilleMhuir
Arcadia de Medina
Valeria Davis
Natalia Vasilkovna Riazan

Scola Metallorum
The Outlands

January 30, 1999
2nd Edition

Table of Contents

A * indicates that this chapter is still under development

Introduction

1st Edition, 1996...

After playing SCA light weapons for several years, my friends and I gradually became frustrated and bored with the usual tournament scenarios. After all, once you've done one double elimination, you've done them all. This led to an increased interest in melees. After all, a melee represents the ultimate in combat -- multiple fighters, multiple weapons, terrain, goals, tactics, and strategy. This is not to say that a formal duel over a matter of honor cannot be exciting and fun. However, in comparison to running through a mock village with five of your friends looking for bags of treasure and fending off city guards, the duel is somewhat lacking. This manual is meant to be extend the melee within SCA light weapons above and beyond the usual open field battle. Within this handbook are the basic tools for creating units and scenarios for light weapons melees. In addition, the manual extends the basic melee to include missile weapons, an aspect of combat usually not seen in light weapons. This manual is not meant to be the final word in melee tactics and strategy -- instead, the manual is meant to explore some of the possibilities inherent to light weapons melee combat.

2nd Edition, 1999...

Now after almost three years of working on the manual, my friends and I have come to realize that this document is constantly evolving. In reviewing tapes of old fighter practices, events, and melees, we noticed that much of the 1st edition manual was quickly becoming outdated. Some changes occurred in response to increasing importance of light weapons melee combat in the kingdom (as seen at the Estrella War). Other changes occurred as counter-tactics rendered existing techniques for offense and defense ineffective. Some changes even occurred as several of the Blue Company instructors modified our existing training programs for new fighters into include basic melee skills. Finally, we decide to make the extra push and completely convert the manual over to HTML as the paper copies were becoming cumbersome and expensive to create and distribute. We hope you enjoy the second edition and find it a valuable resource in your light weapons fighting.

Today: Web Update, 2002...

Many changes have happened in the Blue Company--focuses have changed, members have come and gone, and our knowledge-base has grown, however, we still do a great deal of work with
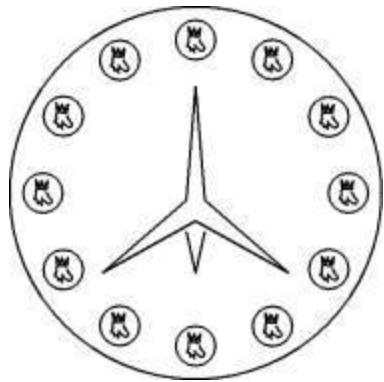
melee and are continually trying to adapt and improve our training regime with experimentation and practice. There is a lack of interest in updating the manual, at present, however finding it online and navigating through it can truly be a pain. Thus, I am endeavoring to update the formatting and HTML to make it more closely resemble xhtml and removing some of the quirks of navigation that were present in the old manual.

I should emphasize that I have left this manual relatively unchanged from the 1999 version, simply making minor modifications to layout and hosting it on my site.

In Service to the Dream,
David ap Llywelyn ap Gwyn
ap_llywelyn@mac.com

Today's insanity, tomorrow's textbook military procedure. -- *Unknown*

Winning isn't everything. You gotta look good, too. -- *Tristan Grey*

Chapter 1: Before You Melee

It's time to kick ass and chew bubble gum -- and I'm all out of gum. -- *Duke Nukem*

Wind the frog -- *Toy Story*

It's all fun and games until someone loses any eye. -- *Unknown*

Melees are very different from single combat. For fighters and marshals, these differences can represent a significant safety hazard. Some preparation prior to conducting a melee can reduce the risk and make this combat experience both fun *and* safe. Most of this section is geared towards the marshal in charge (MIC), but the topics discussed should be known by **all** fighters.

The primary difference between single combat and melees is in the need to expand the fighter's focus. In single combat, a fighter is able to focus nearly all of his or her attention on the opponent. In a melee, however, this focus must be divided between multiple opponents,

maintaining position within the unit, following orders, and coordinating offense and defense movements with adjacent comrades. Fortunately, most of these problems disappear with training and experience.

Marshals, too, suffer from the increased number of fighters on the field. One of the most difficult problems faced by melee marshals is limited visibility. The increased number of fighters, combined with variable terrain, can make marshaling a melee a veritable nightmare. Marshaling can be made significantly easier by applying some of the same principles of unit command to marshaling. These include: advanced planning, training, and communication. Refer to Chapter 10 Marshaling Melees for detailed information.

This section should serve as a set of guidelines for setting up a successful melee. They are not meant to be the definitive standard by which melees are run. Most of the information contained within this section has been gleaned from personal experience. If some of the guidelines are not suitable for the fighters in your area or do not meet local rules, feel free to modify them.

Fighters

At best, every fighter in a melee would be fully authorized in all light weapons styles, along with a marshaling authorization. However, this is rarely the case and the MIC can expect the fighters on the field to have a wide range of experience. Since the level of safety increases as fighters gain more melee experience, severe restrictions on participation generally only serve to perpetuate the problem. The final say on who fights and who doesn't is up to the MIC. To this end, fighters should make every effort to make this person's job as easy as possible. If you're doubtful about being a safe fighter during a melee, *don't fight*. As far as our knowledge extends, the minimum authorization for any light weapons activity, whether is be a tournament, duel, or melee, is single point authorization. Considering the heightened risks inherent to melees, no exceptions should be made.

Green cards? We don't need no stinkin' green cards! -- *Robert de Marchet*

Even with single point authorization, a fighter may not be ready to melee. In our experience, the level of training prior to authorization can vary from 3 months to over a year. Remember also that single point authorization tests a fighter's skill and presence of mind in single combat **only**. Out there in the melee, a safe single combat fighter may very well become an extremely dangerous melee fighter. When in doubt, always think of safety first.

At fighter practices, however, not all of the fighters are going to be authorized. The question then becomes: Who should you let on the field? We recommend that the more experienced fighters decide. Fighter practices tend to have quite a few regular fighters. Ask their opinion of a new or unknown fighter's readiness to melee. If the fighter is training at that fighter practice, seek out the instructor (chances are the instructor is participating in the melee) and ask their opinion. If in doubt, pull the fighter off the field. If you're the marshal in charge, you have both the final say as well as the responsibility.

Armor

Two words: Testicular Strangulation -- *Angelique Rive de Hellsgate*

While the armoring standards should be more than adequate for melees, we recommend that if you have extra armor, you should wear it. Reinforced gorgets, heavier gloves, breast protectors, and plastrons are all examples of additional armor which can decrease the chance of injury during melees. In general, the risk of heavy touches and broken weapons greatly increases in melees. In addition, don't be caught on the field wearing armor below the standards. If you're the MIC, do a quick armor inspection prior to letting the fighters take the field.

Weapons

How do you hold your schlaeger? -- *Alexandre Bernajoux*

With both hands! -- *Martin Silverthorne*

The weapons allowed on the field are a reflection of the fighters on the field. Offhand weapons, particularly daggers, scabbards, and second rapiers, can be easily misused during melees. Accordingly, the MIC can restrict the weapons allowed on the field. These restrictions can also be extremely useful in balancing mismatched units. The following restrictions have been determined through trial and error. A wide variety of melee scenarios have been run by the authors of this handbook and the restrictions below represent the results of those practices.

Single Point Only

This melee condition allows each fighter to have a single rapier. This restriction should be used if a majority of the fighters on the field do not have the offhand authorizations or the level of melee experience is low. This is the weapon restriction that promotes the greatest level of safety.

Defensive Secondary Only

This melee condition allows each fighter a single rapier and a defensive secondary (cloak, scabbard, short scabbard, or buckler). While slightly more risky than the single point restriction, this restriction is still very safe and is good practice for those fighters not possessing offhand authorizations. Should the situation arise where a defensive secondary is being used inappropriately, we recommend that the weapon restriction be increased to single point only. Late in the fighter practice (which is often when melees generate), when fighters begin to fatigue, the MIC should consider increasing the restriction to single point again.

Unrestricted

This melee condition allows each fighter their choice of weapons. This level of restriction should be reserved for fully authorized fighters. Defensive secondaries may be allowed for those

fighters not possessing off hand authorizations to prevent imbalance. This is the most risky of the weapons restrictions.

In addition to weapon restrictions, the presence of off-hand weapons on the field creates additional concerns during a melee scenario. The two primary concerns for the MIC are scavenging and discarding.

Scavenging

In some scenarios, the MIC may allow scavenging. Scavenging allows fighters to take weapons and secondaries from the dead. Some fighters are fanatically against loaning out their equipment. The MIC might be wise to clear scavenging with all fighters prior to the melees. If anyone has a problem with it, don't allow it.

Discarding

With the popularity of light weapons combat in various kingdoms, weapons (particularly swords and daggers), are becoming much more period in design. Unlike the modern fencing weapons which use a simple dished guard and straight grip, many fighters are equipping their weapons with elaborate swept hilts, quillions, and ornate pommels. While these embellishments definitely improve the "look" of light weapons combat in the SCA, they do also represent a substantial hazard on the field. Discarded weapons using extensive hardware (quillions particularly) will generally orient themselves with at least one quillon upright when discard. The quillions then act much like a caltrop. Fighters who trip on or fall on such a weapon could very easily suffer serious injuries, particularly to the back of the head, kidneys, and back. The MIC should warn fighters not to simply discard weapons when losing an arm, but hold onto the weapon until it can be handed to a marshal, tucked into a belt, or sheathed.

Terrain

The field of combat will vary greatly depending on the site and type of melee. At a minimum, the MIC and his or her primary marshals should do a walk through of the field and highlight any potential safety hazards (holes, stumps, spiked pits, etc.) These hazards should be marked and all marshals and fighters should be made aware of them before starting. The boundaries of the field should be clearly defined and in the case of terrain with definite dangers (ravines, cliffs, ditches, barb wire fences, etc.), the boundary should be marked with an artificial boundary, such as construction tape, ropes, hay bales, or walls. In addition, those boundaries should be tasked to specific marshals.

In particularly poor terrain, the MIC may wish to impose weapons restrictions and reduce the number of fighters allowed on the field at any one time to reduce risks. More marshals can then be added to the field for melees involving vision obstructing obstacles, such as walls, buildings, trees, and tents.

Miscellaneous

This section deals with several topics of concern found in every melee. These should be discussed with the fighters prior to the melee. The MIC will be much better off clarifying the rules before tempers flare or accidents happen.

Death From Behind

Any rules regarding Death from Behind should be clarified prior to the start of the melee and all fighters should be made aware of them. Based on extensive research and field trials, we recommend that Death From Behind **not** be allowed on the field (for more information, see Chapter 15, Death From Behind). Sure, this restriction is somewhat unrealistic, but the risks inherent to Death From Behind far outweigh the benefits of more realistic combat. If in doubt, *don't do it!*

Dead Off the Field

Bring out your dead! Bring out your dead! -- *Monty Python and the Quest for the Holy Grail*

Melees generate large number of bodies. How these bodied are disposed of represents an interesting challenge to the marshals. The safest approach (and also the least realistic) is to have dead fighters leave the field. Typically, these fighters hold their weapons in such a manner as to denote death. This particular approach keeps the field clear and prevents dead fighters from being stepped on/stabbed/kicked. An alternative is to leave the dead on the field -- dead fighters die in place and assume a comfortable position on the ground. This adds additional obstacles to the field and heightens the realism of the combat. If the dead become too numerous, the marshals should call a hold and clear the field. This particular option should be reserved for experienced melee fighters.

Missile Weapons

Recently, missile weapons have entered the realm of light weapon melees. These weapons include such items as throwing knives, pistols, bows, and crossbows. The primary difficulty with such weapons is making them hit hard enough to be felt through the armor while preventing the possibility of injury. Our experience includes Nerf Crossbows, pistols (using surgical rubber tubing), and throwing knives. Though rather unrealistic looking, Nerf Crossbows are both safe and effective. Throwing knives are easy to make and inexpensive. Pistols are the most expensive and labor intensive to make. They are also the most realistic. Like any nonstandard weapon, their use on the field is conditional and the MIC should present the matter to the fighters prior to combat. See Chapter 9 Missile Weapons, for more information regarding the use of missile weapons in melees.

In addition, the presence of missile weapons also poses a danger to marshals. While such weapons as Nerf crossbows and foam throwing knives are relatively safe, rubber band pistols represent a definite eye hazard. Marshals in scenarios involving missile weapons should never

take the field unless they are wearing good eye protection. Eye glasses may be usable, but safety goggles are safer and cheaper. In addition, marshals may also wish to wear long sleeve shirts and pants into order to avoid bruising or welts from poorly-aimed shots.

Blow Calling

I'm not quite dead yet, sir. -- *Monty Python and the Quest for the Holy Grail*

Melees are often chaotic and usually the fighter's experiences are much more intense than in single combat. If you make what you consider to be a good touch, and your opponent does not take it, *do not* become irate. The blow may have been missed in the confusion. Fighters will often need to take several seconds to review the recent action and determine what happened. If the problem persists, call a hold and ask the fighter if they are feeling the blows. Be polite -- poor manners have no place on the field of combat. Should the problem continue over several melees, take it up with the marshals.

Marshals

A melee represents a significant amount of chaos on the field. If the melee scenario is very complex, marshaling must be extremely competent to prevent the melee from degenerating into absolute anarchy. Chapter 10 Marshaling Melees, covers this topic in greater detail, but some guidelines regarding marshaling will be given here. Melee marshals should be experienced field marshals. Green marshals are very likely to be overwhelmed by the action of a melee and may miss important items or events, such as armor failing, broken weapons, movement into hazardous terrain, etc. In addition, the marshals may be required to keep track of the victory conditions, a task which can add a significant amount of distraction to an already difficult job. We recommend that melee marshals wear something more than normal garb on the field. Melees can quickly spread out across the available terrain and it is not uncommon for a marshal to be looking in the wrong direction and suddenly find themselves in the midst of combat. Marshaling staves are **highly** recommend for both control and protection.
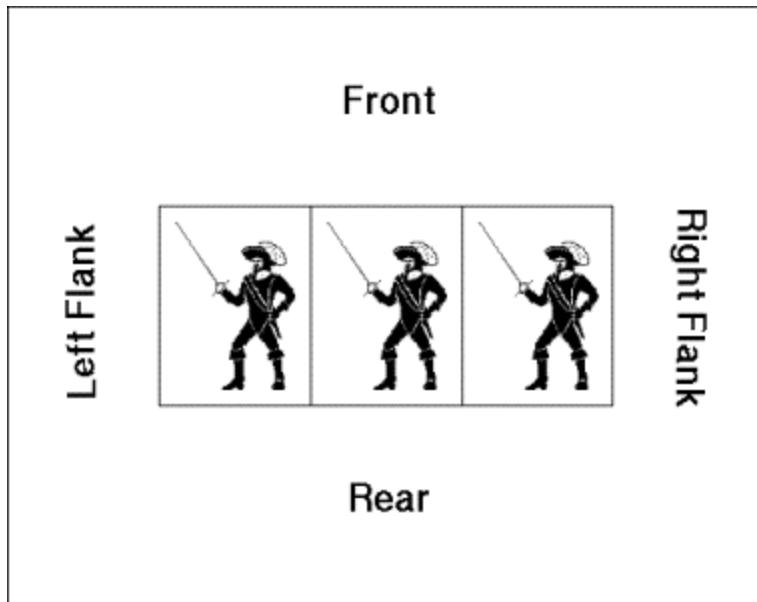
Chapter 2: Basic Terminology

This chapter serves as a glossary of some of the terminology we use during melees. In general, such terminology allows a commander to quickly outline the coming battle using terms that everyone can understand.

The Parts of a Unit

Check on the unit on that guy. -- *Garth.*

The following terms are used to described locations within a unit.

Front

The front of the unit faces in the direction of the advance. In most units, the front of the unit represents the greatest concentration of offensive and defensive capability.

Rear

The rear of the unit is normally the area behind the front line of the unit. In most formations, the rear of the unit is extremely vulnerable, as all weapons are oriented to the front. Since Death From Behind is uncommon in our SCA light weapons melees, the rear of the unit is rarely attacked.

Flanks

A unit's flanks are the left and right sides of the units as you face the direction of the advance. Flanks are more vulnerable to attack than the front, but less vulnerable than the rear. Since the rear cannot be attacked when Death from Behind is restricted, the flanks are often the most common points of attack on a unit. For more information on making up or moving in formations see Chapter 14, Formations.

People

Who are those guys? -- *Butch Cassidy and the Sundance Kid*
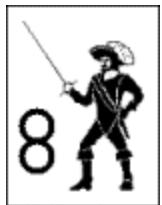
Corporal

A corporal commands a team.
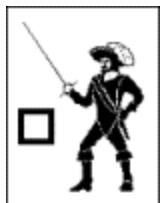
Sergeant

A sergeant commands a lance.
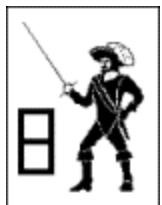
Lieutenant

A lieutenant commands a company.

Captain

A captain commands a battalion.

Flanker

A flanker is a unit that is ordered to break away from the main unit and fight independently. Flankers are usually tasked with destroying key personnel, achieving limited goals, drawing the

enemy's manpower, guarding the commander, plugging holes in the line, and acting as reserves. Chapter 7, Flankers, explores the role of the flanker in greater detail.

Skirmisher

A skirmisher is a unit tasked with delaying an enemy unit. Skirmishers are often used during retreats to slow attacking units and allow a commander time to re-consolidate and re-deploy their forces. Fighters tasked as skirmishers are also commonly used as flankers.

Units

In a classical military unit hierarchy, large complex units are created by combining smaller units. Organization simplifies the chain of command and imparts a great deal of flexibility within a unit. We have adopted this philosophy in the creation of light weapons units.

Our experience has led us to use combinations of three. Each unit in the hierarchy we've "designed" is composed of three smaller units. In theory, a unit commander will be able to place two units on the line with a third held back in reserve.
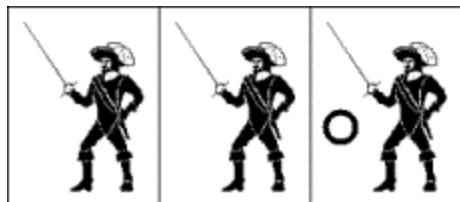
The Pair

Fighters should never operate alone unless the number of available fighters restricts the creation of pairs and teams. At a minimum, a fighter should always have a partner. This leads to the formation of the pair (see Chapter 5 The Pair).
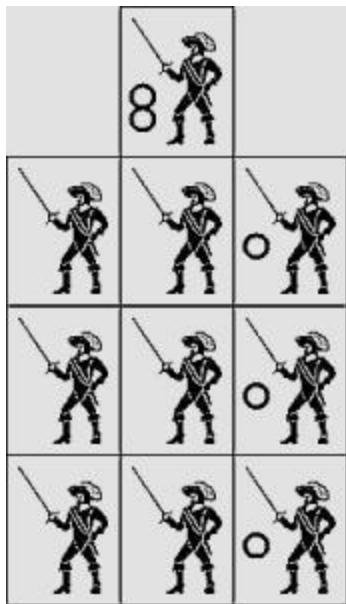

The Team

The team is the basic unit of the hierarchy (see Chapter 6 The Team). A team consists of two fighters and a corporal. The size of this unit is 3 and contains one corporal.

The Lance

The lance consists of 3 teams and a sergeant. The lance is the basic tactical unit on the field, as teams are rarely fielded alone.

Chapter 3: Being a Solider

Excuse me, but Corporal Hicks is just a grunt. -- *Aliens*

Murphy was a grunt. -- *Murphy's Laws of Combat*

Melees represent a significant departure from single combat. Accordingly, there are quite a few differences in being a soldier in a unit as compared to being a fighter in a duel. This section examines some of the aspects of being a good soldier in the melee setting.

Identification

In most melees, units are small enough that commanders and soldiers can easily recognize friend and foe. In larger units or at events where the fighters are not familiar with each other, identification becomes extremely important. Identification helps the commander to locate sub-units and solo fighters on the field.

Tabards

One of the most visible identification features is a tabard. A tabard is usually not much more than a wide strip of cloth with a hole cut in the middle for the head. Tabards can have ties along the edges to keep it in place, although most tabards are belted on. For common units and fighting households, tabards bearing the unit's colors and arms are the norm.

Armbands

Armbands are another popular method of marking friendly soldiers. Most armbands are nothing more than a thin strip of cloth knotted about the upper arm. A common fancy form of the armband is the garter. This particular variation is usually secured with elastic material and trimmed with lace. While less visible than tabards, armbands are cheaper and easier to replace. To avoid confusion with dons and cadets, the color of armbands should not be white or red.

Belt/Baldrics/Sashes

The least common unit identifiers are belts, baldrics, and sashes. Standardization is the key to the effective use of these identifiers. In some cases, confusion can occur when an enemy unit inadvertently wears a matching color identifier. When using these identifiers, avoid the colors red, white, green, yellow or blue.

Movement
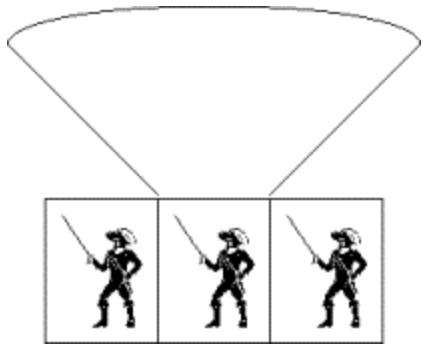
Every soldier has different footwork and accordingly, every soldier moves at a different rate on the field. In a melee, however, this difference in movement rate can quickly leave one or more soldiers alone on the field, easy targets for flankers. Soldiers within the unit must take great care in matching their rate of movement to that of the unit, both in advancing and retreating (see Chapter 11 Training Melee Skills).

Since most units in SCA light weapons melees are relatively small, the need for precision drill and marching is quite low. Soldiers can easily adjust their position and movement to match that of the rest of the unit by visual inspection. Commanders can quickly spot soldiers who are out of position and make corrections.
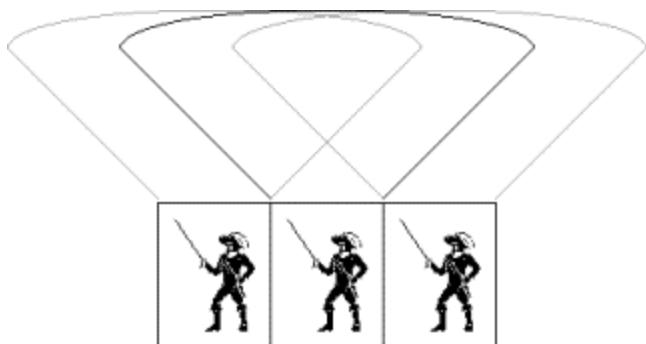
On the Line

The buddy system is essential to your survival. It gives the enemy somebody else to shoot at. -- *Murphy's Laws of Combat*

Unlike single combat where a fighter can focus their attention on a single opponent, melee combat forces the soldier to focus on several different opponents at once. The soldier must limit their offense/defense to avoid entangling adjacent comrades. A soldier in the line must concentrate their attention on a small zone. Typically, this zone is a 45° arc to the front of the soldier, which extends out to lunge range.

The primary disadvantage of using a zone is that it leaves a soldier's flanks open to attack. The key to using zones is to interlock them to provide unbroken defense along the line. Adjacent soldiers protect each other from attack and prevent shots to the flanks of each individual soldier. Within a typical zone, a soldier can expect to engage 3 opponents.
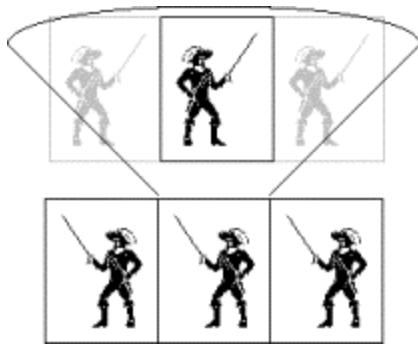

Note that a soldier will share two of their opponents with adjacent comrades. This simplifies the melee for the soldier on the line and allows commanders and lieutenants to more easily specify targets for individual soldiers to attack.

Defense

There's nothing more satisfying then having someone take a shot at you and miss. -- *Winston Churchill*

The key to the interlocking zones is allowing your adjacent comrades to handle the defense of your flanks. This is a significant departure from single combat where you are required to handle this yourself. Realize that if the end fighters within your zone attack, they open themselves up for a counterattack from your adjacent comrades. The trick is to concentrate your defense on the opponent directly in front of you and your attacks on the enemy fighters on his/her left and right.

In addition to your defense, there are times when a soldier is required to defend a particular adjacent comrade. The most common example of this defense is having a bodyguard for the commander. The bodyguard's primary mission is not to kill other fighters, but to make sure that enemy fighters do not kill or disable the commander. Another possibility is protecting a specialist fighter, such as a sniper, who primary mission is to engage and destroy certain personnel.

In addition to the protection afforded by adjacent fighters, personal defense is often handled exclusively by the off-hand weapon. Under melee conditions, use of the primary weapon to handle personal defense limits one's offensive capability and opens the fighter up to binding. Off-hands weapons are described below according to their length and melee characteristics.

Short Weaponry

Short weapons in the off-hand are very effective at increasing one's personal defensive capability. The choice of a short weapon is primarily dependent on one's skill level. Some short weapons can be used effectively with little training while others require significantly more experience to use. The use of an off-hand weapon will require a portion of the fighter's concentration. If you are not confident with an off-hand weapon, the use of one in a melee may greatly reduce your offensive and defensive capabilities.

Buckler

The buckler is the simplest of all the short off-hand weapons. In most kingdoms, this small shield is approximately 12 to 16 inches in diameter and is secured by a center grip. A much more rare form of the buckler is strapped to the fighter's forearm. Due to the buckler's small size, the amount of protection affords is limited. However, the buckler doesn't require extensive training and can deflect shots without being moved. In addition, the buckler is very effective in deflecting missile weapons. Buckler is recommended as a starting off-hand weapon for new soldiers.

Short Scabbard

The short (or dagger) scabbard is a cut-down version of the normal long scabbard. Short scabbards are typically 18 inches in length and vary in weight. Short scabbards rely on sweeping motions in front of the fighter in order to deflect thrusts and cuts. Due to the decreased length,

the short scabbard is much more suitable for personal defense within a melee as it doesn't easily entangle adjacent fighters. The short scabbard is an excellent off-hand training weapon for those soldiers wishing to move on to dagger.

Dagger

The dagger is rarely used as a offensive weapon during a melee due to its short range. In many cases, kills made with a dagger are executed by flankers who have the mobility and position to engage single opponents. In comparison to the short scabbard, the dagger handles slightly differently when used defensively. First, the dagger is usually less rigid than the short scabbard. This aspect of the dagger requires its wielder to be much more aware of how the dagger engages incoming blades. Typically, a dagger has a rigid edge and a flat side. If the flat side catches a blade, there is a good chance that the dagger will flex and not deflect the incoming blade. Even the rigid side of the dagger can be made to flex somewhat and for this reason, the dagger should always be used to catch an incoming blade near its tip. Accordingly, the dagger should always engage incoming blades early. We have experience with the American Flexi-Dagger (AFD), the Black Tulip (sadly this company is defunct) and the Prieur dagger blade. We recommend the stiffer, heavier, Black Tulip and Prieur-type blades (Editors Note: Triplette now produces a #2 flexi-dagger blade which is as stiff as the aforementioned dagger blades); especially for use with schlaeger. For the more inexperienced dagger fighter, we recommend the more bendable AFD for single combat where dagger kills are more frequent.

Cloak

The cloak is perhaps the hardest of the short off-hand weapons to use during a melee. Due to its non-rigid nature, the cloak is very susceptible to entanglement with adjacent soldiers. Cloaks should be used by soldiers on the ends of the line where the extra space decreases the likelihood of entanglement.

Even short off-hands weapons pose a threat of entanglement. Soldiers should practice keeping the motions of their off-hand weapons small and quick. This is especially true with dagger and short scabbard. Large sweeps with these off-hands will have you hitting your adjacent comrades' legs, arms, or head with mortally embarrassing results.

Long Weapons

The primary long weapons currently used in the off-hand are the second sword and long scabbard. Long off-hand weapons can be highly effective at opening up opponents for shots from your adjacent comrades. Due to their large size, these weapons are not as effective for personal defense and represent a significant entanglement risk when used in such a manner. Instead, these weapons should be used aggressively to disrupt the enemy defense.

Sweeping

The primary use of these weapons is to sweep your opponent's blades to one side. Both long scabbards and second rapiers can be used in this capacity. Most sweeps are executed using parry

VIII (down and to the outside of the lead leg), although other parries can also be used to sweep. Sweeps should be timed to correspond with attacks. If the attack is late after a sweep, then the entangled opponents will have time to free their blades and defend against the attack. In concert, the first soldier sweeps and the second soldier quickly attacks, taking advantage of the momentary disruption in the enemy's defense.
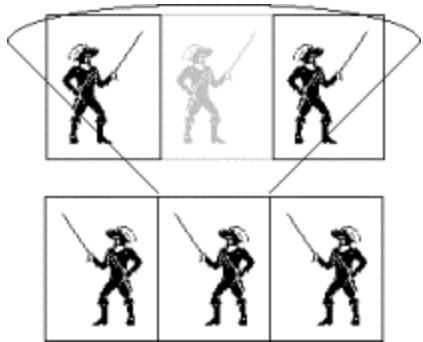
Binding

Binding an opponent's blade requires significantly more skill than the sweep. In this technique, a soldier uses both of his or her weapons to entangle the enemy's blade. Binds require extremely good timing and extensive practice as the soldier executing a bind must cross his or her own blades. Binds are typically used against attacks in order to catch the maximum amount of the opponent's blade. The most common of the binds is the X bind. In this bind, the soldier catches the enemy's blade, during their thrust, by sweeping the soldier's blades down over the top of the enemy blade in an X. The enemy's blade is then caught between the two blades and forced down, leaving the enemy open to attack. Binds require a veteran soldier who can anticipate attacks and read opponents. Binds are most effective when at least half of the blade is entrapped. This prevents most disengages and requires the opponent pull the blade back before returning to the en garde position. The primary advantage of the bind over the sweep is the more effective trapping of the enemy blade. A sweep can usually be disengaged and avoid. A successful bind, however, prevents disengaging and requires the trapped blade to be pulled back from the bind. This action is very slow and opens the trapped enemy, as well as their nearest comrades, to attack. At the same time, the bind is much more vulnerable to attack then the sweep and requires more skill to execute.

With the increased popularity of schlager, the use of a case of rapier (two swords) has undergone several modifications. Since schlager blades are available in a variety of lengths, some fighters are adopting a long/short blade combination (45"/36") of blades. While this style does have possibilities, fighters should realize that longer blades require greater strength to handle effectively and are much more flexible, resulting in poor point control.

Offense

Extending the principle of interlocking zones to offense dictates that your primary targets are the opponents found at each end of your effective zone. With speed, experience and good fortune, you'll be able to catch your opponents when their concentration is focused on another part of the line.

Targets

Attacking the end opponents within the zone greatly increases the chance that an attack will be successful. The disadvantage of attacking this opponent is that they will be at slightly greater range than the opponent in front of you. Accordingly, you may not be able to get in a killing blow without moving out of position on the line. Instead of moving, concentrate your attacks on the nearest points on your opponent's body. Alternate targets include primary hand, off-hand, legs, and head. In single combat, these target areas tend be difficult to hit as your opponent often counterattacks with a killing blow. In melee, the ability of your opponent to counterattack is greatly limited and most of these target areas will be open due to the oblique direction of the attack.

Primary Hand

The taking of the primary hand is a difficult, but extremely effective shot. Most fighters train predominantly on a single hand, particularly if their original light weapons training was done outside of the SCA. Forcing them to switch to their off-hand will greatly decrease their offensive and defensive capability in combat. This shot can also be used to set up a killing blow from one of your comrades. During the confusion of switching hands, the opponent will be extremely vulnerable to attack.

Off-Hand

While the taking of the off-hand is not quite as devastating as the taking of the primary hand, this shot is also effective in decreasing the offensive/defensive capability of a fighter. When fighting opponents using short weaponry (daggers, bucklers, cloaks, etc.), the taking of the off-hand reduces their personal defense leaving them more vulnerable to attack. Removing the off-hand of fighters using long weaponry (long scabbard and second rapier) prevent these fighters from sweeping blades and making simultaneous attacks. Off-hand shots also limit an opponent's flexibility. Should the opponent's primary hand be taken after losing the off-hand, that opponent will be unable to attack or defend.

Legs

In a melee situation, leg shots are often overlooked because fighters tend to concentrate their attention to the upper body. There are certain situations which mandate the targeting of legs. Any melee scenario where the unit is defending dictates that leg shots be used heavily. Every time a soldier takes a leg of an opponent, the mobility as well as the manpower of the enemy unit is decreased. If the terrain and situation permits it, move the unit back after legging an opponent. Once out of range, the legged enemy can be safely ignored. If the rules permit resurrection a legged enemy cannot return and is, effectively, "dead" for good.

Head

In single combat, the head is often a very difficult target to hit. Not only is the head usually back out of range, it is a small target. In addition, shots to the head must land flat against the mask in order to prevent skipping and grazing. In some ways, the fencing mask increases the difficulty of landing good head shots due to its smooth, curving surface. On the positive side, the fencing mask increases the surface area of the head, making the target slightly larger. In any case, the head is one of the more lucrative alternate targets, as it results in a kill. The optimum time to take a head shot is when the opponent has moved forward to make their own attack. In that situation, the head will be within range and vulnerable and the opponent's concentration will be on attack, not defense. Snipers are extremely fond of taking head shots under these conditions.

A common mistake of new soldiers is to be tentative with their own attacks. They often hang back in fear of being attacked from the sides. While this course of action is effective in preventing death, it does little to promote the offense of the unit. This situation is very common when a numerically superior force of new soldiers is faced with a veteran solo fighter or pair. Instead of pressing the attack and overwhelming the smaller unit, the new soldiers hang back. This allows the smaller unit to press their own attack and pick the soldiers off individually.

Lunges

In the melee environment, the deep lunge usually represents a suicide attack. Once in a deep lunge, the fighter's flanks are exposed and the fighter's position is extremely difficult to defend. In addition, the fighter is less likely to be sure of the footing prior to lunging and runs the risks of slipping. Short lunges, on the other hand, overcome many of the difficulties encountered in the deep lunge. A typical short lunge only cover 12 to 14 inches and offers a much faster recovery, less exposure on the flanks, and better stability on unknown footing. The disadvantage of the short lunge is, of course, the limited range. The limited range is offset by an opponent's inability to retreat any significant distance without fatally exposing their own comrades. The short lunge can be coupled with sweeps and binds for very fast attacks against vulnerable opponents with minimal risk of counterattack. To better understand the nature of melee attack and defense see Chapter 11 Teaching Melee Skills.

Following Orders

What is your major malfunction? -- *Full Metal Jacket*

Anything can get you killed, including nothing. -- *Murphy's Law of Combat*

Another difference between single combat and melees is the necessity to follow someone else's orders. For a fighter used to making their own decisions regarding when and where to engage in combat, this can often lead to problems with the execution of complicated plans. Be a soldier. Only one person can be the commander and that person is counting on you to be at the right place at the right time to make their plan work. If you have a problem with the plan, talk to the commander before the melee starts. A good commander will take the time to listen to your suggestions and criticisms. Don't expect the commander to suddenly revamp everything to do it your way, though. Once you take the field, you are expected to follow the commander to the best of your ability.

Communication

A common problem during melees is lack of communication between soldiers. The principle of interlocking zones relies heavily on adjacent fighters working together. Once adjacent soldiers lose touch with each other, they quickly become vulnerable. This is especially true when one of the adjacent soldiers is wounded or killed. We have developed code words and phrases that help make communication unambiguous and understandable in the press of combat.

Wounded Arm

A flesh wound? Your arm's off! -- *Monty Python and the Quest for the Holy Grail*

When a soldier takes a hit to the arm, there will be several seconds during which the soldier is extremely vulnerable to attack. This vulnerability arises from the necessity of switching weapons from hand to hand. The wounded soldier must also adjust his position and stance to the change in hands. An arm shot followed by a killing blow is a quick, effective combination, particularly if the soldiers executing these shots have timed their attacks. The fighters adjacent to the wounded team-mate also become vulnerable as their defense drops momentarily in that zone the wounded fighter was responsible for. If you are wounded in the arm, immediately call it out. Typically, this call consists of "Arm!" Say it loudly enough so the nearby soldiers in your unit can hear you, and can adjust their blade play to temporarily "cover" for you.

Wounded Leg

Leg shots quickly disrupt the interlocking zones and rapid adjustment of the line is necessary to reestablish correct defense. As with the arm shot, a legged soldier should immediately call out the injury. Typically, this call consists of "Leg!"

Death

Death of a soldier represents the maximum disruption of the line. Once a soldier dies, both adjacent soldiers are now vulnerable and a rapid adjustment of position in necessary. In most

melees, a kill is quickly followed by several more in a "cascade failure" as the unit attempts to reform the line. If you are killed, immediately call it out. Typically, this call consists of "Dead!"

Red Zone

A soldier can sing out when receiving too many close attacks from the enemy and wants to retreat slightly without causing a general disengagement or retreat. The soldier typically calls out, "I'm RED ZONED, here." Soldiers on either side of a red zone movement should think primarily about defending themselves and the red zoned team-mate until that soldier calls out, "O.K." or appears less pressed.

Raiders

Or some similar call is used during scenarios which allow Death/Capture From Behind. Use of "Flanked" or "We're being flanked" is discouraged as it sounds too much like "flankers" which could result in a general recall/retreat of friendly flankers who think they're being given orders.

Dress Right/Left, Close It Up

This command is used to close gaps in the line caused by casualties, obstacles, terrain, or movement. In most case, soldiers should automatically dress their line as gaps represent a severe weak point in the unit. In addition, the command "Dress the Line" indicates that soldiers are ahead or behind the line and that they should move appropriately to keep the line continuous.

Ronin

This command is given by a designated soldier who is tasked with breaking a formation or making a "suicide charge." We DO NOT recommend running into opponents or making unsafe body to body contact. There are times when the key to flanking or destroying an enemy formation can be found in one position, terrain feature or fighter. An experienced veteran soldier, who has permission, can "go ronin" and break up a costly stalemate. Soldiers should go in behind the ronin and kill adjacent fighters during the disruption.

Chapter 4: Being a Commander

The measure of man is what he does with power. -- *Pittacus*

The Claw. The Claw is our leader. The Claw decides who stays and who goes. -- *Toy Story*

You are what you do when it counts. -- *John Steakley*

The most challenging position in a unit is that of commander. As a commander, you will need to plan your unit's mission(s) as well as lead your unit into battle. The role of the commander is extremely important to the effectiveness of the unit. Military history is filled with examples where a good commander was able to achieve decisive victory in the face of overwhelming odds.

At the same time, there are also countless examples of where poor commanders lost the field even when conditions favored them. This section covers a few of the aspects of being a commander. It is not meant to cover all aspects of command. Most of this section is devoted to highlighting two key aspects: planning and executing a mission.

Planning

Maybe, if I had a month to plan, I could come up with something. -- *The Princess Bride*

Planning is primarily up to the commander and lieutenants. Prior to the start of the melee, the units will be briefed by the marshal in charge regarding the rules of the melee, including the victory conditions and boundaries. The unit now has a few minutes to prepare prior to the start of combat. During this time, the commander of the unit has to accomplish quite a few tasks. First and foremost is analysis of the scenario, terrain, and enemy. The results of this analysis will dictate the plan the commander decides upon.

Scenario

Is this going to be a stand-up fight, sir, or just another bug hunt? -- *Aliens*

At the heart of every melee is a set of victory conditions which dictate which side wins. These conditions can be as simple as killing the entire enemy unit or holding a position for a certain amount of time. At the other end of the spectrum are complex conditions involving accomplishing several different goals such as: ambushing an enemy unit, killing their commander, obtaining a key from the dead commander's body, and then escaping. The more complicated the scenario is , the more complicated the plan tends to become.

Defensive Scenarios

In this type of scenario, the unit is tasked with defending a person, object, or position. The usual victory condition is to prevent the enemy unit from taking the position (occasionally within a specific time limit), usually by completely destroying the enemy unit. Performing well in defensive scenarios can be extremely difficult depending on the terrain and enemy unit.

Offensive Scenarios

In this type of scenario, the unit is tasked with destroying an enemy unit, over-running their position, obtaining a certain object, or killing key personnel. Offensive scenarios tend to have very specific victory conditions which makes them easy to plan and accomplish.

Mixed Scenarios

In this type of scenario, the victory conditions contain both defensive and offensive objectives. A classic example of this type of scenario is Capture the Flag. In order to be victorious, the unit must capture the enemy flag while protecting their own flag. This type of scenario can be

frustrating to plan for due to the simultaneous and usually conflicting nature of the victory conditions combined with the fluidity of the combat. Commanders should examine every detail of the victory conditions, as many scenarios have a number of loopholes which can be exploited. If you are unclear about any aspect of the scenario, talk with the marshals.

Time Limits

Some melee scenarios will have time limits. These limits can be imposed either as victory conditions or as scenario limits. The most common limits are those used to define the end of a scenario and occur most often in resurrection scenarios. This allows the marshals to delineate a clear ending to an otherwise open-ended scenario. In other cases, time limits are imposed to insure that the melees proceed in an orderly fashion and prevent scenarios from running overly long. In any case, the commander should be aware of time limits and ensure that the plan will work within the allotted time.

Terrain

How important is this doorway? -- *Tryffin Mac Ualraig* The Queen's honor is at stake. -- *Rivka Vladimirovna Rivkina*
See you in Valhalla. -- *Tryffin Mac Ualraig*

Terrain plays an important part in the deployment of the unit. Ignoring the terrain will quickly get the unit into trouble. Terrain can either work for the unit or against it. In some cases, the terrain will offer no advantage either way.

Defensive Terrain

If the unit is tasked with the defense, the commander would be wise to position the unit such that the terrain works against the enemy. For example, if the unit is defending a bridge, the commander would be better off deploying on the bridge. Deploying the unit along the river bank is ineffective as the river provides natural protection for the defending unit (sounds obvious, but we've seen it happen). Good defensive terrain protects the flanks and rear of the unit. Examples of good defensive terrain include bridges, gates, gang planks, crest of hills, tree line, and alleys. For the best results, units should experiment with defending before, on, and behind a defensive position.

Offensive Terrain

If the unit is tasked with the offense, this type of terrain facilitates attackers by allowing flanking and enveloping attacks. This allows the offensive unit to divide the enemy unit into smaller pieces and prevent regrouping. Examples of good offensive terrain include open fields, villages and terrain features which mask the flankers movements.

Neutral Terrain

Neutral terrain offers no advantage to either side. This type of terrain typically makes combat as well as command and control very difficult. Examples of neutral terrain include woods, swamps, and thickets.

A commander would be wise to remember that strong defensive terrain can be held against overwhelming numerical superiority. Sun Tzu recommends 10:1 odds before mounting an attack against a fortified position. While most defensive terrain in SCA melee combat rarely offers this degree of protection, many defensive positions are quite capable of requiring 2:1 and 3:1 odds to be taken successfully. Obviously, these strong positions should be denied to the enemy if possible.

Enemy

In most melees, the commander gets the opportunity to see the other team and make an insightful assessment. In some cases, the commander may even be able to observe rehearsals and unit placement. The four important aspects of assessing an enemy unit are: number of fighters, level of experience, weapons and placement.

Number of Fighters

The size of the enemy unit is very important to the unit placement. If the unit is outnumbered, then the commander would be wise to seek good defensive terrain. If the units are more evenly matched, the commander can go either with a defensive or offensive placement. If the unit outnumbers the enemy, a very aggressive placement may be warranted. Unit commanders must also forecast the rate of casualties expected during combat. Some situations may require suicide attacks by veteran soldiers and sub-units in order to break up enemy formations, capture key positions, or destroy expert fighters (see Chapter 14 Formations). If such losses greatly increase the unit's chances for victory, then the commander would be wise to order them. Numerical superiority can be highly advantageous to a unit, but our experience shows that a TEAM with melee training and experience working together can defeat units with a 2:1 and 3:1 numerical advantage if said enemy unit is really a collection of individuals and not a TEAM. An additional caveat here: A fundamental mistake we see most commanders make is in their inability to sacrifice individual soldiers and units to achieve a strategic goal. Rarely does a victory condition require a commander to retain even half of the soldiers they began with (in reality a unit suffering 50% casualties is often "hors de combat" for the rest of the war). Remember this when planning.

Level of Experience

An enemy unit will generally contain fighters with different levels of experience. In general, the following ranks can be applied to fighters.

Beginner

This fighter possesses basic fighting skills and little to no experience. Typically, this type of fighter has less than 6 months SCA light weapons experience and knows only single combat.

This fighter should be paired with a more experienced fighter that has good command skills. This type of fighter is also sometimes referred to as fodder.

Intermediate

This fighter possesses good basic fighting skills, offhand experience, and some melee experience. They are familiar with all weapon types and know a variety of advanced techniques. Fighters at this level are just beginning to develop their own fighting style. Fighters at this level general have 1 to 4 years of experience.

Expert

It's so obvious. -- *The Seven Samurai*

This fighter possesses mastery of basic fighting skills, extensive offhand experience with mastery in one or more forms, and has participated in a large number of melees. Typically, this fighter has 5+ or more years experience and are often instructors, cadets, or dons (for more information, see Chapter 13 Fighter Analysis).

Over the buckler, around the building, under the don, off the newbie -- nothing but mask. -- *Randal the Malcontent*

Escape is not his plan. I must face him. Alone. -- *Star Wars*

The table below is designed to help commanders in deciding what type of sub-unit is necessary to effectively destroy a particular level of fighter. Use the leftmost column to determine the skill level of the enemy fighter. The commander then reads to the right to determine how many fighters of a particular skill level are needed to effectively destroy the enemy fighter.

Unit Tasking based on Enemy Fighter Experience Level			
Enemy Fighter Level	*Beginner*	*Intermediate*	*Expert*
Beginner	2 1 0	0 1 0	0 0 1
Intermediate	3 2 0 0	0 1 2 1	0 0 0 1
Expert	4 3 1	0 1 2	0 0 0

	0 0	2 0	1 2

For intermediate and expert fighters, we recommend 2:1 and 3:1 numerical advantage, respectively, for maximum effectiveness. Even the best fighters can be overwhelmed and destroyed using sufficient coordinated force. In addition to general experience level, there are some special types of fighters which need to be identified. These fighters should be tasked with very specific missions with regards to enemy unit(s). Their destruction is usually a tremendous blow to the enemy unit's effectiveness.

Snipers

Where the hell did that come from? -- *Valdemar Gillanders*

Snipers are generally intermediate or expert fighters with a well-developed attack. Snipers are extremely effective at picking off attacking fighters as well as disarming and legging fighters in the line. In general, snipers rarely attack, preferring to wait for targets of opportunity. Snipers are best killed by tasking a pair of soldiers to them. One soldier baits the sniper by attacking opponents adjacent to the sniper. These attacks should only be feints. The other soldier then waits until the sniper "uncovers" and then counterattacks. With luck, the sniper's attention will be focused away from the counterattack, allowing the sniper to be easily killed. If the sniper cannot be killed, attempt to disable the primary hand. This should reduce the effectiveness of a sniper.

Flankers

Some expert fighters are ill-suited to fighting in the main unit and are tasked as flankers. Typically, this fighter is solo and generally armed with rapier/dagger or rapier/rapier. The primary mission of this fighter is to flank the enemy unit and harass or destroy a large number of fighters. The key to this fighter's success is skill and mobility. A roving flanker should be identified quickly and dispatched by tasking 2 or 3 soldiers to destroy them once they leave the enemy unit. Typically, a flanker requires two intermediate soldiers or an intermediate/expert combination for destruction.

Commanders

Commanders are usually obvious -- they're the person surrounded by the others during the planning phase and the one shouting orders during the melee. A good offensive technique is to kill the commander quickly. This disrupts the plan and in some cases, removes all effective leadership from the unit. Good commanders will plan for such a contingency and will sport 1 or 2 soldiers as a personal guard.

Weapons

Look Out! He's got a sword! -- *Guard #1*
You fool! We've all got swords! -- *Guard #2, Aladdin*

The type of weapons the enemy is using will often dictate the placement of the unit's own weaponry. Weaponry is broken down into two main categories: short and long.

Short Weaponry

Short weapons are designed primarily for personal protection and have limited reach. Weapons in this category include daggers, cloaks, short scabbards, and bucklers. Short weapons typically provide extra protection for fighters on the line.

Long weapons have extended range and are generally used to sweep a fighter's blade off line in preparation for attack. These weapons include second rapiers and long scabbards. As a rule, short weapons should be matched against long weapons. For example, the commander spots an enemy fighter with a long scabbard. Knowing that the enemy fighter is going to use it to open up lines of attack, the commander tasks one of his soldiers with a dagger against him. The dagger provides additional defense if the enemy fighter manages to sweep his rapier off line. During deployment, those soldiers with short weapons should be tasked to flanking units. The additional defense is useful in keeping these soldiers alive. Additional offensive capability is less important, as these soldiers are already using position and mobility to their advantage. Soldiers with long weapons should be tasked to the main unit. Their primary task is to sweep enemy blades off line and open up offensive opportunities. When pairing soldiers together within the unit, the commander should also pair long weapons with short weapons. This allows the long weapon to sweep and the short weapons to attack.

The Plan

That was your plan, Ray? Get her? -- *Ghostbusters*

There is no such thing as a perfect plan. -- *Murphy's Laws of Combat*

If it's stupid and it works, then it isn't stupid. -- *Murphy's Laws of Combat*

Planning the unit's mission is the most difficult task the commander faces . Based on the analysis of the scenario, terrain, and enemy, the unit commander must now decide how to effectively deploy his or her soldiers to achieve victory. Even a poor plan is better than no plan at all. Commanders will find that their units fight significantly better if the soldiers have an idea of what their tasks and positions are during the melee. The plan should answers the 5 Ws: who, what, where, when, and why.

Who: Creation of Sub-Units

This is the first step in planning and defines which soldiers in the unit belong to which sub-units. The size and composition of each sub-unit will be based primarily on the sub-units task(s) during the melee. An additional step at this point is delegating additional lieutenants to lead sub-units.

What: Tasking of Sub-Units

The second step is to task each sub-units. Common tasks include defending key objectives, destroying enemy fighters, capturing key objectives, distracting enemy sub-units, and assisting other sub-units. The lieutenant in charge of each sub-unit should be clear with respect to the tasks they've been assigned.

Where: Placing of Sub-Units

Once the sub-units have been established and briefed on their missions, the commander should then describe where each sub-unit should be positioned during the melee. Sub-units tasked with defending fixed objectives should be physically placed in position by the commander. Sub-units tasked with detaching from the main unit or acting as flankers should be told what positions they

need to occupy on the field along with routes. Key landmarks should be used to ensure that these sub-units move to the correct positions.

When: Timing on the Field

The sub-units need to know when to execute their missions. In many cases, timing will be controlled by the commander via vocal commands. However, complicated plans or scenarios involving large separations between sub-units may require slightly different timing schemes. Some of these "go signals" include: executing after moving a certain distance, engaging the enemy, capturing a key terrain feature, after a certain amount of time has passed, etc.

Why: The Purpose

Sub-units need to know why they are doing a particular task. This knowledge makes it much easier for the sub-unit to execute the task because they have a clear idea of what is going on. Knowing "why" also allows lieutenants to make necessary adjustments within their sub-units while keeping the overall mission of the unit intact. Situations will change on the field and this nearly always ends up trashing the original plan. For maximum flexibility, lieutenants (and commanders) need to know the "why" of their mission in order to quickly adjust the plan.

Concluding Remarks

No plan ever survives initial contact. -- *Murphy's Law of Combat*

Exceptions prove the rule and destroy the battle plan. -- *Murphy's Law of Combat*

No two melees are ever "the same" - even when the enemy, terrain, and scenario are identical. A commander would be wise to realize the implication that the same plan may NOT work twice. If you want to greatly increase the chances of your unit achieving victory on the field, HAVE A PLAN. If you want to go one step further, HAVE A BACKUP PLAN. If you feel your plan is weak or you don't think you have a good handle on planning, don't despair. Experience is the best possible teacher. If your plan causes your unit to be crushed, take a couple of moments to talk with your team-mates to see why things didn't work. Don't just rely on your perceptions of the battle -- use the additional perspectives of your lieutenants and soldiers. If you plan causes your unit to achieve a stunning victory, again take the time to find out what went right.

The tough part of being an officer is that the troops don't know what they want, but they know for certain what they don't want. -- *Murphy's Laws of Combat*

Here's a blatant hint: listen to your soldiers. While you may be the commander, one or more of your team-mates may have more experience and in some cases, more command experience. Ask their opinions regarding enemy strength, terrain, and the scenario. During the briefing, listen to the comments, criticisms and suggestions. Then, YOU DECIDE. The key here is NOT to let the unit be run by committee. You're the commander -- listen to others, but don't let them run the unit. Finally, appoint good lieutenants. If you're planning on splitting the unit during the melee and actually separating the sub-units by a considerable distance, take the time to find able lieutenants. This will greatly reduce the chances of a sub-unit being destroyed during the melee. Give the lieutenants some initiative, too. If you try to command every single soldier in a 10 fighter unit, you'll be killed very quickly. Let the lieutenants do most of the work -- that's their job.

A Checklist

A riot is a spontaneous outburst. A war is subject to advance planning. -- *Richard M. Nixon*

This checklist is provided as a brief point summary of the planning phase. For those commanders who are new, it might be a good idea to put this checklist onto a 3x5 card and laminate it. This allows a commander to quickly run through the main points of planning and deploying the units and prevents missing key elements.

- Select a Unit
- Select a Commander
- Get the Scenario
- Begin Planning
  - Conditions
    - Scenario Type (Offensive/Defensive/Mixed)
    - Victory Conditions Time
    - Limits Terrain Type (Offensive/Defensive/Neutral)
    - Key Positions
  - Enemy
    - Number of Enemy Fighters
    - Experience Levels (Beginner/Intermediate/Expert)
    - Special Fighters (Snipers/Flankers/Commanders)
  - Weapons
    - Short Weapons (Daggers/Short Scabbards/Bucklers/Cloaks)
    - Long Weapons (Long Scabbards/Second Rapiers)
- Plan
  - Who
    - Skill Level of Soldiers Available
    - Weapons
    - Sub-Unit Mission
      - Selecting commanders
      - Establishing a Chain of Command (what the team should do when YOU get killed)
  - What
    - Define Sub-Unit Missions
    - What to Do to Achieve Victory
    - What to Do if a Sub-Unit soldier is legged
    - What to Do if a Sub-Unit soldier is killed

- o Where
    - ▪ Arrange Initial Unit Formation
    - ▪ Define Sub-Unit Positions during the Melee
        - ▪ Positions with the Main Unit
        - ▪ Positions away from the Main Unit
- o When
    - ▪ Define Sub-Unit Timing
        - ▪ When to Advance/Retreat
        - ▪ When to Detach/Rejoin from Main Unit
- o Why
    - ▪ Explain the Sub-Units' Purpose
    - ▪ Explain the Sub-Units' Mission
- o Backup Plans
- Communication
    - o Define Verbal Commands
        - ▪ Advance
        - ▪ Retreat
        - ▪ Wheel
        - ▪ Shift
        - ▪ Flank
        - ▪ Detach Sub-Unit
        - ▪ Retrieve Sub-Unit
        - ▪ Special Commands
    - o Define Non-Verbal Commands
- Deploy Unit Physically Place Sub-Units in Formation
- Rehearse and Rehearse Complicated Maneuvers
- Take the Field

For very simplistic scenarios, this checklist will seem like overkill. However, the checklist is invaluable when faced with a very complicated scenario. In time, most of the items on the list will come to mind automatically. The commander will be able to quickly and confidently plan a successful mission. Experience is the key to deciding which portions of the checklist are important.

Creation of Sub-Units

McCoy, Spock, myself, and a Security detail will beam down to the planet surface. -- *Star Trek*

The creation of sub-units is an integral part of the planning phase. Sub-units allow the commander to delegate authority and reduces their workload. Once sub-units are in place, the commander can move blocks of soldiers around the battle field more easily. The number of sub-units should reflect the number of different tasks the commander envisions.

Commanding

I don't care what's holding him up -- we're taking the bridge and we're taking it now! -- *Kelly's Heroes*

*"Consider this your first **command** decision." - Star Trek: Next Generation*

Once the unit has been briefed and the melee started, now is the time for the commander to actually lead the troops into battle. This section covers some of the important aspect of leading fighters and maintaining command and control on the battlefield.

Lead from the Front

The commander shouldn't be standing behind the unit. This is a bad idea of two reasons. First, it lowers the unit's strength as there is one less fighter on the front line. In a large unit this may be relatively unimportant, but in a small unit, it can be critical. Second, the commander must be in a position to see what's going on. This requires that the commander be right up front and in the action. Obviously, leading from the front places the commander at a significant amount of risk. If the enemy commander is competent, rest assured that you have been tasked for destruction early on in the melee. The key here is to create your own guard. Their mission is simple -- protect you from the enemy. Depending on the size of the unit, we recommend 1 or 2 guards. Any more than that simply draws valuable manpower and limits your mobility. A trio led by the commander is a very effective sub-unit which offers a substantial amount of protection.

Communication

Every command which can be misunderstood will be. -- *Murphy's Laws of Combat*

On the field, the commander will have to give commands. In the heat of battle, the commander must be extremely vocal. In a melee, everyone is shouting, swords are clashing, and everyone's ears are covered by masks and padding. Commands should be simple and loud. Prior to the battle, the commander should review the basic commands for attacking, moving, and splitting the unit. When giving commands, here are some hints: Look at the fighters you want to command. Oddly enough, this is something commanders don't do on the field. Also, repeat the commands several times. If you shout "Retreat" during a hectic engagement, maybe half your soldiers are going to hear you, with occasionally disastrous results. If you shout "Retreat" three times, you have a much better chance that ALL the soldiers will hear you and responding correctly. In some cases, shouting will not be enough. If you need to get in touch with a sub-unit out of audio range, send a runner. A nice feature of the trio sub-unit is that it allows the commander to detach a soldier to use in this capacity, without leaving the commander open to attack. Don't give the runner a long command either -- keep it very simple.

Death of the Commander

You really shouldn't parry with your face. -- *Tristan Grey*

He's dead, Jim. -- *Star Trek*

Even with your guard, there are going to be times when you're going to buy the farm. A good commander plans for this particular disaster by establishing a clear chain of command. This is not to say that your death will not affect the unit -- chances are your unit is now doomed. We recommend that you take this time to study the battle. A good commander never passes up the opportunity to extend their knowledge, particularly of other commanders.

The Plan Isn't Working

Don't Panic. -- *Hitchhiker's Guide to the Galaxy*

Uh...Help. -- *Randal the Malcontent*

Inevitably, there will be times when the plan doesn't work. On the one hand, this is bad as you're now in the unenviable position of pulling something out of your butt on the field without the luxury of time to plan. On the other hand, this melee will no doubt generate a first class "No shit, there I was..." story. First and foremost, remain calm. It's OK to feel the icy black hand of fear around your heart - it is NOT OK to let your troops know this. Act confidently. Believe in yourself and your soldiers. If you turn into a blithering idiot on the field, don't be surprised if the lieutenant standing next to you cuts your throat (again, we've seen this happen).

It's humiliating, I know, but for God's sake, take it like a man. -- *True Lies*

If the situation is really getting out of hand, retreat and regroup. Fall back to a defensible position (if one exists), reestablish your formation, and start thinking. If you've already got a backup plan, now is the time to use it. Here are some last ditch "plans" which occasionally work.

Attack

Stay on target. -- *Star Wars*

Somebody wake up Randal. -- *Tristan Grey*

Hey diddle, diddle, straight up the middle. -- *The Longest Yard*

When in doubt, attack. Advance the unit and engage the enemy. At this point, caution is a waste of time. Press the attack strongly and concentrate on the weaker enemy fighters. The rationale here is; if you know you're going to die, try to take some of them with you. Kamikaze attacks by veteran soldiers are an excellent way to destroy key enemy fighters and disrupting the enemy formations and plans. The redeeming factor of this plan is that it might actually work. The chances for achieving victory are slim, but it is possible.

Surrender

Game over, man, game over! -- *Aliens*

In some cases, the best approach may be to raise the white flag and surrender the unit. While less messy than attacking, this approach offers no chance of victory. The danger here is that some enemy commanders may not offer quarter and in surrendering you've just doomed the unit.

Retreat

Run away! Run Away! -- *Monty Python and the Quest for the Holy Grail*

We're leaving! -- *Aliens*

In some melee scenarios, it is possible to leave the field and end the melee. In this case, the best alternative is to quit the field. Remember, "He who fights and runs away, lives to fight another

day." While this option doesn't heap fame and glory upon your unit, it is sometimes a prudent choice for a commander facing imminent defeat.

Sacrificing Soldiers

"An enemy infantry unit of 200 men is marching off to battle. At the base of a large hill, they spy a lone Blue Company mercenary at the top. The mercenary begins shouting insults at the unit. The infantry commander quickly grows annoyed and dispatches a soldier to deal with the mercenary. The soldier and mercenary disappear over the top of the hill and the sounds of battle are heard. After a few minutes, the mercenary reappears and begins berating the unit again. Annoyed, the commander dispatches 10 soldiers. They, too, disappear over the hill and the sounds of battle rage. After fifteen minutes, the mercenary again reappears to hurl insults again. In a fit of rage, the commander now sends 50 soldiers to kill the taunting rogue. The soldiers march over the hill and a terrible ruckus ensues: the clash to steel, shouted commands, screams, and a cloud of dust drifts over the summit. Finally, a lone soldier crawls back down the hill. Severely wounded, the soldier yells to the commander. "Sir, sir!" he cries, "Don't send any more men! It's a trick! There are two of them!" - Robert de Marchet

A commander must balance victory over the safety of the unit. Ideally, a commander should be able to crush the enemy and not take a single casualty. Sometimes, this will happen and everyone will be happy. However, most melees are going to result in several soldiers being killed. If a commander is not willing to sacrifice troops to gain victory, then there is little chance that the unit will be victorious. Some common situations requiring sacrifices are described below.

Capturing a Defensive Position

In most cases, a defensive position can usually be won through attrition of the enemy fighters. The commander places sufficient pressure on the position and with skill and some luck, destroys the enemy fighters. In some cases, however, a defensive position can be exceedingly difficult to capture using normal tactics. A sacrificial frontal assault may be necessary to crack the enemy defense and allow attacks to open up the position. Typically, one or two veterans will rush the enemy line in an effort to sweep enemy blades and kill enemy fighters. At the same time, the rest of the unit concentrates their attack on the portions of the enemy line being hit by the rushing soldiers.

Skirmishers

In some defensive scenarios, the unit may be forced to retreat to a secondary defensive position. If the new position requires several seconds to occupy, a fighting withdrawal of the entire unit may be unsuitable. This is particularly true of retreating through a narrow gate or alley. Under these conditions, the commander will want to delay the enemy unit just long enough to execute a fast retreat and re-deploy. To achieve this goal, a flying squad, forlorn hope or skirmishers should be tasked. These soldiers must defend the entire retreating unit against the oncoming enemy and delay their attack long enough for the unit to take the new position. In most cases, one or two veterans will be facing the entire enemy. Their mobility will be restricted. Casualties among skirmishing soldiers will be very high, typically, total loss.

Destroy Key Enemy Fighters

If the enemy unit possess an expert fighter, it may be necessary to use a pair or trio to rush the fighter and destroy them. Depending on the skill level of the enemy fighter, they may be able to

destroy one or two of the assaulting soldiers. This sacrifice is often made to prevent an expert fighter from destroying the unit via attrition. No matter what the situation, the decision to sacrifice a soldier should result in a substantial gain for the unit. At the very least, a sacrificial soldier should kill one enemy fighter before being killed. In many cases, the sacrificial soldier is able to achieve several kills as they are no longer restrained by caution. Considering the small size of most light weapons units, sacrifices must be kept small in order to prevent the unit from wasting too much valuable manpower.

Morale

They call him the Sand Spider.
"Why?"
Probably because it sounds scary. -- *True Lies*

Just as in an actual military unit, morale is extremely important to the effectiveness of an SCA unit. Beginner and intermediate soldiers can be easily intimidated in the presence of a strong enemy unit (such as a baronial or kingdom guard). This intimidation is often manifested in such comments as "*Damn, we are going to get our ass kicked.*", "*Oh man, we're facing the So and So's.*" and "*Look who's on the other team!*". If the unit believes they are going to lose, chances are, they will. Be positive and let the troops know it. Exude confidence -- once the troops realize you're not worried, they'll stop worrying too.

Pep talks aren't just for football coaches -- they work in melees, too. Psyche the unit up and the performance level will rise dramatically. Lieutenants need pumping up -- in most cases these soldiers are new to command and really need a confidence boost. From a physiological point of view, fear causes tension within the human body. This tension interferes with the fine motor control essential for good point work in the melee setting; resulting in sloppy attack and defense.

"*Esprit de Corps*" (pronounced: es-PREE-day-core) essentially translates into the fighting spirit of the unit. Elite military units such as: the U.S. Army Rangers, U.S. Navy SEALs, Britain's SAS paratroopers, Germany's GD9, etc. build esprit de corps. The members of these units are essentially warrior-fanatics who's loyalty to the unit inspires 110% performance. This tends to bring the unit together into an extremely tight-knit team and allows them to focus their energies with devastating effect. This "unit integrity" results in a synergistic effect where the sum of the whole is greater than the sum of the parts. On that same note, the intimidation factor brought to the field by these units can be demoralizing to enemy personnel. This level of integration in SCA Light Fighting is usually only seen in households and mercenary companies (hint, hint). Commanders would be wise to take such espirit into account when encountering such a unit.

A Final Comment

Field experience is something you don't get until just after you need it. -- *Murphy's Laws of Combat*

Good commanders are NOT created from books or manuals. They are created on the field, in the thick of battle. This manual can only give you a little taste of what it is a commander needs to say and do -- the final say in commanding lies in leading units and gaining experience. It takes experience for a soldier to become a good commander. Plans will fail and soldiers will die - fortunately, in the SCA, death only lasts until the next melee.

The Pair

One enemy soldier is never enough, but two is too many. -- *Murphy's Laws of Combat*

The simplest of all the sub-units is the pair which, as the name suggests, consists of two fighters. The pair is a very versatile unit as it offers good defense along with excellent mobility. In general, though, the pair is a relatively weak unit unless the fighters composing the pair are very strong. New fighters should not placed in pairs.

Positioning

The key to the pair's defensive capability lies with each soldier protecting the other. The typical attack pattern of the pair is to have one soldier attack while the other defends. These offense/defense roles alternate and provide a high degree of protection to the attacking soldier. This type of defense is based on the two soldiers maintaining close proximity and timing their attacks. The manner in which the fighters stay together varies on the amount of melee experience the pair has together.

Touch

The simplest method of maintaining good position is to hold onto the other fighter. The contact point varies with pairs, but some common examples include the shoulder, belt, and baldric. Holding your partner's buttocks is not recommended as it provides a severe distraction and should be reserved for only the most intimate of fighters. Touch is best suited to very new pairs or those fighters with very little unit practice. While very simple, touch can reduce the pair's mobility, particularly when retreating.

Peripheral Vision

But with the blast shield down, I can't even see. How am I supposed to hit anything? -- *Star Wars*
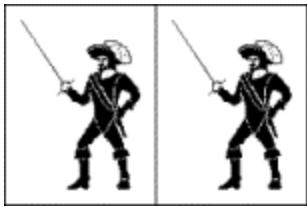
After participating in a number of melees and training classes, soldiers in a pair will no longer rely on touch and instead maintain position via peripheral vision. Peripheral vision allows the fighters to separate slightly which allows greater mobility and more flexible attack patterns. It also increases the range of each soldier's attack.

Situational Awareness

At this level, the soldiers in the pair have been fighting as a sub-unit for an extended period of time. They are familiar with each other's range, attack patterns, and timing. The pair maintains its position based on experience. This pair can now be considered extremely lethal.

In general, the relative position of the soldiers within the pair will vary according to the team's membership. The optimal spacing for two fighters is best determined in combat. Poor spacing will usually result in the pair being easily crushed. Adjust spacing to the point where the pair is able to last for a significant amount of time in combat. We do offer some basic positions for fighters in the pair.
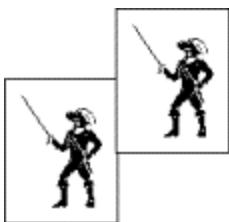
Line Formation

The fighters stand shoulder to shoulder with about 6 to 8 inches between them. This formation is the most flexible and is generally the most common formation adopted by pairs. The weapons placement in this formation is generally unimportant, although left and right hand fighters would be wise to take up positions such that the longer weapons are in the outside hands of the pair. This prevents entanglement and adds additional defensive capability to the flanks of the pair.

Staggered Formation

Stagger, stagger. Crawl, crawl. -- *Yellowbeard*

This formation is similar to the line formation except that one of the fighters in the pair takes a half step backwards. In this formation, the back soldier is offered better mobility in case of a flank attack to the pair. However, the back position prevents the back soldier from defending the front soldier very well. In general, the weaker of the two soldiers should be placed in the back position. This serves to protect the weaker soldier by increasing range of incoming attacks, but still prevents the immediate destruction of the front soldier. Weapons placement in this formation is slightly more critical as the front soldier should have a short weapon (dagger, short scabbard, or buckler) for maximum personal defense. The back soldier is better off with long weapons (second rapier, long scabbard). A second rapier is a common weapon for the back soldier as it allows quick attacks both to the front and to the flanks. This formation often occurs "unconsciously" when an aggressive solo fighter is paired with a less experienced beginner. The disciplined soldier holds formation with a beginning soldier until their partner develops the confidence needed to hold station without help. In our experience, the team is more effective when the veteran is conservative, anyway.

Wide Line Formation

In this variation of the line formation, the distance between soldiers is increased to several feet. This formation is often used by intermediates and experts when engaging a single enemy fighter (or a pair that has one fighter legged. For more information, see Chapter 13 Fighter Analysis). The increased distance can divide the enemy fighter's focus, allowing simultaneous attacks. This

formation is extremely dangerous in that the pair cannot cover each other effectively and can be defeated "in detail." The wide line formation is recommend for intermediate and expert fighters ONLY.

Column Formation

This formation extends the staggered formation to the point where the back soldier is directly behind the front soldier. This is a relatively rare formation, but it can be effective: particularly when the unit is being attacked from different directions. Often, the soldiers are facing in opposite directions and in some cases may fight back to back. This formation, like the wide line, can be extremely dangerous in that the soldiers in the pair are not covering each other well. The mobility of this formation is severely restricted. This formation is often seen when a pair is surrounded or a scenario allows Death From Behind.

Offense
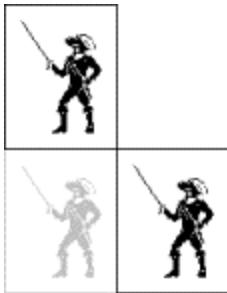
When attached to the main unit, the pair merely functions as part of the line and should merge its attack patterns with that of the main unit. Once the pair is detached from the unit, the pair's attack patterns change in order to provide the maximum in mobility, speed and accuracy without compromising defense.

The Pulse

The pulse is a very common melee attack pattern. This pattern consists of alternating attacks between the members of the pair. As one soldier attacks, the other soldier defends. Once the attacking soldier returns to position, the defending soldier then attacks. In many cases, the retreat of the attacking soldier will draw one or more of the enemy fighters forward into the upcoming attack of the defending soldier. The pulse can also be used by larger sub-units. The pair initially begins in a line formation.
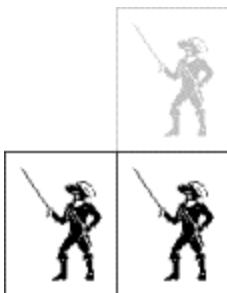

While the pulse can also be used with the wide line and staggered formations, the defensive capability of this pattern is greatly reduced. One of the soldiers attacks, usually with a lunge.

The other soldier maintains position and defends the attacking soldier. Next, the attacking soldier returns to the initial position and the defending soldier attacks simultaneously.

The key is to time the retreat with the attack so the defending fighter is able to catch any attacking enemy fighters moving forward. Finally, the second soldier also returns to the initial position.
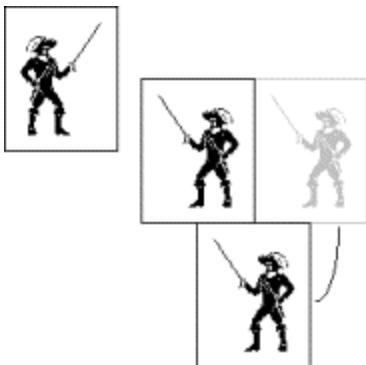

While this sequence illustrates a single pulse, the pulse attack pattern can be made continuous by replacing the final retreat with another attack. Pulse require excellent timing and coordination between the members of the pair to insure that both soldiers are prepared to pulse.

The Cross-Over
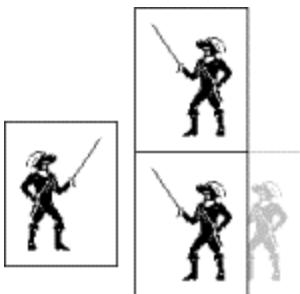
When the pair is fighting a single opponent or another pair, the greatest threat stems attacks by a flanking unit. Once the enemy crosses the flank, they are able to concentrate on a single soldier. The cross-over attack pattern is useful in defeating flank attacks and is a effective alternative (if done correctly) to wheeling a pair to meet the flank attack. This is an advanced attack pattern. It requires good timing and mobility. If either element is lacking, then the cross-over is a veritable death trap for the pair. This attack pattern should be only be attempted by experienced pairs. The pair initially starts in a line formation.

The staggered formation can also be used if the flanking fighter(s) envelopes the back soldier. If the flanking fighter(s) attacks toward the back soldier, then the best option is to wheel the pair. Once the flank attack begins, the back soldier drops behind the front soldier. The front soldier rotates in place to meet the flank attack.

This position is risky because the back soldier will lose sight of the flanking fighter(s).

At this point, the back soldier has moved completely around the front fighter is now in position for a flank attack on the enemy unit. As the enemy's attention should be focused on the front fighter. A strong attack at this time will usually destroy one or more flanking fighters.

This attack pattern requires excellent timing and mobility. The front soldier must be skilled enough to resist the enemy until the back soldier is in position to counterattack. Should the front soldier be destroyed, the back soldier ends up advancing blind with no support. In most cases, this will result in the back soldier being killed as well.

Simultaneous Attacks

If the pair is facing a solo fighter or a very weak pair, a particularly effective attack pattern is the simultaneous attack. In this attack pattern, both soldiers attack at the same time in order to
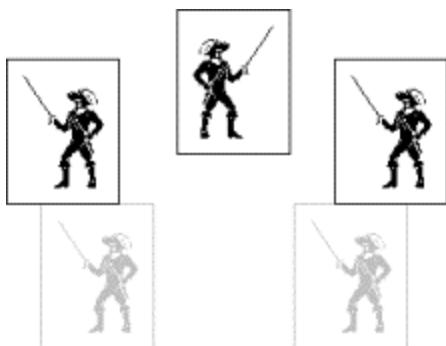
overwhelm the enemy unit. If done properly, this attack pattern is devastating. The initial formation for this attack pattern is limited to the line, staggered, or wide line formations.

The column formation requires too much movement to properly execute the simultaneous attacks. The wide line is often the standard initial formation as it precludes the necessity to space the soldiers in the pair prior to attacking. The first step is to adjust the spacing between soldiers in the pair such that they form a 45º angle with the enemy unit.

In addition, the soldiers turn inward slightly to protect their flanks. If the unit is in the wide line formation, then the spacing is already correct. Once the soldiers are in the correct positions, both soldiers make a strong attack on the enemy unit.

The key is to have both attack occurring at the same time. This prevents an effective enemy defense and greatly increases the chances for successful kills. This attack pattern is susceptible to flanking and should be executed as quickly as possible to prevent the enemy unit from moving. For best results, the pair should start in the wide line position. Both soldiers must attack simultaneously or the enemy unit will have opportunity to defend against both attacks.

Defense

The pair offers excellent offense and defense as long as the pair maintains its mobility. Should the terrain restrict that mobility or if a soldier in the pair is legged, a large part of the pair's offense/defense will be negated. The impact of the wounded soldier on the pair will depend on the pair's skill level and mission.

Restrictive Terrain

The best way to deal with restrictive terrain is to avoid it. If the lieutenant in charge of the pair realizes that the sub-unit is being forced into restrictive terrain, the best option is to move the pair away. In some cases, a strong attack can also remove the threat of being boxed in by destroying a portion of the enemy unit threatening the pair. There will be cases where the pair will be unable to avoid restrictive terrain. This usually occurs when the pair's mission forces them into such areas. The key to the pair's defense at this point is formation. Depending on the terrain and the enemy, the pair should adopt a formation which maximizes defense each soldier provides for the other. The line formation is usually a good choice when the soldiers in the pair have equal skill. If the skill levels are disparate, then the staggered formation (with the weaker soldier in the back position) is a better choice. If the pair is tasked with defending a position and the members have sufficient skill, the wide line position is often a good choice. This position allows the pair to cover a large amount of terrain at the expense of reduced defense. The wide line should not be used by beginner soldiers.

Legged Fighters

Leg shots are common in melees. They are particularly effective against those units on the offensive. Legged fighters reduce the mobility of a unit, reduce the effective manpower of the unit, and in some cases, separate the units into smaller pieces. In a pair, a legged soldier instantly destroys the mobility of the pair, occasionally jeopardizing the mission. At this point, the pair can either remain together or split up. This decision should be based on the mission objective.

Staying Together

I'm not leaving my wingman. -- *Top Gun*

A good soldier never leaves a man behind. -- *Toy Story*

If the pair elects to remain together, the first step is to get into a staggered formation. The injured soldier is placed in front to maximize their range while the uninjured soldier takes the back position. This formation is extremely difficult to defeat as attacking units must avoid attacks from two different elevations. The front soldier should concentrate on taking arm and leg shots at the attacking fighters as these target areas are now readily accessible, particularly if the enemy is attacking. The back soldier should concentrate on defending the front soldier. If both soldiers are legged, then the best option is to get into a line formation with the pair facing slightly outward. The outward facing decreases the effectiveness of flank attacks and allows the pair to defend a larger area (For more information on attacking a pair, see Chapter 13 Fighter Analysis).

Splitting Up

If the pair splits up, the uninjured soldier should immediately link up with another sub-unit. Stay with the injured soldier until you have planned your route and identified any obstacles. When you decide to go tell the uninjured soldier you are leaving. Move quickly when linking up with

the nearby sub-unit and get into formation as smoothly as possible. Splitting up is always a risky move as both soldiers become vulnerable to massed attacks. Pairs are especially deadly to solo fighters as they have excellent mobility and offensive capability.

Death

Should one of the soldiers in the pair be killed, the decision of the remaining soldier is to stay solo or join another sub-unit. This decision will be based primarily on the mission of the pair. If the pair's mission is to harass the enemy, tie up enemy manpower, or bend the enemy's line, then the remaining soldier should hold position and continue the mission. In many cases, this will result in the complete destruction of the pair. From a historical perspective, leaving one's post in the face of the enemy was considered desertion and was often punishable by death. While that penalty is not imposed under the SCA rules, a soldier should remember that their mission is a part of a larger plan. Should the pair's mission fail, then the entire unit may face defeat.

Command

A large part of the effectiveness of the pair lies within maintaining good communication during combat. Communication is the key to coordinating attacks, maintaining position, and identifying enemy threats. In addition, the lieutenant commanding the pair must be decisive. The pair's primary defense lies in its mobility --indecision can often limit that mobility and open the pair up to attack. Once the pair has been selected, the commander's first task is to decide on a formation and relative placement of the soldiers. Next, the commander should explain the pair's mission and specify the tasks of the other soldier. Finally, the commander should go over what the pair will do in case of restrictive terrain, being legged, death of a team-mate, etc. The pair should then take formation and await placement.

Chapter 6: The Team

We are the three Amigos, Hey! -- *The Three Amigos*

In addition to the pair, the other primary unit found in light weapons melees is the team. Consisting of three soldiers led by a lieutenant or commander, the team offers several advantages over the pair. First and foremost is the increased offensive and defensive capability. The additional soldier also adds increased endurance to this sub-unit, allowing it to last longer in the face of mounting casualties. The primary disadvantage of the team over the pair is decreased mobility. Due to their limited mobility, teams are used for defending objectives and supporting flankers. The team is also excellent for attacking defensive positions. Another common use for the team is acting as a guard for a commander. In any case, the team is a solid unit and suitable to a variety of tactical situations.

Positioning

Due to the relatively large size of the team, the team can assume several different formations. In most cases the formation used by this sub-unit is the line.

Offense
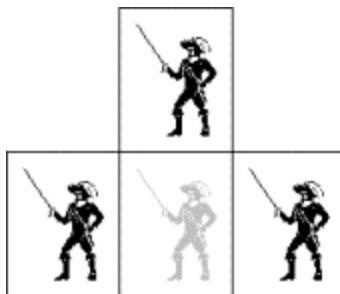
The team offers similar attack patterns to that of the pair with some modifications. In most cases, the team can outperform pairs using the same patterns due to the increased defense inherent to the team.

The Pulse
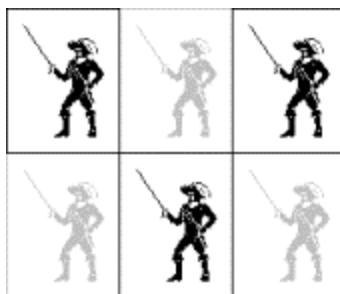
The only modification to this attack pattern over the pulse executed by the pair is that all three soldiers pulse. This allows one extra attack over the pair and increases the defense of the middle soldier during their attack.
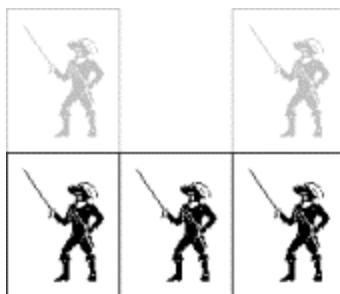
In the case of the team pulse, the center soldier attacks first.

The end soldiers in the team defend the center soldier's flanks. The center fighter then retreats into the line while the end soldiers simultaneously attack forward.

Finally, the end soldiers return to their position in the line.
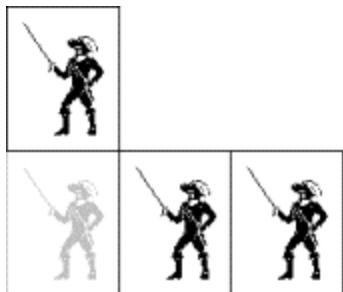
The Ripple

The ripple attack pattern is a variation of the pulse attack pattern. The difference lies in the order of the attacks. The ripple pattern is used to rake a line of opponents. This results in the enemy "holding in place" which can have valuable strategic value when a team of flankers is pressing the enemy flank. The ripple is very effective when the enemy unit is in the process of adjusting
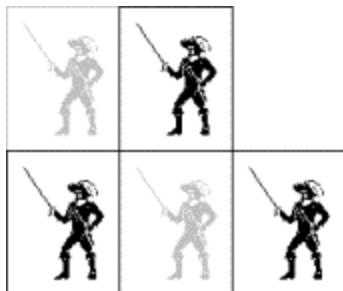
their line due to accumulating wounded or dead fighters. The primary disadvantage of the ripple attack is that attacking soldiers are slightly more vulnerable than in the team pulse. Accordingly, this attack pattern should be used when the enemy is in retreat or not in position to counterattack. The ripple pattern starts with the team on line.
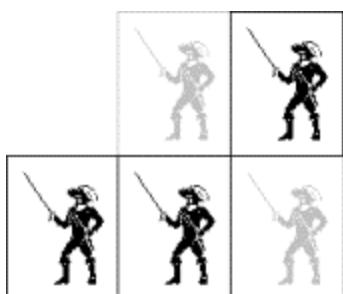
One of the end soldiers then attacks forward while the other two soldiers defend. The ripple attack pattern can be started from either end of the team.
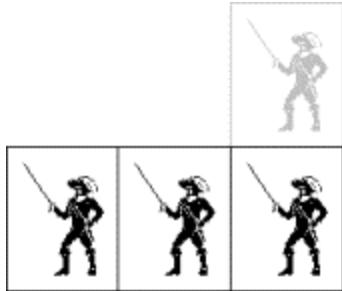
The first soldier retreats back into the line while the center soldier simultaneously attacks forward. The center soldier is defended by the retreating (first) soldier and the end soldier.

The center soldier than retreats and the last soldier attacks forward.

Finally, the last soldier retreats back to the line.
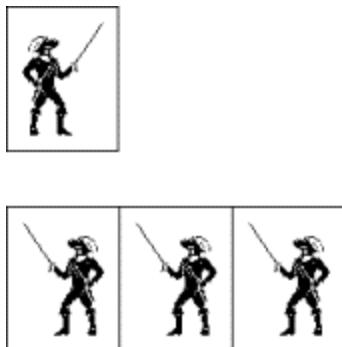
The ripple attack has more "forgiving" timing than the team pulse. The two end fighters don't need to coordinate their attack as finely. However, the attacking soldier in the ripple attack is usually supported by only one team-mate on the line and does not have the added protection from the distraction caused by the simultaneous attack found in the team pulse.

Flank Attack
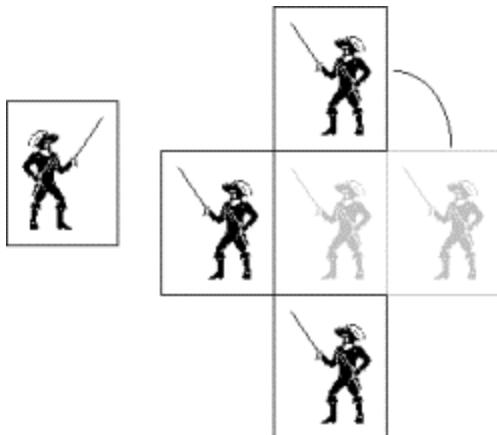
One of the benefits of the additional soldier in the team is the ability to execute flank attacks. In this case, one of the end soldiers breaks away and flanks the enemy unit. The remaining pair then launch a frontal assault while the flanker attacks the enemy flank. This particular attack pattern is very effective against pairs. On command, the flanker detaches from the team and moves to attack the enemy flank. For more information on the use of flankers, refer to Chapter 7 Flankers.

Cross-Over

Attack This attack pattern is exactly the same as the cross-over attack for the pair. The only difference in the team version is that the movement of the far outside fighter dressing to cover the end fighter being engaged. The pattern starts the same way the pair version does with the exception of the movements made by the additional soldier.

As the enemy fighter begins flanking, the center soldier drops back and toward the attack. Simultaneously, the outside soldier dresses into the spot vacated by the center soldier.

At the end of the pattern, the center soldier has moved into a position to threaten the enemy's flank. The outside soldier has moved up to take position next to the inside soldier.

This change is position is extremely useful if the enemy fighter does not continue flanking and instead engages the soldier facing them. Since the center soldier's movement is masked from the attacking fighter, the presence of the outside team soldier significantly improves the chances of catching the enemy fighter unprepared and killing them. The cross-over attack can also be used with an outside fighter dropping back and around the unit to engage the flanker. The increased distance that must be traversed makes this variation of the cross-over less effective and less common. Another variation of the cross-over can be found in Chapter 15 Death From Behind.

Defense

The team offers superior defense over the pair. The additional soldier creates the interlocking zones discussed in Chapter 3 Being a Soldier. Since the team does not rely on mobility for defense, the loss of mobility due to restrictive terrain or legged team-mates is less of a problem for a trio.

Legged Soldiers

A legged soldier does not seriously threaten the well-being of a team. In cases where the team is tasked with defending an objective, legging soldiers of an experienced team actually improves the team's defensive capabilities.

One Soldier Legged

In this situation, the wounded soldier goes to their knees and calls out, "I'm legged." The able-bodied soldiers should immediately take up position on either side and slightly to the rear of the wounded soldier. This configuration prevents the wounded soldier from being flanked and forces the enemy to engage the team head-on. The able-bodied soldiers should hold their position beside the wounded soldier for two reasons. First, they will draw attacks from the enemy which the wounded soldier can counterattack effectively. Second, the wounded soldier is very susceptible to flanking attacks and the presence of the unwounded soldiers prevent such occurrences.

Two Soldiers Legged

In this situation, the two wounded soldiers should take position side-by-side. The able-bodied soldier takes a position behind and between them. The able-bodied soldier then defends the two wounded soldiers. The wounded soldiers can then meet enemy with counterattacks, while being "covered" by their able-bodied comrade. This formation is more vulnerable to flanking attacks as the mobile soldier must move from side to side, defending both flanks. Enveloping attacking against this formation are particularly effective where terrain permits.

Death

Should one of the soldiers in the team be killed, the team reverts to the pair. Tactics and strategy should be modified in accordance with the nature of the "new" sub-unit. For more information refer to Chapter 5 Pair. If two soldiers in the team are killed, the remaining soldier can either fight solo or link up with a sub-unit.

The Team As A Training Unit

Of the two primary units, the pair and the team, we believe the team is best suited for teaching melee skills. Every aspect of the basic melee skills can be improved upon by being in a team: movement, communication, complimentary blade work, strategic thinking, experience and a growing sense of accomplishment and esprit-de-corps. As a fighter progresses in their training, these basics (with some refinement) can be a foundation for performing the more advanced/complex duties of the pair. Fighters new to melees should be placed in teams with a veteran soldier in command. Scenarios should be simple and geared toward teaching new (or old) fighters the basics of melee combat.

Chapter 7: Flankers

The enemy diversion you're ignoring is the main attack. -- *Murphy's Laws of Combat*

Flankers are a specialty unit that detaches from the main unit. Flankers are tasked with a variety of missions, including occupying enemy fighters, destroying key personnel, capturing/defending key positions, disrupting enemy formations, preventing enemy movement, and gathering intelligence.

Selection of Flankers

Flankers are often the best individual soldiers within the team. As a flanking unit often operates a substantial distance from the main body and lacks numerical superiority, flankers are often expert fighters. This increased skill level serves to protect the flanking unit and make up for its

lack of manpower. Beginner fighters should never be used as flankers as they lack the necessary skills to make them effective. Flanking units will have high casualties due to their separation from the main body and the general nature of their mission. The soldiers within the flanking unit should be able to operate as a pair or as solo fighters. Each flanker should have the following attributes:

High Skill Level

Find out what Calvaras is doing and I'll write a song for you myself! -- *The Magnificent Seven*

A flanker must be an excellent single combat fighter and be capable of withstanding 2:1 and 3:1 odds for prolonged periods of time. In some cases, the flankers mission maybe to inflict as many casualties as possible before sucumbing. In a battle to the last man, a high kill to death ratio can be highly effective in swinging the tide of battle.

Excellent Mobility

A flanker must have good footwork and be able to move quickly through difficult terrain. A flanker should attempt to attack the enemy units at their weakest points. A flanker should engage stragglers and other "targets of opportunity." To accomplish these tasks, the flanker must be in good physical condition and be able to attack enemy positions before they can be reinforced. In addition, flankers need to be able to move out of harms way once the enemy realizes the flankers intent and decides to bring a larger force to bear on the flankers.

Good Off-hand Skills

Flankers need to carry as many offensive weapons as possible. Standard combinations for flankers include rapier/dagger and rapier/rapier. Scabbards, both long and short, are viable alternatives, but they definitely lack offensive capability. In addition, a flanker must be able to fight well with both hands. Losing an arm is very common in the melee environment.

Level Head

Flankers must remain cool and collected during the heat of battle. Since they are operating independently, they must be able to think on their own and adapt to the changing conditions before them. Flankers who fail adjust their plans based on enemy positioning and intent are easily immobilized and destroyed.

Attitude

A flanker should exude an aura of death and destruction. Beginner fighters should fear a flanker on the basis of reputation, and intermediate fighters should hesitate before engaging. Intimidation is the oldest form of psychological warfare and flankers must be able to intimidate their opponents. This often prevents flankers from being rushed and overwhelmed with mass attacks (as any well trained melee team can and should do; regardless of a flanker's skill or experience). In most cases, dons and cadets make good flankers. These fighters often possess exceptional single combat skill. Their intimidation factor is high, mostly due to reputation. The colorful scarves they wear also serve to heighten fears and uncertainty in the untrained mind.

Command

Flanking units are rarely commanded by a lieutenant. Soldiers within flanking units should be willing to operate as a team to achieve a difficult objective, but for the most part, these veterans

will operate independently. A unit commander will often outline a mission objective for the flankers and simply turn them loose.

Offense
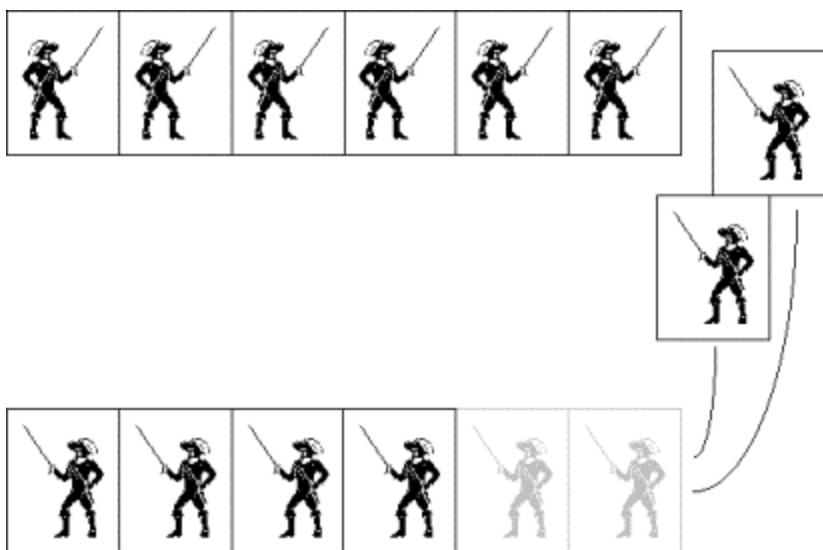
Flankers use "unconventional" practices rather than the standard melee attack patterns (already outlined in Chapter 5 The Pair and Chapter 6 The Team). They attempt to engage the enemy at points where they will face only one or two fighters. Where possible, they use their individual skills to overwhelm an enemy. This section is devoted to common tasks for flankers.

Disrupting Enemy Formations
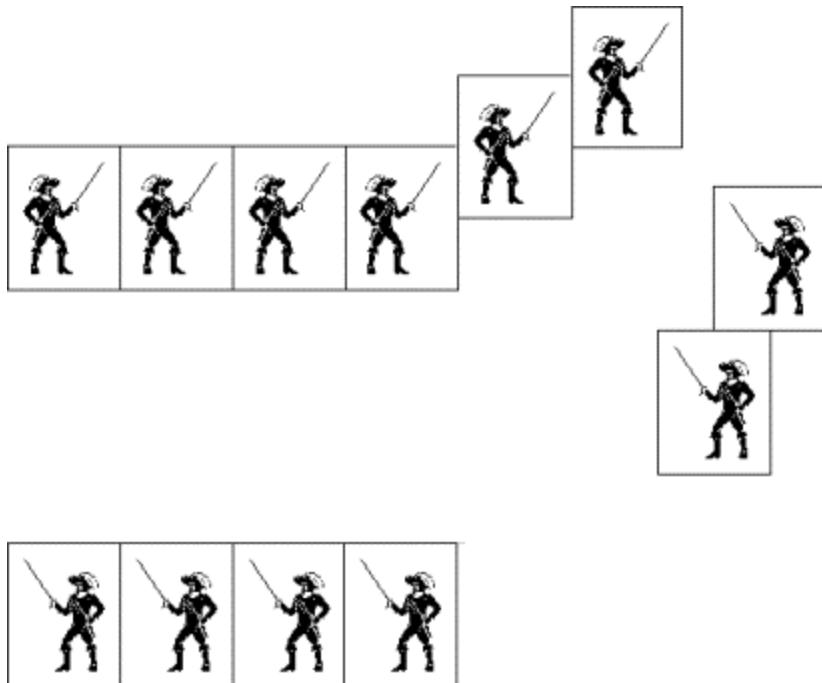
A common task for the flanker is to "bend" the enemy line. This creates a gap in the enemy defenses and allows the main unit to concentrate the main attack on a weak spot.

Flankers leave the main body and move to a flanking position where they threaten one end of the enemy line.

The enemy line will bend in order to prevent the line from being attacked on two fronts. Adjacent fighters will shift position in order to prevent their personal flanks from opening up too much. As a result, a weak spot will form in the enemy line where the adjacent fighters will be unable to defend each other effectively. In the figure below, the weak spot has formed between the number four and number five fighter.
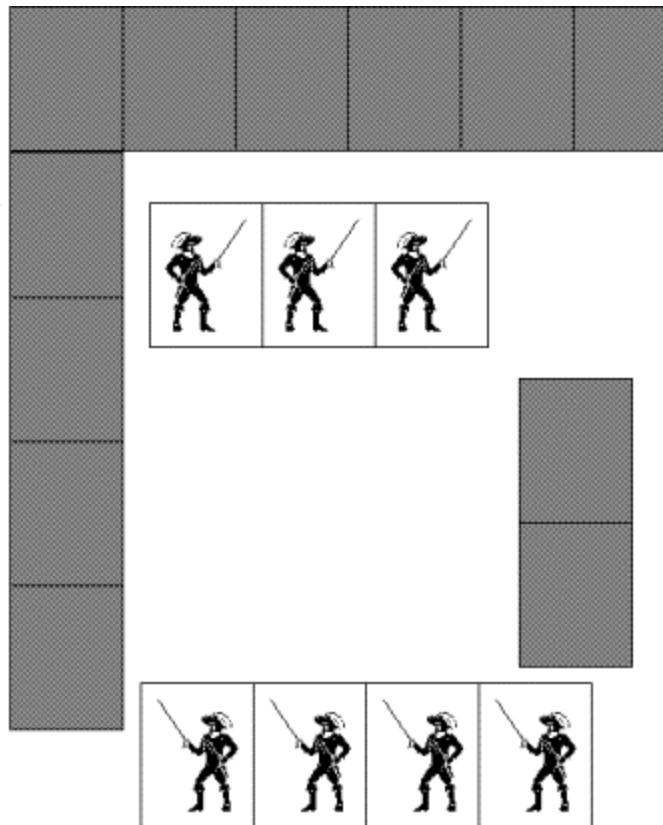
Once a weak spot occurs, strong attacks which kill or disable the disrupted fighters can quickly create large gaps in the enemy formation. The bending of the line can limit the enemy commander's vision and prevent them from making appropriate adjustments to their formation.
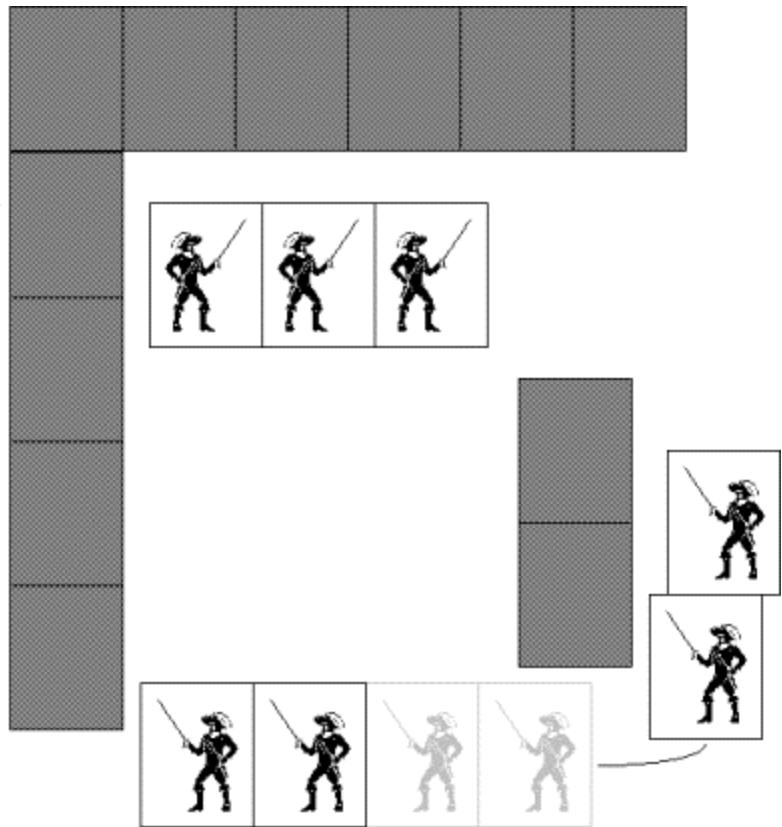
Restrict Enemy Movement

The retreating enemy is probably falling back and regrouping. -- *Murphy's Laws of Combat*
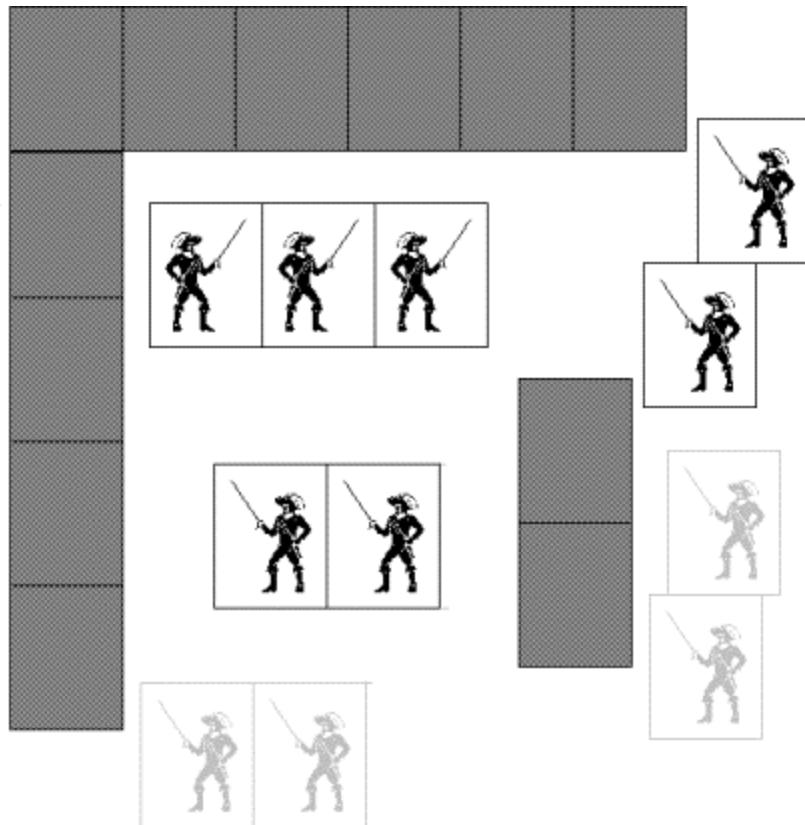
Restriction of enemy movement is another common use of flankers. In this case, the flankers are used to "pin down" an enemy unit in position. When used in conjunction with terrain, flankers can be extremely effective in prevent a unit from maneuvering. This flanker task is common when a numerically superior team is attempting to pin down an enemy unit so that the team's full strength (in terms of sword points) can be brought to bear on the enemy and destroy them. In this example, a numerically superior team is pursuing an enemy unit through restrictive terrain.

The enemy unit has retreated into a corner and is preparing to shift right and escape. The terrain, in this case, favors the enemy. It may allow them to escape around the team's flank. In addition, the narrow confines prevent the commander from facing the enemy with his entire team's strength. Realizing that the enemy has a chance of escaping around his team's flank and perhaps hitting them from behind, the commander deploys two flankers to close off the enemy's escape route.

The flankers move into position and the commander then advances the main body to put pressure on the enemy unit. With the enemy's escape route to the right blocked, the team can now engage the trapped enemy to the front and on the flank.

In this particular case, the commander is taking a risk that the enemy won't try a hard push against the divided team. If the enemy could overwhelm either the main body or the flankers, then the hunter could quickly become the hunted. Splitting the team is always a dangerous gamble, but the heavy tactical advantage gained can be worth the risk.

Capture Key Objectives
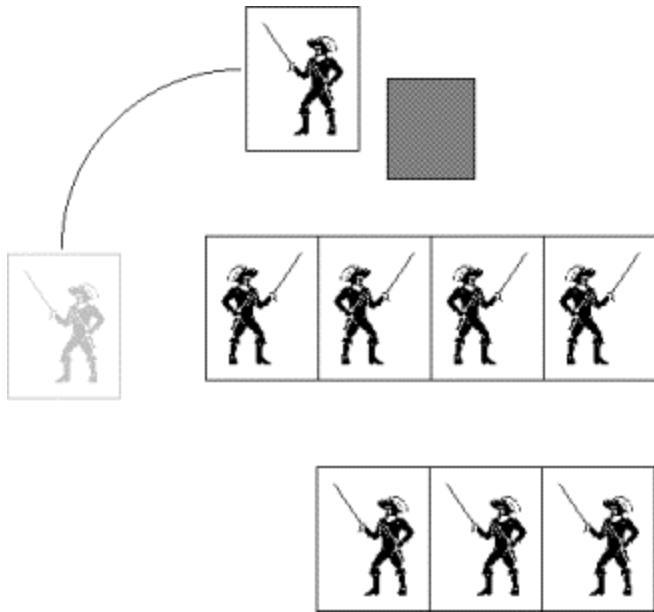
Some melee scenarios require the team to capture some objective: a position, object, or person. The enemy unit is tasked with defending an objective. Flankers can be used effectively in these scenarios to move around the enemy's lines and capture the objective. In this example, an enemy unit is defending a key objective. They are in a wedge formation with the objective behind them. The team commander is advancing in a line formation.

The team commander decides the best course of action is to draw the enemy's attention and send a flanker around the enemy unit's flank to secure the objective. With that goal in mind, the commander presses the enemy unit strongly along the right flank.

In response, the enemy unit shifts right. The flanker, seeing the enemy focus shift to the right, quickly moves around the exposed flank. The flanker is now behind the enemy unit and moves forward to capture the objective.

Depending on the victory conditions, this melee is probably over. If the flanker must then hold the object or return it to his team, the best opportunity lies in continuing around the enemy unit and rejoining his fellows on the far right flank.

Flankers in this type of attack pattern are extremely vulnerable. In many cases, the flanker is not supported by the terrain and can be quickly engaged by a larger unit. The success of this attack pattern relies on the aggressiveness of the main body. The harder the main body presses, the more likely that the entire enemy unit will be distracted or engage.
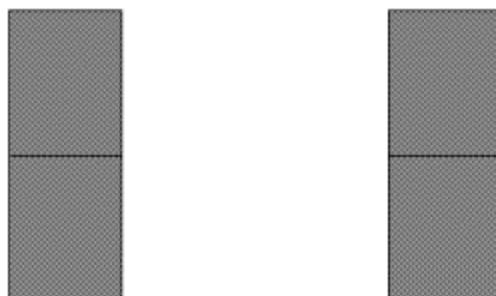
However, this technique is also an excellent method slip a small unit of fighter behind the enemy's main body in order to inflict Death From Behind. In that situation, the flankers should coordinate their DFB with the main unit in order to inflict maximum casualties in the enemy unit. As the enemy reacts to the flankers, the main unit can conduct a hard press to roll up a weak flank or split the enemy unit at a weak spot.

Skirmishing
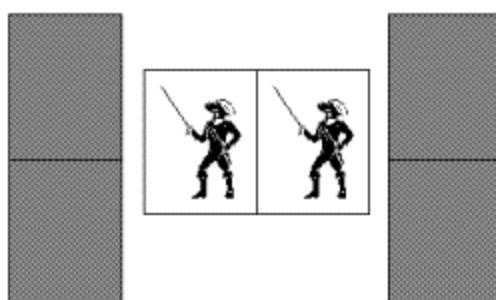
He can't block all of us. -- *Randal the Malcontent*

Flankers are also used as skirmishers. In this role, the flankers are tasked with delaying the enemy advance to allow the team to retreat and/or re-deploy. In military history, skirmishers were often employed as scouts and ranged ahead of the main force. This prevented the main body from being ambushed while advancing through unknown terrain with limited visibility. Skirmishers were used to determine distances between a retreating force and enemy units as well. In SCA light weapons melees, skirmishers are typically used by defending units. If a particular position starts to become indefensible, the commander is often forced to fall back. The retreat can becomes a rout as the attacking units press home their advantage. Skirmishers are often left in place to hold the attackers back until the team can retreat. Skirmishers are best used in very restrictive terrain, such as narrow gates, brides, or alleys. This prevents the enemy unit from bringing a large amount of fighters to bear on the skirmishers. Skirmishers can be used in
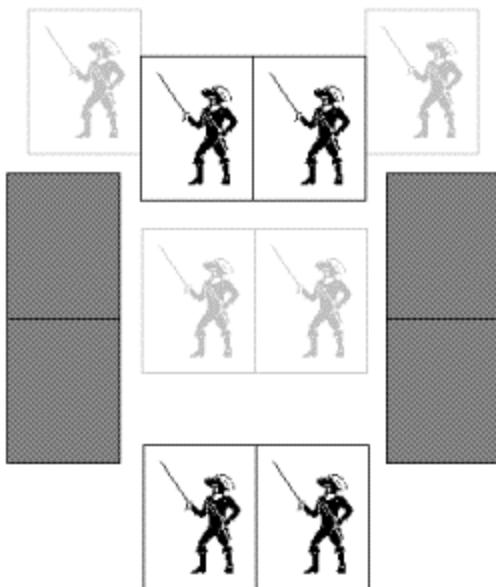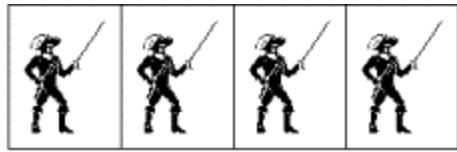
virtually any situation. They can be considered "human tripwires" or alarm systems. In the example below, the team defending the bridge needs to fall back to the far side and re-deploy.
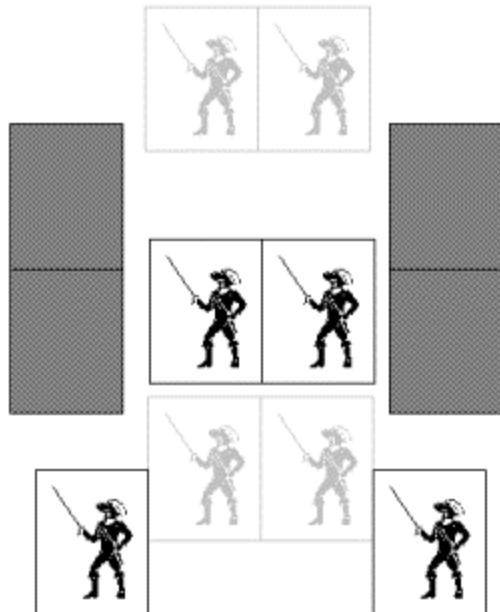
On command, the end soldiers fall back behind the team and retreat over the bridge.
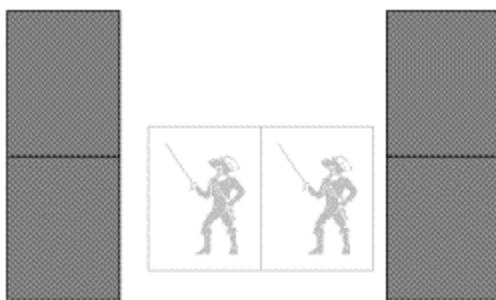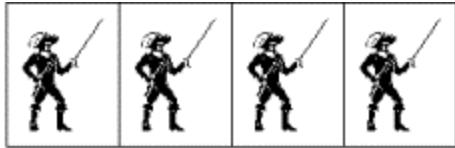
These soldiers are re-deployed first to prevent gaps from forming in the main line. The commander orders the skirmishers to prepare. The end soldiers have now crossed the bridge and re-deployed on the far side.

The commander and the personal guard now fall back. The skirmishers must delay the enemy unit from pressing an attack during the team's retreat. The skirmishers now retreat to the bridge head to take advantage its natural "choke point" characteristics (it limits the number of enemy fighters they must face and prevents flanking attacks).

The bridge itself guards the skirmisher's flanks and increases their survivability. Meanwhile, the commander has reached the far side of the bridge and is readjusting the team's formation to meet the enemy threat. Once the main body is in place, the commander can recall the skirmishers.

In most cases, the skirmishers will be completely destroyed by the advancing enemy, although this depends heavily on the individual skill level, teamwork and experience of the rear guard soldiers. If the skirmishers do survive and terrain is suitable, they should conduct a fighting withdrawal and rejoin their unit. In the bridge scenario just described, this is probably the best course of action. In less favorable terrain, such as an open field or woods, the skirmishers might be better off breaking contact and running.

Chapter 8: Theory of Combat

She blinded me with science. -- *Thomas Dolby*

"*An officer is faced with the following tactical situation. If he leads his unit down one road, there is a 50% chance that 100% of his command will be eliminated. However, if he leads his unit down the other road, then there is a 100% chance that 50% of his command will be eliminated. Which road should the officer take?*" - Discover Magazine

Melee combat can also be viewed from a highly abstract and theoretical point of view. While this perspective is very difficult to apply directly to any given melee, it does serve to illustrate several basic aspects of melee combat. Combat models have been used for centuries to aid in the scheduling of manpower and supplies. These models allow quartermasters and supply officers as well as commanders and kings to estimate what resources are necessary to defeat an enemy.

A Linear Combat Model
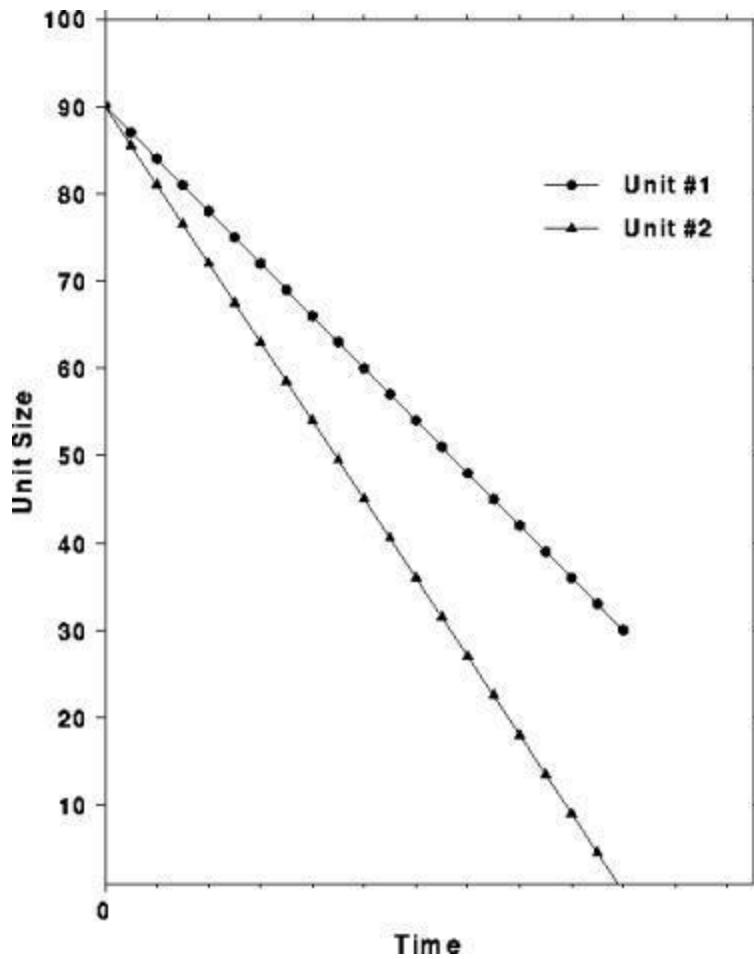
The most simplistic of the combat models consists involves the comparison of casualty rates between the two units. A unit's size at any time t is a function of the casualty rate A and the unit's initial size x0. This function is expressed as $x(t)=-At+x_0$ The comparison of two units requires two equations and the resulting linear system represents the battle. Both units start out with an initial number of soldiers, x_{10} and x_{20}.
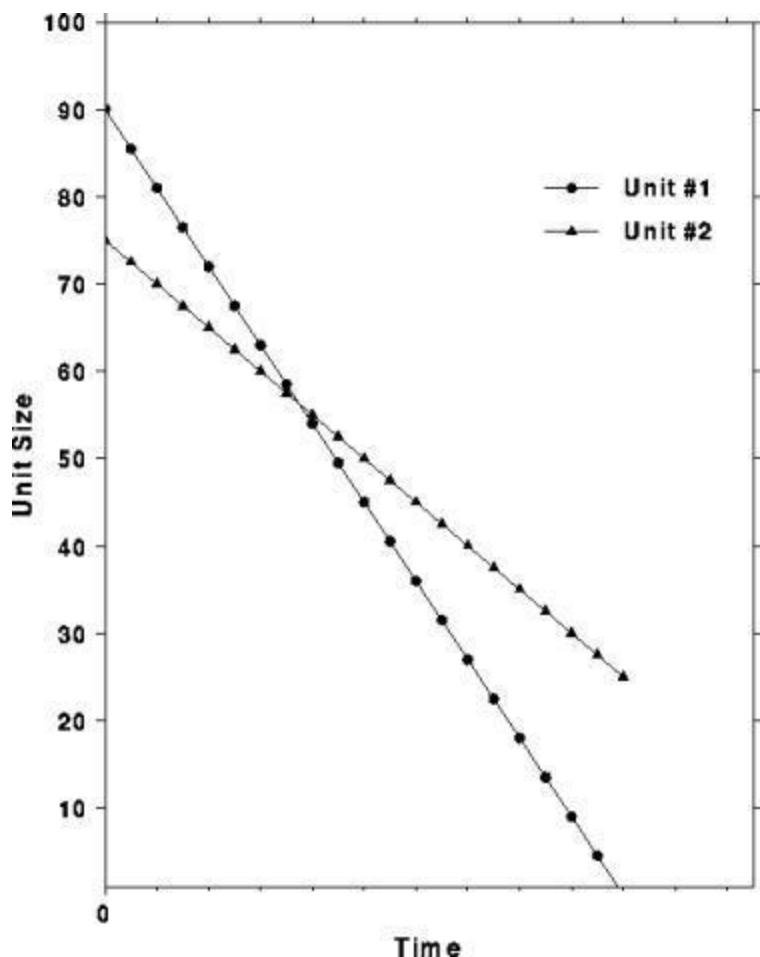
$$x_1(t)=-A_1t+x_{10}$$
$$x_2(t)=-A_2t+x_{20}$$
$$t>0$$

As the battle progresses, Unit #1 and Unit #2 loses soldiers at the rate A_1 and A_2 respectively. Victory occurs when either $x_1(t)$ or $x_2(t)$ becomes zero. This system can be represented graphically as a pair of lines.

The figure above represents a battle being modeled. In this battle, both units start off with the same number of soldiers (in this case, 90). During the course of combat, Unit #2 takes casualties at a slightly higher rate than Unit #1 and eventually is destroyed. This models the concept of attrition. Unit #2 lost the battle because it was unable to sustain that casualty rate.

In figure above, Unit #2 starts out with a numerical disadvantage. However, Unit #2 is able to sustain a much lower casualty rate and is able to outlast Unit #1. From a realistic point of view, this model describes a smaller veteran unit versus a larger green unit. While this particular model is extremely simplistic, it does illustrate a very important aspect of combat -- victory goes to the last unit left standing. When planning a melee, commanders should not overlook the fact that victory is often achieved by simply killing them faster than they kill you. A particular limitation of this model is the fact the casualty rate is constant. In reality, the casualty rate is often proportional to the size of the enemy unit. A larger unit is often able to inflict greater casulties. The next model is slightly more complicated, but allows slightly more realistic modeling of combat.

A Differential Equation Combat Model

Just play with the numbers and get a feel for the problem. -- *Tristan Grey*

The primary drawback of the linear combat model lay in the model's inability to relate the casualty rate to the size of the enemy unit. By using a slightly more complicated model, this relationship can be incorporated into the model. The system of first order ordinary differential equations below relates the rate of change of the unit's size $x(t)$ to the size of the unit, the size of the enemy unit, and a rate of reinforcement.

$dx_1/dt=-ax_1-bx_2+p$
$dx_2/dt=-cx_1-dx_2+q$
$x_1(0)=x_{10}$
$x_2(0)=x_{20}$

$x_1(t)$ and $x_2(t)$ are the size of then units at functions of time. The coefficients *a* and *d* represent operational losses and the coeffieicents *b* and *c* represent combat losses. *p* and *q* are reinforcement rates. Combat losses represent the damage inflicted by the enemy unit and accordingly, are proportional to the size of the enemy unit. A larger unit will inflict greater casualties than a smaller unit. Operational losses, on the other hand, represent losses due to non-combat influences, such as accidents, sickness, etc. These losses are directly related to the unit's size and a larger unit will have a greater loss rate from a statistical point of view. This model is slightly more realistic than the linear model, but there are certain assumptions inherent to this model as well. First, all soldiers within the unit are identical -- all soldiers perform at exactly the same level. Second, the unit's size *x(t)* is assumed be a continous function of time *t*. These assumptions work well for for large units, such as whole armies, but cause the model to break down when the unit sizes begin to approach zero.

Operational Losses

We set off a little charge on the warehouse roof, so Tommy can claim a mortar shell combat-lossed the gun. -- *Rolling Hot*

Operational losses represent unit casualties not based on combat. These include broken weapons, non-combat related injuries, accidents, etc. In terms of applying this model to SCA combat, operational losses are not very significant. In a real army, such losses would be important to mission planning and scheduling. However, in this case, we'll assume these losses are nelgible and set the *a* and *d* to zero. With this assumption, the combat model above reduces to
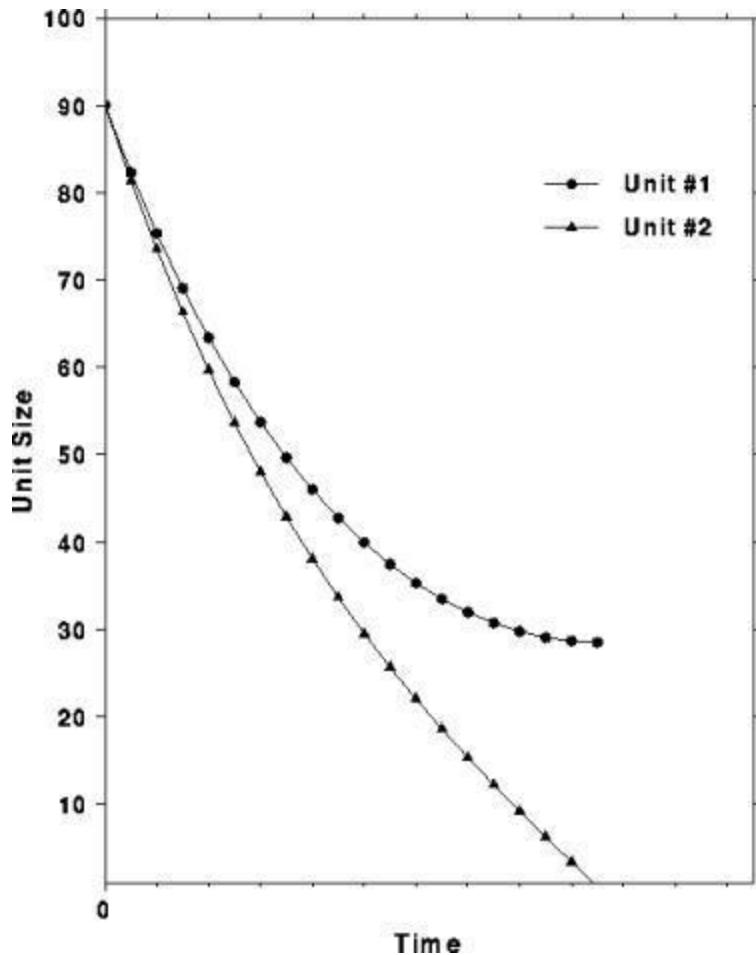
$dx_1/dt=-bx_2+p$
$dx_2/dt=-cx_1+q$
$x_1(0)=x_{10}$
$x_2(0)=x_{20}$

Open Field Battle Example #1

Let's apply the combat model to a real world example problem. Consider an open field battle between two units with no reinforcements and no resurrection. Both units consist of 90 fighters and Unit #1 is slightly better than Unit #2. The combat model becomes

$dx_1/dt=-0.9x_2$
$dx_2/dt=-x_1$
$x_1(0)="90"$
$x_2(0)="90"$

Rather than solve this problem analytically, the model is run through a numerical solver using fourth order Runge-Kutta. The results are displayed in the figure below.

In the figure, both units perform similarly early in the battle. However, as the Unit #2 begins to lose fighters, it is unable to maintain its previous casualty rate against Unit #1. About halfway through the battle, Unit #2 begins to quickly lose soldiers while Unit #1 starts to lose less. Near the end, Unit #1's casualty rate is nearly zero. This behavior is quite common in most melees. Once one side gains a numerical advantage, it quickly crushes the opposing side.

Open Field Battle Example #2

In the previous example, both units started out with the same number of soldiers. In this example, a penalty will be imposed on the better unit by reducing its initial size from 90 to 75. The model is this example is
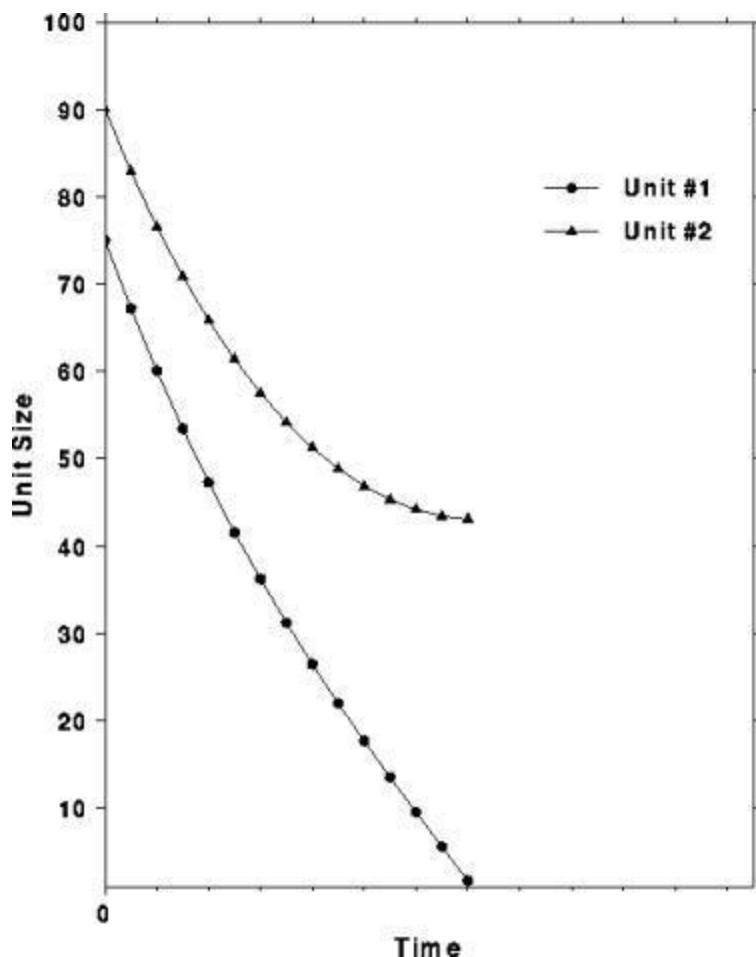
$dx_1/dt=-0.9x_2$
$dx_2/dt=-x_1$
$x_1(0)="75"$
$x_2(0)="90"$

Again, the model is run through the numerical solver and the results are graphed. The figure below illustrates the results of this battle. In this case, the numerical advantage of Unit #2 offsets the higher skill level of Unit #1, resulting in victory for Unit #2. For units of similar skill levels, numerical advantage typically represents victory.

Open Field Battle Example #3

In this example, we'll increase the skill level of Unit #1 to the point where it offsets the numerical advantage of Unit #2. This example assumes that Unit #1 is twice as good as Unit #2. The model is this example is
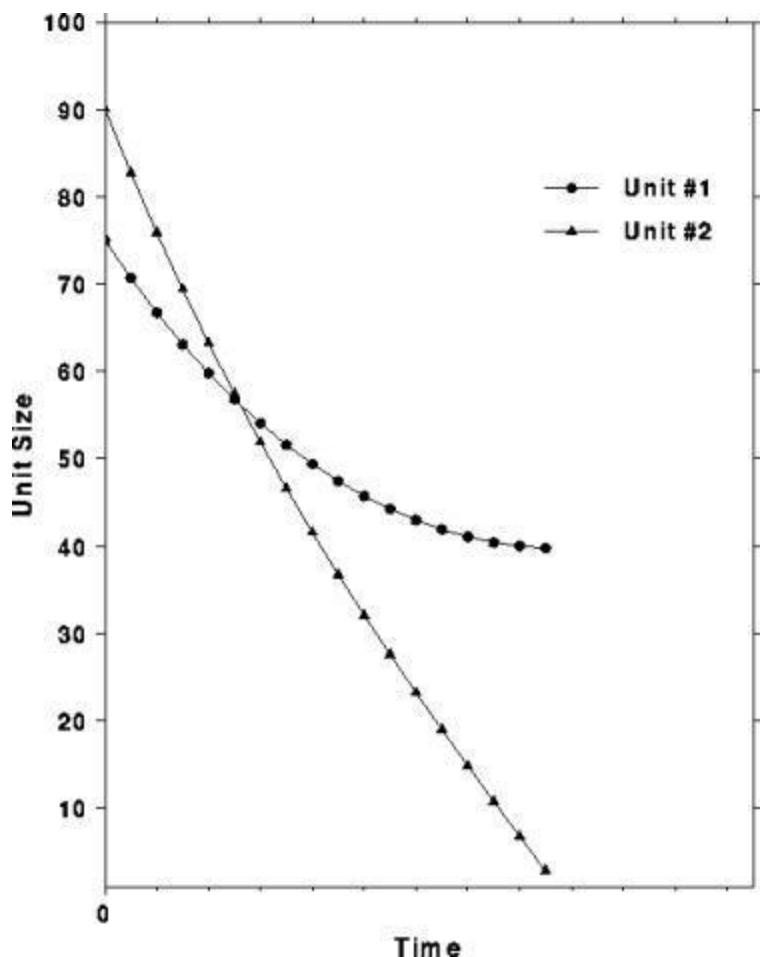
$dx_1/dt=-0.5x_2$
$dx_2/dt=-x_1$
$x_1(0)="75"$
$x_2(0)="90"$

Again, the model is run through the numerical solver and the results are graphed. The figure below illustrates the results of this battle. Unit #1 eliminates Unit #2's numerical advantage early in the battle due to its higher skill level. Once Unit #1 achieves a numerical advantage it quickly overwhelms Unit #2.
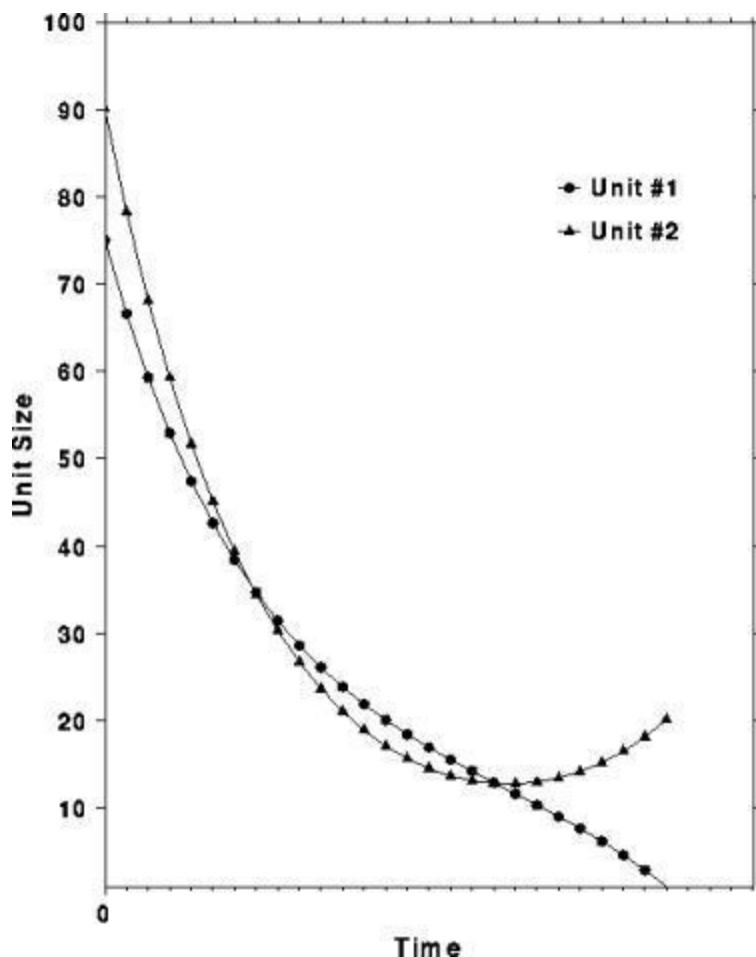
Open Field Battle Example #4

To offset the high skill level of Unit #1, we'll allow Unit #2 to reinforce. This simulates resurrection for one side during the Open Field Battle.

$dx_1/dt = -0.5x_2$
$dx_2/dt = -x_1 + 12$
$x_1(0) = "75"$
$x_2(0) = "90"$

Again, the model is run through the numerical solver and the results are graphed. The figure belowillustrates the results of this battle. In this particular battle, both units start perform similiarly and the skill level of Unit #1 is instrumental in maintaining the status quo between the two units. However, the reinforcements supplied to Unit #2 eventually overcome Unit #1's skill level and victory goes to Unit #2. Unit #1 was even winning the battle for quite some time, but the lack of reinforcements prevented Unit #1 from effectively destroying Unit #2.
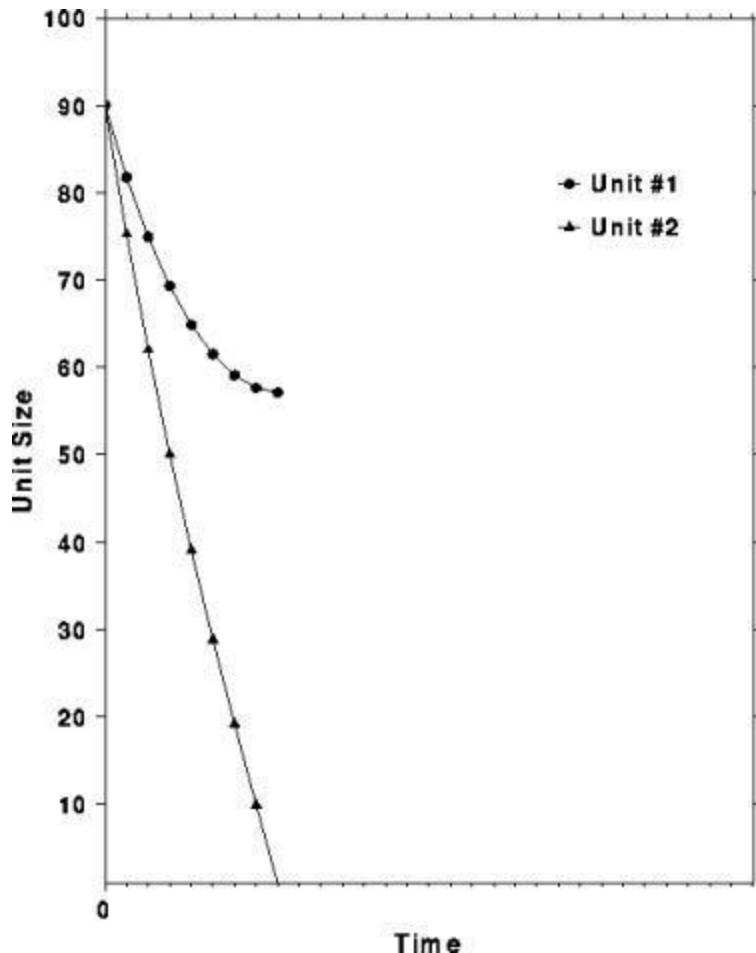
Open Field Battle Example #5

This example is the same as the previous example, except the Unit #2 no longer has a numerical advantage.

$dx_1/dt=-0.9x_2$
$dx_2/dt=-x_1+12$
$x_1(0)="90"$
$x_2(0)="90"$

Again, the model is run through the numerical solver and the results are graphed. The figure below illustrates the results of this battle. In this case, the lack of numerical advantage removes the reinforcement advantage of Unit #2. Unit #1 uses its higher skill level to decimate the ranks of Unit #2 and victory goes to Unit #1.

Theoretical Conclusions

These models, while abstract, do illustrate a single point: Kill them before they kill you. In every example, the victor was the unit who was able to inflict the most damage. In some cases, this disparity in casualty rates was due to a higher skill level and in other cases it was due to an advantage in unit size. Fancy tactics and movement are useless unless they allow a unit to inflict more casualties then they take.

Advanced Models

Join us at the board and show us your solution to this paltry geometric dilemma. -- *Better Off Dead*

These models can be expanded to include more than two units and can be used examine the effect of multi-unit combat. In the multi-unit model, there are *n* total units with *m* friendly units. The original pair of first order ordinary differential equations becomes a system of *n* equations. This model assumes that the first *m* units are friendly.

$dx_1/dt = -a_1x_1 - a_2x_2 - a_3x_3 - \ldots - a_nx_n - b_1x_1 + p_1$
$dx_2/dt = -a_1x_1 - a_2x_2 - a_3x_3 - \ldots - a_nx_n - b_2x_2 + p_2$
.
.

$$\dot{x}_n/dt = -a_1x_1 - a_2x_2 - a_3x_3 - \ldots - a_nx_n - b_nx_n + p_n$$

$$x_1(0) = x_{10}$$

$$x_2(0) = x_{20}$$

.

.

.

$$x_n(0) = x_{n0}$$

In the model, the coeffiecients a_i and b_i represent the combat and operational losses respectively for Unit #i and p_i is its reinforcement rate. By setting $a_i = "0"$, two units can be friendly. This model can be solved using the 4th order Runge-Kutta algorithm.

Runge-Kutta Fourth Order Algorithm

I implemented the Runge-Kutta algorithm using FORTRAN 77 on a Silicon Graphics Indigo 2. The code below implments the algorithm for the differential combat model described at the beginning of the chapter. To adjust the combat parameters, modify the values for *x1, x2, a, b, c, d, p,* and *q*.

```
program runge_kutta
real*8 a,b,h,t real*8 x1,x2
real*8 k11,k12,k21,k22,k31,k32,k41,k42
integer N,i
real*8 f1,f2

a=0.0
b=100.0
N=500
h=(b-a)/N
t=a
x1=90.0
x2=90.0
print*,t,x1,x2
do i=1,N

k11=h*f1(t,x1,x2)
k12=h*f2(t,x1,x2)
k21=h*f1(t+0.5*h,x1+0.5*k11,x2+0.5*k12)
K22=h*f2(t+0.5*h,x1+0.5*k11,x2+0.5*k12)
k31=h*f1(t+0.5*h,x1+0.5*k21,x2+0.5*k22)
k32=h*f2(t+0.5*h,x1+0.5*k21,x2+0.5*k22)
k41=h*f1(t+h,x1+k31,x2+k32)
k42=h*f2(t+h,x1+k31,x2+k32)
x1=x1+(k11+2.0*k21+2.0*k31+k41)/6.0
x2=x2+(k12+2.0*k22+2.0*k32+k42)/6.0
t=a+i*h
if (x1.lt.0.0 .OR. x2.lt.0.0) then goto 1000
endif
print*,t,x1,x2

enddo
```

```
1000 print*
end

function f1(t,x1,x2)
real*8 t,x1,x2
real*8 f1
real*8 a,b,p
a=0.0
b=0.5
p=0.0
f1=-a*x1-b*x2+p
return
end

function f2(t,x1,x2)
real*8 t,x1,x2
real*8 f2
real*8 d,c,q
c="1".0
d="0".0
q="12".0
f2=-c*x1-d*x2+q
return
end
```

This is an example of the output for the program:

Time	x1	x2
0.0000000000000000	90.00000000000000	90.00000000000000
0.2000000000000000	81.75130000000000	75.24950000000000
0.4000000000000000	74.89994235500001	62.00648829166666
0.6000000000000001	69.30867245232537	50.00566485015152
0.8000000000000000	64.86547928142429	39.00661465430058
1.000000000000000	61.48135149524506	28.78899140194868
1.200000000000000	59.08849422872691	19.14810326577902
1.400000000000000	57.63897095158483	9.890812258260041
1.600000000000000	57.10374314737111	0.8316650567622563

Output of the combat simulation.

The first column is time, the second column is *x1*, and the last column is *x2*. The program stops whenever *N* iterations are achieved or *x1* or *x2* reaches zero.

Reference

For more information regarding combat models, please refer to the following texts.

R.L. Burden and J.D. Faires. *Numerical Analysis*. PWS-KENT Publishing Company, Boston, Fourth edition, 1989.

R.K. Nagle and E.B. Saff. *Fundamentals of Differential Equations*. The Benjamin/Cummings Publishing Company, Inc., New York, Second edition, 1989.

M. Braun, C.S. Coleman, and D.A. Drew, eds.. *Differential Equation Models*. Springer-Verlag, New York, 1983.

T.L. Saaty and J.M. Alexander. *Thinking with Models*. Pergamon Press,

Chapter 9: Missile Weapons

Missile weapons in light weapons is a very recent occurence and in many ways adds a high degree of realism to melee combat. During the time of rapier fighting, the musket was quickly supplanting the sword as the soldier's primary weapon. This chapter looks at the development of several different types of missile weapons available to the light weapons fighter and examines tactics and strategies.

Missile weapons go a long way in leveling the playing field. Relatively inexperienced fighters are now able to kill very experienced fighters, a situation very common during period combat. In addition, missile weapons are an excellent means of improving the realism of attacking/defending a static position. Softening up the enemy is made much easier through missile weapons and encourages the fighters to take cover during combat.

A significant problem with missile weapons on the light weapons field is registering shots. Since more missile weapons rely on relatively light missiles, the chance of a legal shot being unnoticed good. Fighters should not get angry when another fighter doesn't acknowledge a legal hit. Depending on the range, type of missile, and shot location, it's very easy not to feel a shot during a melee.

Types of Missile Weapons

"Where does he get all those wonderful toys?"- Batman

The primary limitation on missile weapons for light weapons fighter is safety. Under nearly all rapier rules. secondary weapons must be constructed in such a way that they do not damage weapons or armor. This generally requires off-hand weapons to be constructed out of sturdy materials with lots of padding.

Crossbow

The crossbow is an extremely high powered missile weapon in period. It's primary advantages were simplicity of use and high power. The primary disadvantages, though, were slow rate of fire and limited range. However, the crossbow was an extremely effective weapon on the field of battle and allowed commanders to equip their untrained troops with effective missile weapons. The Blue Company has been using the Nerf Crossbow for over two years to simulate a period missile weapon. The weapon shoots a foam bolt approximately 10 inches long up to a range of about 30 feet and has a reload time of approximately 30 seconds. The primary advantage of this weapon is that it is construct completely out of plastic and foam. This satisfies Outlands rapier rules for odd offhands. In addition, the bolts are heavy enough to be felt through armor during combat. The bolts are also brightly colored which aids in registering hits. The primary disadvantage with the Nerf Crossbow is that it doesn't look very period. The plastic is colored an awful shade of purple and the stock sports a very un-period looking handle (note: this is used to cock the crossbow).

Pistol

I know what you're thinking. Did he fire six shots or only five? Well, to tell you the truth, in all this excitement, I've kinda lost track myself. But being as this is a .44 Magnum, the most powerful handgun in the world, and would blow your head clean off, you've got to ask yourself one question: Do I feel lucky? Well, do ya punk? -- *Dirty Harry*

Good. Bad. I'm the one with the gun. -- *Army of Darkness*

At the Estrella XII, several fighters got together and experimented with a variety of different subjects in the area of light weapons, including death from behind and missile weapons. The missile weapon of choice at this practice were rubberband pistols. Several different varieties of pistols where displayed on the field and construction varied. In general, though, the pistols were constructed out of wood, were approximately 12 to 16 inches long, and fired either rubberbands or surgical tubing. Range varied, but accurate fire was generally limited to 10 feet or less. The primary advantage of the pistol is that it looks very period. In addition, the materials being used generate similar performance to period weapons (limited range and poor accuracy). The rubberbands are harmless to a fighter in full armor. The primary disadvantage of the rubberband pistol is that marshals and onlookers run the risk of eye injury. For melees using this type of weapon, marshals should be required to have some sort of eye protection (mask, safety goggles, glasses, etc.). The other disadvantage was the registering of hit through armor. The surgical tubing was far superior in this respect to the rubberband as it weighed more. On the downside, surgical tubing is expensive.

Throwing Knife

You're going to look pretty silly with that knife sticking out of your ass. -- *High Plains Drifter*

Light weapons throwing knives are generally constructed out of foam and wrapped in several layers of duct tape. The knife is then hurled at an opponent. The primary advantage of the throwing knife is that is very cheap to make and currently satifies the rapier rules. In addition, they are heavy enough to be recognized as a valid hit even through heavy armor. The disadvantage of the throwing knife is realism. If the knife strikes a fighter, then it is automatically recognized as a valid strike. In reality, a thrown knife could easily hit hilt first, resulting in a bruise but no real damage. Also, throwing knives are extremely difficult to use and often results in large amount of frustration.

Tactics

With the addition of missile weapons to the field of combat, many melee tatics must be adjusted. Range, cover, rushing, and restriction of movement now take on whole new meanings. In addition, many fighters often switch their off-hand weapons to reflect the new weapon.

Offense

Defense

Off-hand Weapons

Many fighters will change their off-hand weapon to something with a little more passive defense -- the buckler. In a missile weapon environment, the buckler becomes much more useful is deflecting shots. In addition, fighters also begin considering much large bucklers (i.e "war bucklers") with radii pushing the rapier rule limits. However, fighters should recognize that a buckler is not an invulnerable shield. Valid missile weapon shots to the buckler should result in

the loss of the arm, thus simulating injury to the arm in absorbing the energy of the missile. The Blue Company has played scenarios both ways with the buckler being vulnerable or invulnerable. In either case, the marshal in charge should make a ruling prior to the start of combat and make sure all fighters are aware of the buckler's status.

Reloading

Reloading of missile weapons is considering highly unlikely on the field of battle. Unless the shooter is protected by restrictive terrain or a defensive unit, they are usually easily rushed in the amount of time necessary to reload a period missile weapon (crossbow or pistol). Reloads should generally take 30 to 45 seconds to complete (this is assuming a fighter trained in that particular weapon). With pistols, the fighter would often dischage his or her pistols at an advancing enemy, drop them, and draw a sword. On the light weapons melee field, this can result in a lot of dropped weapons so marshals should be on the lookout for discarded pistols.

Scavenging

A common occurence during Blue Company melees using crossbows was scavenging of bolts. In reality, a bolt would most likely have been destroyed on impact and would not be available for scavenging. Like the buckler restriction above, the marshal in charge should rule on scavenging and announce it's status prior to the start of combat.

Chapter 10: Marshaling Melees

This section looks at various aspects of planning, setting up, and running a successful set of melee scenarios. Much of this information was taken from various autocrats and MICs who had run melee events (Light Metal Mayhem II, III, IV, GateCrashers III, IV, V, Estrella War, etc.)

Setting Up a Melee

Terrain

The Marshal In Charge should definitely walk over the melee site several hours before the start of the melees. At best, the marshal should visit the site prior to the design of the melees and select appropriate and safe terrain. In any case, all terrain types have different advantages and disadvantages. Terrain can be evaluated for its suitability for melees on a variety of criteria. This manual uses the following criteria for examination and selection of terrain: Speed, Slickness (both dry and wet), Hardness, and Visibility. Speed refers to the terrain's ability to slow the fighters movements; either by being difficulty to walk through, filled with obstacles (like low level branches) which preclude straight line motion, or traps the limbs. Slickness is the degree of slipperiness inherent to a surface. Hardness measures the degree of danger presented to fighters while falling and the comfort level for downed or legged fighters. Finally, visibility examines the difficulty in seeing obstacles in the terrain as well as maintaining line of sight to fighters and marshals.

Grass

Grass is probably the most common terrain type found on melee sites. Grass fields can range from close-cut lawn grass to waist high prairie grass.

Short Grass

Short grass is commonly found on most lawns and parks. The maximum length of short grass is generally no more than 6 inches. This type of surface is excellent for melees as it is usually soft and falling fighters (either dead or legged) are unlikely to be injured. In addition, legged fighters can withstand this sort of surface for longer periods of time as compared to harder surfaces (concrete, packed earth, or gravel). Dangerous obstacles, such as holes, rocks, etc. are more easily spotted in short grass. The primary disadvantage of short grass is slickness when wet. In many cases, wet short grass is much like gravel in regards to footing.

Long Grass

Long grass is most commonly found in overgrown fields or prairies. Grasses vary from 6 to 24 inches, depending on location and type of grass. Long grass is a soft surface and helps prevent injuries while falling and helps token legged fighters comfortable. However, the long length of the grass makes it difficult to spot dangerous obstacles. In addition, long grass make foot work much more difficult and increases the likelihood of fighters tripping and falling. On a positive note, long grass tends to be less slippery when wet. Some types of long grass have very sharp leaves and stems. Fighters shouldn't have any problems with long grass due to the armor, but field marshals would be advised to wear long pants and gloves while marshaling.

Packed Earth

Packed earth, such as clay surfaces or bare fields, is another common surface type. Packed earth generally has a minimum of plant life and tends to be encountered in dried climates, such as the Southwest. Packed earth is generally a good surface to fight on as it's very easy to spot dangerous obstacles and footing tends to be solid. The surface dynamics change when packed earth gets wet, however, and rain or snow can very quickly turn a good field into a veritable marshaling nightmare. Packed earth can quickly get slippery when wet and depending on the type of earth, can also become very porous. In either case, marshals would be wise to stop melees until the surface dries. Another disadvantage with packed earth surfaces is the hardness. Unlike grass surfaces, packed earth is usually much harder, which increases the chances for injuries while falling. The harder surface can make a legged fighter extremely uncomfortable.

Gravel

Gravel is possibly the worst surfaces to melee on. Gravel surfaces vary from a thin layer of gravel on a packed earth, all the way to deep layers, several feet thick. In any case, gravel surfaces are very unstable, particularly the thin layers, and thus make footwork treacherous (especially since many fighters wear leather soled boots. We encourage fighters to wear rubber soled boots for safety reasons, placing fighter safety over historical accuracy). The size of the gravel can also vary from large stones (1 to 2 inches in size) down to fine sand). Gravel surfaces tend not be affected by the application of water, thus making them preferable to grass under wet conditions.

Large Stones

Large stone gravel is typically found in parking lots, driveways, and unpaved roads. Stones are generally 1 to 2 inches in size and vary in shape. The stability of this type of surface is dependent on the depth of the gravel and underlying surface. The thinner the layer of gravel over the underlying surface, combined with the hardness of that surface, determines the level of

instability. This type of surface is also damaging for falls and extremely uncomfortable for legged fighters.

Medium to Small Stones

Medium to Small stones are relatively rare and the most common example would be a cinder running track. This type of surface has slightly more slickness compared to the large stone surface, but offers less risk of damage and is more comfortable for falling or legged fighters.

Sand and Dust

Sand and dust surfaces are very common in the Southwest. Common examples include desert sites and volleyball courts. The slickness of this surface is very dependent on the depth and composition of the underlying surface. A thin layer of sand on a very hard underlying surface, such as clay or concrete, is very slick. On the opposite extreme, a very deep layer of sand (8+ inches) isn't very slick, but tends to deform easily, thus increasing the likelihood of twisted ankles. On the plus side, this type of surface tends to be more comfortable than the other two types (depending on depth). Another difficulty present in sand surfaces is sand or dust kicked up by blades. Sand thrown by a blade easily penetrates the mask mesh and can blind a fighter.

Concrete

Concrete surfaces, which also include asphalt, rock, and tile) are generally man-made and occur frequently at developed sites such as gyms, parking lots, parks, tennis courts, etc. Concrete surfaces vary in slickness depending on the amount of moisture and material, but tend to have very solid footing when dry (dusty surfaces, however, can be slick). The primary disadvantage of concrete surfaces is their hardness. Falls are extremely hazardous on such surfaces and broken bones can easily result. Also, this type of surface is very uncomfortable for legged fighters. In addition, these surface can also become extremely hot when exposed to direct sunlight.

Forest

Forest sites offer quite a variety of advantages and disadvantages. The primary advantage of this type of this type of terrain is shade. Most of the other terrain types and surfaces mentioned above are typically uncovered with little to no shade. In hotter climates or during summer events, adequate shade is very important for keeping fighters cool and preventing heat related injuries. Also, forest terrain offers quite a bit of natural obstacles which can greatly add to the melee scenarios. Trees provide defensive position, channel fighters, and disrupt formations, thus allowing for some more realistic melee combat. On the downside, forest terrain offers a number of hazards, the most dangerous of which are stumps, logs, and broken branches. All of these obstacles make foot work treacherous and offer an extreme hazard to fighters falling or dropping to their knees. In some cases, some of these obstacles can be move aside prior to meleeing, but permanent or immovable obstacles should be clearly marked with tape, cloth, or flags and marshals and fighters should be made aware of their positions. The degree of comfortable award to legged fighters varies on the type of forest, but in most cases, the forest terrain is very comfortable for the legged fighter. Forest terrain will obviously block the vision of fighters and marshals alike, so fighters should extra careful in forest terrain as marshals may be less like to spot dangerous situations.

Ravines

Ravines can be found in a variety of locales and vary in size and shape. The most common examples include large ditches, creek beds, or drainage canals. Ravines add quite a bit of tactical realism to melees as they are very restrictive terrain and very used often during large scale warfare as a defensive obstacle. Ravines can be either wet or dry depending if they were formed naturally or were man-made. The surfaces of the ravine can consist of any of the previously mentioned surfaces, including grass, packed earth, gravel, or concrete. In any case, the primary problem with ravines is slickness of the surface. Unlike flat surfaces, even a packed earth surface can become very slick when tilted at an appreciable angle. The other problem with ravines in limited visibility as seen in forest terrain. While ravines are fun to play in, they are accidents waiting to happen.

Terrain Suitability for Melee **Terrain**	**Speed**	**Slickness (Dry)**	**Slickness (Wet)**	**Hardness**	**Visibility**	**Overall Rating**
Short Grass	Fast	Low	Medium to High	Very Soft	Good	Excellent
Long Grass	Slow	Low	Low to Medium	Very Soft	Poor to Good	Good
Packed Earth	Fast	Low	Low to Medium	Hard	Excellent	Good
Large Stone Gravel	Fast	Medimum	Medium	Hard	Excellent	Poor
Small Stone Gravel	Fast	High	Medium to High	Hard	Excellent	Poor
Sand	Slow	Medium to High	Medium to High	Soft	Excellent	Good
Concrete	Fast	Low	Low to Medium	Very Hard	Excellent	Poor
Forest	Slow	Low	Low To Medium	Soft	Poor	Good
Ravines	Slow	Medium to High	Medium to High	Varies	Poor	Poor

Walk Throughs

"Step 5: Conduct Reconnaissance. Reconnaissance is a continues process during the Troop-Leading Procedures (TLP)." - Ranger Handbook

A walk through the melee site is an imperative for all marshals involved with in running the melees. Three separate walk throughs should be conducted prior to the start of the melees.

Planning Walkthrough

The marshal in charge should visit the melee site(s) early, preferably before the design of the melee scenarios. In some cases, the marshal will have free rein in selecting an appropriate site, particularly if the marshal is also in charge of the site. In other cases, the marshal will be told which areas are available by the autocrat or marshal-in-charge. In either case, the marshal running the melees should visit the site.

The Day Before Walkthrough

This walk through is conducted at least a day before the melee. The marshal is getting a general feel for the site and prepping it for the upcoming scenarios. For large melee scenarios, I would recommend bringing several marshals in order to get the best coverage of the site. At a minimum, the marshal should bring along a pad of paper and writing implement. Write down any pertinent information regarding the melee site, such as dangerous obstacles, boundaries, points of interest, etc. A rough sketch of the site is also a good idea, particularly when briefing other marshals or planning specific scenarios. Also mark down alternate sites for scenarios in case of bad weather (sudden rain turns a perfectly good field into a muddy quagmire). If you're prepping the site of immediate use (same day or next day scenarios), I would also suggest bringing along several garbage bags, work gloves, and construction tape. During the walk through, move dangerous items such as trash, broken glass, dead brush, etc. from the main fighting sites. This serves two purposes: 1. the site is much safer to use and the likelihood of a fighter being injured decrease, and 2. the site will be cleaner and in better shape than it was found. Gloves are a necessity to prevent cuts, splinters, and other hand injuries. The construction tape can be purchased at most hardware stores for a minimal cost and can be used to mark boundaries, dangerous areas, resurrection points, safe areas, etc.

The Day Of Walkthrough

On the day of the scenarios, the marshal should bring all of the marshals involved with the melee to the site and conduct a walk through. In addition to familiarizing the other marshals, this walk through also allows the marshal in charge to see if anything has changed after the initial setup was complete, such as storm damage, unexpected campers, etc. Such new obstacles should be marked off and any affected scenarios updated to reflect the changes. If the marshal in charge is using the zone marshaling, individual marshals should be assigned to their appropriate zones are this point and should take a opportunity to become familiar with their zones. If the melee scenarios span several days, such as a large war, the marshal should inspect the sites each day for dangerous conditions. For example, the marshal in charge inspect his melee sites on the first day of the war. The is site is pristine and no dangerous obstacles exist. That night, Household X holds a squiring ceremony involving a large bonfire in the middle of the site (unlikely, but it can and does happen). In the midst of the party, a number of bottles get broken in and around the bonfire. Obviously the broken glass and fire pit represent a serious hazard to fighters on the field. Don't expect to be able to show up to the site 10 minutes prior to the start of the melees and have the site ready to go. Site preparation and inspection takes time.

Armor Inspections

Weapons and armor generally take the most amount of abuse during melee scenarios. Shots tend to be harder and come in at odd angles. In addition, conditions arise during melees that rarely if ever occur during one-on-one combat, such as strikes to the rear, tripping and falling, and body

contact. As a result, safety standards for melees should run slightly higher than those for a normal bout.

Weapons

First and foremost of any armor inspection is inspection of the weapon. As mentioned previously, thrusts tend to run harder under melee conditions. As a result, weapons are under a lot more strain during melees and are more lightly to break. Obviously, a fighter entering a melee should be aware of such conditions and shouldn't bring borderline or questionable weapons onto the field. However, it does happen and these weapons needs to be identified and refused prior to combat. For small melees, weapons generally do not need to be marked. However, for a large war, such as Estrella or Gulf Wars, passed weapons should be marked with tape at the armor inspection. Prior to and during combat, marshals should be on the lookout for non inspected weapons and such weapons should be removed from combat ASAP.

Swords

Due to the harder shots, softer weapons or weapons with pronounced curves should not be allowed on the fields. Again, this is up to the inspecting marshal's discretion, but I recommend not letting weapons with noticeable soft-spots onto the field. Also take the opportunity to inspect tips to make sure they are firmly attached. A good way to insuring such an occurrence is to use the passed-inspection tape on both the tip and forte. Also, the decreased visibility on the field makes it much more difficult for a marshal to spot broken or damaged weapons. It's much better to err on the side of caution when it comes to melees.

Daggers

Daggers, particularly the soft daggers, should be inspected for S-curves and soft spots. Any noticeable kinks should be cause for refusing a weapon. Stiffer daggers, such as Prieur or Black Tulips are highly recommended for melee scenarios. The thicker blades do increase the potential for hard shots, but the large decrease in the risk of breaking more than makes up for it. Most of the daggers I've seen break (including my own) broken jaggedly about half way down the blade, resulting in a very sharp and extremely stiff weapon. I have no doubt even the strongest armor would have trouble stopping a broken blade of this type.

Armor

In addition to meeting the minimum armor standards, I highly recommend that fighters go the extra distance and include any additional armor, such as gorgets, thicker coifs or hoods, knee pads, and/or breast protection for melee scenarios. Problem areas for most fighters will be around the mask, particularly with regards to the sides and back of the head. Make sure that hoods and coifs are vulnerable to side and rear thrusts.

Marshaling on the Field

Once field and fighters are ready, it's time to move out onto the field and fight the scenarios. Depending on the terrain and size of the melee, there are two different approaches to handling the field marshaling: group and zone. The technique used (or combination thereof), depends on the size of the melee. As the size of the melee increases, zone marshaling becomes much more useful than group marshaling. In any case, the marshal in charge of the melee should be flexible and ensure that adequate field marshals are available for the melees.

Group Marshaling

Under the group marshaling method, marshals roam the field and concentrate where the fighters concentrate. If 20 fighters suddenly decide to mix it up near the left boundary, then a large number of marshals will move to that area. Typically, marshals using this type of technique follow around the larger groups of fighters. The primary advantage of the group marshaling technique is that it puts the most number of marshals with the largest concentrations of fighters. This technique is also more flexible than the zone marshaling, allowing marshals to go where the fighting is occurring. This technique also requires very little setup as marshals don't have to be assigned to particular areas. The primary disadvantage of this technique is that this draws marshals away from other areas of the field and may result in irregular coverage of the field. Also, this requires that marshals move frequently, which can result in fatigue, particularly for long scenarios.

Zone Marshaling

In this technique, individual marshals are assigned fixed zones within the melee site. Marshals move to appropriate hot spots within their zone, but do not follow fighters out of their zone. This technique help prevents gaps in the marshal coverage and keeps marshals from wandering all over the field. This technique is very good in preventing fatigue in marshals are they are not forced to cover large amounts of terrain in order to keep up with the fighters. For definite hot spots in a scenario, such as gate or bridge, the marshal in charge can assign several marshals to a particular zone. The primary disadvantage of zone marshaling is the amount of time it takes to set up. Marshals need to be briefed and assigned zones prior to contact, which makes adding and removing marshals difficult. Also, zone marshaling is best suited to larger melees with either large numbers of fighters, a large amount terrain, or both. The two techniques can also be combined to increase the flexibility of the group marshaling and reduce fatigue as well as making zone marshaling easier to adjust to variable numbers of marshals.

After the Melee

Make sure that when losing that the lesson learned isn't lost. -- *Unknown*

In the military, every mission is followed by an After-Action Review (AAR). During an AAR, the principals involved get together to discuss how the mission went as well as good and bad things that occurred during the mission. AAR's tend to be very candid, but they represent a very valuable part of military training. The same type of discussion should occur after a melee in order to evaluate various aspects of the scenario and marshaling. In this fashion, it's very easy to adjust scenarios to prevent dangerous situations, even out mismatched sides, prevent exploitation of loopholes, and generally increase the fun factor. I prefer to run an AAR during a lull in the fighting, such as a water break. In cases where it's obvious the scenario isn't work, I would suggest taking a quick break to conduct an AAR and fix up the scenario, particularly when tempers are starting to flare. It's better to keep everyone cool and focused. AAR's start with the commander of either side, usually with the winning side. I have them present how they approached the scenario, starting with how they interpreted the scenario and finishing with how they executed their plan on the field. I then ask the losing side their version of the scenario. I then have the marshals tell what they saw and how they thought the melee went. Next, I ask all sides to give me several good points about the scenario (use of terrain, victory conditions,

balance of forces, weapon and time restrictions, etc.). Then I ask all sides to give me several bad points.

As the marshal in charge or as the person who designed the scenarios, I would recommend keeping a very open mind. There's generally a lot more criticism than praise for a scenario. If there is something seriously wrong with the scenario, such as a glaring loophole or extremely unmatched forces, fix them immediately. Adjust the victory conditions, rearranged the units, change the terrain, restrict the weapons, but make sure that both sides are happy before the next scenario. In addition, talk with the marshals to resolve any problems there as well, such as dangerous fighters, ignoring of shots, etc. AAR's will tend to bring out the worst in a scenario, so it is very important for the marshal in charge to keep cool. Take the criticism like a mature adult, realize when you have made a mistake, and keep your humor about you. An angry marshal will definitely reduce the fun factor for the upcoming melees and make a bad impression for the marshallate as a whole. Marshals are the voice of authority on the field of combat and any action or behavior that reflects poorly on the marshallate cannot be tolerated.

Chapter 11: Teaching Melee Skills

These drills were added to this manual by Randal the Malcontent. They are originally part of a separate work of his titled *Little Book of Horrors or Training Drills for SCA Light Weapon's Combat.*

When I left, I was but the student. Now I am the master. -- *Star Wars*

When I left, I was but the student. Now I am a better student. -- *Tristan Grey*

Author's note: Almost all the drills herein presented can be done in pairs and trios (the basic units of rapier melees). The main difference lies in armoring. All melee drills should be done in full armor (there are a couple of common sense exceptions, but for complete realism, including lack of hearing and vision, full armor is best.). You can begin with basic team footwork, having a lieutenant call directions. You can do it with most of the team blindfolded. You can have teams maintain distance against other teams or fight with limited movement, weapons, defensive tools, etc. The real challenge comes in adding strategic goals, scenario objectives/missions and interesting terrain.

Training Drills For Beginners

NOTE: The phrase "Then have" denotes more difficult variations layered on the basic exercise.

Snatch The Pebble From My Hand...

In alternating pairs, have one person thrust at their partners' hand. Have them touch only when the hand has stopped moving. Then have the target size reduced to two fingers, then the single thumb.

Equipment needed: One rapier and one glove (for the target hand).

Face-off

In alternating pairs, students maintain distance between themselves. Have students face each other and raise their hand (Left or Right,i respectively) making contact with two fingers, respectively. Have one person lead in movement forward, back and to the side as the other "follows" and maintains distance. Then have the follower blind-folded/eyes closed. Then have

pairs engage with hands (or rapiers) lowered checking distance with "en guarde" called by someone (probably the instructor).

Equipment needed: None.

Slow Parry Drill

In alternating pairs, have one person thrust slowly in Four and Six with a scabbard while their partner parries with the rapier. Thrust must invade space and make contact with chest or shoulder if not parried.

Equipment needed: One rapier and one scabbard.

Walk the Cliff

Using a line of tape (or anything suitable as long as it's straight and can be stepped on), have students inch along in correct stance, with correct footwork Reverse the direction occasionally. Step through to correct stance. Step back to correct stance. Then have students invent combinations of the four types of step.

Equipment needed : None. Hand up or sword in hand optional.

Blindfold Walk

Using bandannas or using an honor system, have students move forward and backward. Move side to side. Pivot. Skip. Do it some more. Then have students do it as duos and trios (with one person in the group sighted).

Equipment needed : None. Hand up or sword in hand optional .

Back-up Tag Team

Two lines like this: >>>> <<<<. Have the first fencer in either line engage with the first fencer in the other. Have that fencer defend while moving backwards toward their line (like this). >>> <<< . When they have retreated to their line they > < "tag" the next fencer. The tagged fencer now presses the attack until reaching the opposite line. THIS FENCER now defends while retreating and so on until both sides have attacked and defended.

Equipment needed : None (Use empty hand) if instructor calls the paces (On my mark...one...two...etc.). Masks if walking (with swords). Full padding if running (With scabbards in place of swords for added safety).

Three On One

Have three students face one. In rotation have THREE make a simple thrust to the target named by ONE. ONE blocks appropriately. Then have THREE attack target of their individual choice. Then have ONE turn away while THREE decide non-verbally who will attack first, second, third.

Equipment needed : Three scabbards and one rapier(unpadded). Four rapiers (padded)

Follow The Leader

Have the entire class follow the instructor though a series of steps, pivots, skips and step throughs. Use all the available space and have students call out each step as they perform it.

Intermediate Drills

We're trained to deal with these kinds of situations. -- *Aliens*

Three Strikes, You're Out

In alternating pairs, thrust to three targets named by the instructor or a member of the pair. Call out all three, then say "Begin!" Then have a small lunge added. Then have a deep lunge added. Start with unlimited time to acquire targets and attack them, softest touch possible. Then have time reduced to three seconds, calling "Stop!" when time has expired. Hit too hard or miss you target and you're out

Equipment needed : One rapier and one mask (or any amount of armor that makes the instructor comfortable. With advanced students, no other padding but the mask required.)

Off-Hand Comment

In alternating pairs, have one person thrust with a scabbard as the other parries using the off-hand only. Begin with parry hand advanced. Then have hand refused. Then have the rapier in unused hand (it's only there as an impediment and makes NO offensive motions). All thrusts below the neck.

Equipment needed : One scabbard and one glove (rapier optional).

Crossed Swords

In alternating pairs, have students cross rapiers at the tip and move around the floor. One person leads. Then have students maintain distance with only one rapier "engaged" the other held low. Leader says "Check!" and follower lifts blade and engages. Measure, using two inch rule. Then have both students engage without any blades. Leader says "Check!" both blades are raised to measure.

Equipment needed : Two rapiers or scabbards.

Runaway Thrust

In alternating pairs, have one student engage "refused." On the command "Thrust!" given by the instructor or defender of the pair, "refused" student steps through and makes a thrust. Defender parries and makes a riposte. Then have refused student make from two to five thrusts to various targets, then continue as before. Then have defender parry with off-hand and riposte.

Equipment needed : Two rapiers, armor to suit instructor/speed of drill.

Prey for Mercy

In alternating pairs, one fencer DOWN, one UP. UP fencer does five simple thrusts. DOWN blocks. Reverse positions. Continue indefinitely. Then have DOWN make five thrusts and UP do five blocks continue ad nauseum. Equipment needed : Full padding, two rapiers. Look Ma, No Hands In pairs, have one fencer (who cannot advance) attack Florentine on one who is un-armed. Un-armed blocks until both hands are lost to a thrust (HANDS THEMSELVES ARE TARGETS ONLY FOR ADVANCED STUDENTS). Reverse roles. Then have pair move around. Then have attacker use drawcuts only.

Equipment needed. Gloves and mask on unarmed. Two rapiers or scabbards.

Name That Tune

In pairs, have fencers duel at a controlled tempo, attacking ONE TARGET ONLY.(i.e. wrists, forearms, lead leg etc.) Then have two targets: one low(legs) and one high (head).

Equipment needed: Full padding for beginners/intermediate. Pad only the targets area and masks for advanced students.

Downtown

In pairs have students fight kneeling. Then have barriers left, right and between.

Equipment needed: Full armor, two rapiers.

Advanced Drills

Drawcut Wonder

In alternating pairs, have one student thrust. Parry with any off-hand tool, step through and drawcut the abdomen. Then have students engage "refused" and have one step forward and make a thrust. Defender continues with parry and drawcut.

Equipment needed : Two rapiers and full armor.

Nowhere to Run

In alternating pairs, put one student against a wall or similar barrier. Have leader make ten thrusts to various targets. Defender uses both rapier and off hand to parry. Then have, in groups of three, two attackers alternate ten thrusts (keying off each other as to when to begin)at the defender who continues as before.

Equipment needed : One Rapier and scabbard or two rapiers and full armor. A wall or suitable barrier.

Three Musketeers

Have TWO attack ONE. Limit TWO to single point. Defender can use multiple weapons. Wounds are cumulative and a leg wound on an attacker means they're out.

Equipment needed : Three rapiers and full armor.

Marquee Lights

Arrange class into two lines facing. Beginning at one end, have that student make an attack to the line opposite (no attack to the student directly in front of them. 45 degree angles only). Then have each student to the left attack when the preceding student has finished. Single point only, those attacked can defend themselves. No riposte allowed. Have students rotate.

Equipment needed : Rapier, full armor all around.

Terminator

In alternating pairs have one fencer attack the other for ten seconds. Attacker cannot be killed. Defender must SURVIVE within a limited area. (This is a good confidence builder if newbies get to be the Terminator) Then increase the time. Then have defender use defensive only tools like scabbards, cloaks and bucklers.

Equipment needed : None all the way to full armor/weapons.

Nailed to the Floor

In alternating pairs have one fencer fight with their lead foot nailed (figuratively) to one spot. Change roles. Equipment needed : full armor/all weapons. Saber Duel In pairs, have students duel with drawcuts only. No point work allowed. Then have all blocking done with off hand only.

Equipment needed : Two rapiers, full armor.

Blind Man's Bluff

In pairs, have students duel for five to ten touches blindfolded.

Equipment needed: Full armor, Rapiers (schlaegers work well here). *SAFETY NOTE: TWO MARSHALS OR MORE SHOULD ATTEND THIS EXERCISE. NEVER ALLOW STUDETS TO DO THIS UNSUPERVISED.*

X's and O's

In pairs, have students work with single point (without any off hand) vs two off-hand defensive secondaries (subject to availability and marshal's approval). Use good control and have an attack/time/space limit. EXAMPLE: ten thrusts/draws within half a tennis court for thirty seconds. Then have defender down. Then have attacker down (really limit space).

Equipment needed: An abundant supply of secondary defensives and one Rapier, Full armor.

Melee Drills

Areas of development outside single combat include: Command and control (make everyone sit in the hot seat at least part of the time. This is uncomfortable and takes PRACTICE. Make yourselves do it.) Working as pairs and trios. (mix it up. Everybody needs to learn to fight with everybody.) Improving communication and knowledge of commands. (learn the talk...) Moving and fighting as a unit. (walk the walk...) You are encouraged to use your imagination and experiment within the bounds of safety. Remind newcomers that this is a different game and control is paramount. Always control the tempo (these things tend to take on a life of their own). Use lots of marshals.

Good luck and good hunting.

Randal the Malcontent

Chapter 12: Melee Scenarios

This section describes some common melees scenarios along with their victory conditions, unit sizes, and variations. The scenarios are divided according to their terrain. In addition, the scenarios also contain some strategy tips both sides.

Format

Each scenario presented here is laid out in the following format: Name, Description, Setup, Victory Conditions, and Rules. In general, this will be the order a scenario will be played out as the Marshal in Charge will pick the scenario, discuss it with the marshals, prepare the field, brief the commanders, give out the rules, and then execute.

Basic Rules

This section covers several of the common problem areas in melee scenarios. A poorly constructed scenario will create problems during execution, either by becoming unbalanced or placing fighters in dangerous situations. Marshals who are planning to execute scenarios should announce all rules prior to each scenario so each fighter is aware of exactly what is permissable in the scenario.

Running

In virtually all melee scenarios, running should not be allowed. There are instances where a runner or runners may be used, but on the whole, marshals should prevent fighters from running. The biggest problem with running is a lack of control on the part of the running fighter. The situation on the battle field is very fluid and a running fighter is definitely not in a position to react to problems, such as someone crossing their path or another fighter engaging them.

Weapons Restrictions

If the marshal in charge realizes that fighters are getting tired or if tempers are beginning to flare, then the best course of action is to impose a weapons restriction. In most cases, the best solution is to resctrict weapons down to single point only. This allows the fighters on the field to concentrate solely on a single blade, thus reducing the load on their concentration during combat.

Death From Behind

As a general rule, we do NOT recommend Death From Behind (DFB) for several different reasons. First and foremost is that DFB is very difficult to do safely and the use of DFB greatly increases the likelihood of injury on the field. Training can alleviate some of the problems, but DFB will always remain a dangerous enterprise. If DFB is to be allowed, then the marshal in charge should demonstrate the appropriate method for DFB prior to the start of combat. (see Chapter 15 Death From Behind)

Angle of Engagement

The angle of engagement determines at what point a fighter can engage (ie attack) another fighter. In most areas, the common rule is 120º, which implies that a fighter can make a valid attack as long as he or she within an arc extending 120º in front of the other fighter. Unfortunately, this angle is relatively large and does allow for the possibility of blind shots. In general, we recommend that fighters engage within a 90º arc and warn the other fighter prior to taking a shot. Warnings can easily be verbal or physical (tapping their blade with your blade).

Scavenging

Scavenging occurs when fighters are allowed to pick up discarded weapons on the field. As some fighters can be fanatical about their equipment, this rule should only be allowed if all fighters agree. In most cases, scavenging should not be allowed.

Dropped Weapons

Fighters who lose a arm are faced with the possibility of either holding onto the weapon or dropping it onto the field. We highly recommend that weapons be retained until they can be placed outside of the field or taken by a marshal. Dropped weapons represent a serious injury hazard on the field.

Dead Off the Field

As casaulties occur, fighters can either exit the field or drop in place. Depending on the terrain, it generally advisable to have dead fighters exit the field as quickly and safely as possible. In some scenarios, such as bridge or gate battles, dead fighters may be unable to exit the field. In these cases, marshals should leave the dead on the field and call holds as necessary in order to clear the field.

Suicide Charges

In some scenarios, the only way to achieve a breakthrough is to use a wedge of fighters to penetrate and break the opposing unit's line. In most cases, the initial wave of fighters (shock troops) are usually destroyed to the man. However, in their midst of dying, they tie up the enemy's weaponry, obscure vision, and disrupt enemy formations. Unfortunately, suicide charges also generate a large number of very hard shots which in turn greatly increases the risk of injury. In addition, charges also result in body-to-body contact which also increases the risk of injury.

The recommendations made above are rather conservative with the primary concern being safety. Depending on the level of the fighters in the scenarios, these rules can be adjusted in order to provide greater challenge. However, as fighters become tired, then the marshal in charge should definitely tighten up the rules to prevent problems.

The Open Field Battle

The simplest (and most common) melee scenario is the open field battle. In this scenario, two sides battle on an open playing field with no obstacles. Typically, the field is rectangular, although this can vary depending on available space. The open field battle is also used when training new soldiers as it allows a fighter concentrate on positioning as well as offense and defense without having to spend too much time worring about terrain. It is also a good scenario for training commanders as the open field offers maximum visibility and communication.

Setup

Unlike other scenarios, the open field battle requires little in the way of setup. Marshals may wish to use tape, rope, or string to outline the borders of the field.

Victory Conditions

The primary victory condition for the open field battle is last man standing in which each sides fights until one unit is completely eliminated (or disabled). In some variations, units may be required to protect an object (such as a pennant, banner, or other marker) while capturing the enemy's object.

Rules

As this scenario is very basic, any combination of rules can be applied. In general, running and DFB can be added safely, although marshal witnessing unsafe acts should remove them from play.

The Gate Battle

The next simplest scenario is the gate battle. In this scenario, two sides battle over a gate or door for the purpose of either entering or exiting through it. The gate battle is very different from the open field battle in that there is very little maneuvering.

Setup

A gate battle requires a gap between two boundaries (a pair of hay bales, two folding chairs, two cardboard boxes, etc.) While this scenario can be played by simply marking an gap on the ground, the best results occur when solid obstacles chest high or better are used. The width of the gate depends on the number of fighters, but we recommend that a gate be relatively narrow. If the number of fighters on each side is less than 6, than the gate should be 4 to 5 fighters wide. For large units, we recommend that about 1/4 of the unit be able to fit within the gate.

Victory Conditions

Gate battles usually have two victory conditions: destroy the opposing unit and/or drive the opposing unit some distance from the gate.

Rules

Running and suicide charges tend to be the most common restrictions for this type of battle. In addition, fighters should be restricted from attack "through the walls" by attacking above or through the obstacles defining the gate.

The Double Gate Battle

Setup

A double gate battle consists of a pair of gates separated by some distance. This type of scenario is best described as taking a castle's outer and inner gates. Depending on the scenario, the gates can be at any angle to each other, although straight and staggered layouts tend to be the most common.

Victory Conditions

See Gate Battle.

Rules

See Gate Battle.

The Bridge Battle

A bridge battle is merely a very wide gate battle. However, the bridge battle does over the possibility of flanking maneuvers by allowing fighters to "swim" around the bridge and attack the enemy's rear and flanks.

Setup

Like the gate the battle, the bridge battle requires two boundaries to define the sides of the bridge. Bridges are typically two to four times longer than they are wide. For most scenarios, we recommend that a bridge be 4 fighters or less in width. In addition to marking the bridge, any other boundaries (the outline of the river or chasm), should also be marked for those scenarios in which a fighter can swim or ford.

Victory Conditions

See Gate Battle.

Rules

Bridge battles tend to follow the same rules as the gate battle. In addition, dead off the field should be clarified prior to the start of combat. For bridges defined by low obstacles that a dead fighter can easily roll over or for small units, we recommend dead off the field. For larger units or terrain which prevents fighters from exiting the field through the sides of the bridge, we recommend that the marshals not use dead off the field.

Weapons which fall off the bridge should be considered lost and are not recoverable.

The Flared Bridge Battle

The flared bridge battle is a more difficult form the normal bridge battle. Unlike a normal bridge battle, the bridge is flared at the ends (generally widening about about 1 or 2 fighters). As an attacking units forces a defending unit off the bridge, the defending unit will be able to take advantage of the widening bridge to field more fighters on the front line.

Setup

The flared bridge battle is setup in the same fashion as a normal bridge battle, but the ends of the bridge are flared.

Victory Conditions

See Bridge Battle.

Rules

See Bridge Battle.

The Double Bridge Battle

A double bridge battle is to the bridge battle what the double gate battle is to the gate battle. In essence, there are a pair of bridges instead of a single bridge and the area between the two bridges is typically laid out as a island. This is a much more difficult form of the bridge battle as the defending unit has the ability to widen their line at the island and increasing their offensive strength. In addition, the island provides a good staging area for moving soldiers from rear to the front.

Setup

See Bridge Battle.

Victory Conditions

See Bridge Battle.

Rules

See Bridge Battle.

Campaign Design

The above scenarios make for excellent single battles, but the real key to a successful melee event is the creation of a campaign of scenarios. A good campaign should unfold like a good story with each side playing a specific part, whether it be pirates vs merchants, bandits vs guards, English vs French, English vs Spanish, mercenaries vs mercenaries, or brothers vs brothers. In addition, the scenarios making up the campaign should progress in a logical fashion.

Pick a Story

The first step in creating a good campaign is to pick a appropriate story line. From examples above, there are plenty of possibilities for establishing a conflict. Well defined roles will also help define the victory conditions for both side during the melee and also allow fighters to get into the role. Once you have the sides established, think up a good reason why these two sides should have to come to blows. Bandits raiding a caravan of merchants is an excellent example of a campaign story. The bandits raid, steal the goods, and flee to the hills. The guards and merchants pursue in a desparate attempt to regain their stolen property. The campaign centers on

various skirmishes between the two sides on the way to a bandit hideout and climaxes with a massive battle between the captain of the guard and the bandit king. The rest is history...

Select the Scenario Progression

The scenarios making up the campaign can be arranged as either a linear sequence or as a tree. In the linear sequence, each scenario in the campaign is played out consecutively with the results of each battle doing little or nothing in influencing the upcoming scenario. Linear campaigns are very easy to setup and run, although they do lack a certain amount of realism. Tree campaigns, however, are made up with a large number of scenarios whose order of execution is dependent on the outcome of the previous scenario. Tree campaigns are much more difficult to setup and execute as they require the marshals to be very aware of the victory conditions and the effect of each battle's outcome. However, tree campaigns allow unit commanders much more flexibility in choosing which scenarios are important and to what degree the victory conditions need satisfied. Preventing the other side from achieving their objectives can be more important than achieving your own's units objectives.

For a typical one-day melee event with about 20 fighters, a good rule of thumb is six scenarios. Depending on how the teams are selected, each scenario is fought once (two teams) or three times (three teams) which each team taking a turn at offense and defense. For larger events, we recommend fewer scenarios as scenarios will tend to take longer to set up and execute.

Scoring

Scoring of melees is a difficult proposition as best. There are a wide variety of factors which contribute to a unit's success on the field and while determining which side has won the campaign is easy, determining the best fighters in generally much more difficult. As a general rule, the marshal in charge should set up a scoring system for determining the winning unit and award prizes to each member of the unit. Multi-colored electrical tape, pommels, tips, rust remover, and PVC scabbards are good examples of relatively inexpensive prizes that can be distributed to the members of a winning unit.

Chapter 13: Fighter Analysis

Know your dope fiend! -- *Fear and Loathing in Las Vegas*

Tristan and I have been discussing SCA style fighting and how we approach the two basic forms of combat: dueling (duello) and melee fighting. This chapter deals primarily with the style of individual fighters in the duello setting and may seem to have only limited applications to melees. If our opinion on what is optimal is close to the truth, this is what SHOULD happen. Individual styles must be meshed with the team style (which may depend on the mission/objective). Melees are for teams. Soldiers that wish to achieve excellence in this type of SCA combat need to try and adjust their personal style(s) to the soldier(s) they are working with AND to the nature of the combat. There are limits on what the individual can and should attempt in group fighting. There are goals (at least there should be) in a well written scenario that go beyond the mere slaughter of our fellow swordsmen/women. Our experience in the military has given us some insight into the roles and responsibilities of being a team member. The fundamental building blocks of an effective melee unit are going to be individuals. How those

individuals perform as solo fighters influences your choices in designing teams and delegating mission objectives. Although this is a generalized overview of fighting styles, its application to the melee setting should be kept firmly in mind. In our opinion, the more adept and versatile a soldier is in moving through the styles, the more varied the role you, as a commander, can ask them to play in the melee setting.

Types of Fighters

So far as we can determine, there are four types of fighter. These are not completely rigid templates and there are overlaps. The amount of time a person has been engaged in SCA fencing, their frame of mind while fighting, their training and their experience level are also determining factors with regard to style. The styles are:

The Charger

Is a fighter that is predominantly aggressive and seeks to end the conflict by their own means. These fighters tend to attack quickly and often. They are predominantly linear in their approach (the shortest distance etc.). A charger tends to have a few obvious "tells" or motions that signal the perceptive opponent their intentions (which are simple: get in there and KILL). They tend to be middle level fighters with limited melee experience and approximately 2-3 years experience (as I say, there are exceptions). They are not what I would call formally trained; meaning their fundamentals are either weak or unbalanced (they know a few moves really well, but have other flaws in their overall skills). Their ability to analyze their own fighting (during or after a duel or battle) as well as the fighting of others is weak. Their ability to change styles is weak.

The Blocker

Is a fighter that is predominantly defensive. They seek to end the conflict by a wider variety of means than the Charger: When they are attacked, the Blocker does just that, block. They generally have a set pattern of counter attacks called "Riposte" in the greater fencing community. The Blocker tends to seek a rhythm of exchanges or "conversations of the blade": Attack, block, riposte, reset, repeat. They also tend to be linear in their approach. They tend to use little footwork, preferring to stand and fight. They tend to be higher level fighters with as much as 5-7 years of experience in the duello. They tend to be better trained or at least, have a deeper grasp of the fundamentals and can look at their own fighting. Their ability to change styles is better. Their natural tendencies make them excellent line fighters in the melee setting.

The Runner

Is an elusive fighter. They have no idea how to end the conflict. They tend to have neither a strong attack nor outstanding defense. They often make tentative or peripheral attacks on extended targets like arms and legs. When attacked they run away. When blocked, they run away. When looked at funny, they run away. The Runner can be a smart fighter employing a strategy of "hit and run" by design. This can be an effective way to meet a Charger, for instance, but generally the Runner has limited training and experience; 1-2 years at most (although there are experienced fighters who have "perfected" this and made it their style). A duello with a Runner can take a long, long time (which can be part of their strategy if they are actually using one and are not running out of "fear"). They are difficult to engage and do not establish "conversations." If they can out-wait you, you may do something stupid from frustration that a

Runner can take advantage of. Runners generally have poor blade work/fundamentals, except for footwork related to the retreat. Their ability to change styles is weak.

The Shifter

Is the most difficult fighter to describe, until you meet one. They tend to fight as a runner at first, then shift to blocking or charging with no obvious pattern. They may attack strongly. They may stand and block or stay far away. They may leave the line of engagement and approach or retreat from their opponent at a variety of angles. They are difficult to describe and analyze because Shifters are actually thinking about the fight as it unfolds. They have strong fundamentals and may be very proficient at any one range (close, middle or far ranges); maybe more than one. Their ability to change styles is strong. The more times you meet them over the course of fighter practices or tournaments, the more difficult they are to defeat. They tend to have a great deal of martial arts experience (7-10 years) and perform well in the melee setting as line fighters, flankers, skirmishers, etc. due to their ability to adapt to the styles of fighters they are teamed with or facing off against. I'll let my partner describe how the various styles match up, but before I leave this topic, here are a few words of caution. Match ups in any sport are all theoretical anyway, the two sides must meet before reality can unfold and actually show what happens. This is important to remember. A Runner who underestimates the speed and range of a talented Charger is *dead*, before they can get away. The training, conditioning, size, speed, natural ability and experience of the fighters involved always plays a significant role in the outcome of the match. No matter what kind of fighter you are, you need to be able to describe what you see other fighters doing and what you, yourself, are doing on the field. The better you become at reading yourself and others, the more you will grow as a fighter, teacher, tactician, commander.

Watch and Learn

One of the best ways to observe the four types of fighters is to attend a fighter practice (FP) or tournament. Since tournaments have their own feel (and present the information to you in a different way), I'll leave that to my partner or for another day.

Fighter Practice

SCA fighter practices tend to be fairly chaotic and unstructured, with many fighters doing different things. This is what I've seen in the Northern Outlands. I've heard about FPs from other Lands and I've read training manuals and lesson plans from other Kingdoms. Generally speaking, most of the rapier fighters in the SCA do not seem to have a general martial arts or military background. Rapier fighting is a casual hobby for most. Rarely do I see fighters doing the things I consider essential for excellence in all of the styles. This especially holds true for people who have mastered or nearly mastered one style. They've gotten this far by doing things. If it worked, they kept on doing those few things. To advance further, a rapier fighter needs to start thinking about (and training toward) other aspects of the game. Even more importantly, they must retrace their steps; returning to the fundamentals which make mastery of other styles possible. This is a rare event. It's boring to go back to doing "just" footwork. You won't be seen as a "bigshot" if you do plain old parry drills or point control. The truth is, each of the first three styles of fighter we've described rely on a few of the fundamentals and only those few. To cross over easily from one style to another (or to achieve the kind of mastery we think the Shifter exhibits) requires a high (personal) level of interest, discipline, commitment and honest self appraisal. If you are reading this, you have the potential to do just that; enhancing your fighting ability and enjoyment

as a participant or spectator. How a fighter prepares for and participates at FP will give you clues as to their interest, ability, style and experience level. I'll group this stuff all together under the general label "MINDSET." New fighters will often be unprepared for fighter practice. They lack sufficient funds or equipment and stand around watching. Their MINDSET is unfocused. They don't really understand what they are looking at, nor do they know what they should be looking for. It's too bad they don't do this kind of thing two years later, after they've become active. Watching can be very helpful. Experienced fighters actively watch the others when they are fighting. Who is busy talking? Who is paying attention? Who is checking their gear? Who is padded up and ready to play? Who is on the field first? Who is on the field last? Who is teaching ? Who is doing exercises, drills, etc. The next step is to watch fighters warm up or fight. New fighters can be seen doing basic footwork or lunging against a wall with a sword (or sometimes just a scabbard). Ironically, the best of the old timers can be seen doing the same things. The three basic fighters all have clearly defined MINDSETS; these permeate everything they do. You should be able to pick up "tells", because the three basic types rarely do any useful warm up (I'll discuss the concept of "tells" further in a moment). They just get out there and start fighting. After all, what's there to train? They won't work on weaknesses to improve them. This requires slow, frustrating, uncool-looking, (occasionally) painful drills. The best way to warm up is an individual choice. The only consistent thing to be considered is the MINDSET the fighter is exhibiting. Good fighters come to Fighter Practice to PRACTICE! Good fighters are warming up with a purpose. They are stretching or doing a drill or even (apparently) free sparring, but it's controlled and focused. They came to improve something, something specific.

Tournaments

Unlike the fighter at a fighter practice, the tournament fighter is operating on a much higher level. Most fighters will revert to their most comfortable form during a tournament and this allows the observer and excellent oppurtunity to examine the full depth of a fighter. During a fighter practice, most fighters are typically playing at 50% to 75% of their full speed. Accordingly, most fighters spend quite a bit of time playing manually (ie they are thinking about their offense and defense) rather than letting muscle memory and reflex handle it automatically. During a tournament, however, fighters will up the speed and accordingly, turn a large portion of their offense and defense to autopilot so they can concentrate on reading their opponent and anticipatng their next attack. Inevitably, fighter in this state will exhibit their most basic forms and tells. For example, during a practice I will typically use a lot of flashy parries, hand picks, and cuts. During a tournament, however, I tend to revert to head shots and retreats. The increase in speed results in a very radical change in style.

But why is tournament analysis important to melees? Since melees offer a very high stress combat environment, style changes are also very common. Many fighters will use their tournament style during melees.

The Base Style

Every martial artist starts his or her training somewhere -- nobody is born a fighter. As a result, the most early training is also the most deeply ingrained and under high stress or speed, most fighters will revert to their original training. This is especially true with new fighters who learn the drills and do well when sparring at low speeds. However, the instant their opponents starts to push them, most new fighters revert into a mass of flailing parries and cuts. Even advanced

fighter with several years of training and experience can be forced to revert to their basic training under the right sort of circumstances (extreme fatigue, sudden pain, etc.)

In tournament fighting, fighters tend to use their most comfortable form. As a result, the best way to beat another fighter is to recognize their base form and adapt your own style to it. Unfortunately, this is extremely difficult. On the one level, you have to be able to recognize your opponent's style and then override your own tendency to use your most comfortable style. As you become more fatigued as the tournament progresses, you will feel more and more pressure to use your most comfortable style.

Before the Tournament

One of the best times to analyze another fighter is just before the tournament during warm up bouts. As a general rule, a fighter doing a warm up bouts will start to transition from their usual style into their base style. This is all part of the normal psyching up and tends to be an unconscious process. At best, you should observe a fighter through several bouts to see the progression in the style change.

Once you have a feel for a particular fighter, the next step is fight a warm up bout with him or her. If possible, try to get a late warm up bout when your opponent is fully warmed up and fighting at speed. I recommend fighting about 75% with your opponent and spend most of your bout watching your opponent's reactions. I generally have several different target areas in mind prior to the bout that I have selected from observation prior to the bout.

During the Tournament

Once the tournament begins, try to watch every bout that's you're not participating in. If possible, try to marshal as it gives you an up close look at a fighter's style at speed. At this point, most fighters are operating at 90% to 100% and most of their offense and defense is now on autopilot. Look for favorite attacks, tells, and footwork errors. In addition, talk with other fighters about their bouts. Try to get them to explain the bout in detail, describing good shots or parries, how they won/lost, what made their opponent difficult/easy, etc.

On the Tournament Field

At some point, you will have to take the field and fight. Now's the perfect oppurtunity to use the observation and analysis from the sidelines during combat. As you take the field, take the oppurtunity to loosen up (shoulder shrugs, jumping, wrist rolls) and watch where your opponent gets set. As a general rule, I will take the en garde position several sword lengths out of range. Many fighters have a very fast attack from the en garde position and dying two seconds into a bout is not constructive. On the commencement of the bout, slowly close the range.

Once you get to a comfortable range, now is the time to start looking for holes in the defense. If my opponent is not someone I was able to observe or warm up with, I will start by attacking the nearest target areas and observing the reaction. In most cases, I do not use a committed attack, but instead throw the shot toward a spot about 2 inches from the intended target area. Most fighters will react as if the attack was "live" and defend or attack appropriately. My general order of targets (depending on weapons and physical makeup) are primary hand, front foot, head, front knee, off hand, and torso. If I get a strong reaction (overly large parry, strong riposte, etc), I

throw a second attack at the same target. If you get the same reaction, then I'll designate that area as a "soft target".

Once I get a feel for the other fighter, now is the time to move in for the kill. Tournament fighting is very tiring due to the high stress level. A long bout is most likely going to drain you, resulting in slopping point control, wide parries, and poor footwork. Under good conditions, I try to identify two holes, but if I can only find one or my opponent is starting to press me, I will now attempt to penetrate their defense through that hole.

Once the bout is over, take the time to discuss the bout with observers on the sidelines.

The Truth Tells

The limited fighter (sometimes even the master of many styles) has what we call "tells" short for telegraph; which means they do little things that tell you what they'll probably do next. Tells have to be consistent and (basically) unconscious or uncontrollable to be considered good tells. If a fighter does something a few times and then kills you right after that, what you saw was probably just a set up by a Shifter. Shifters are not committed to any one style. They don't really have solid tells or they have tells in one style that evaporate when they change to another style. Difficult and tricky fellows, those Shifters... Some of these tells may be blatant. Some may be subtle. It depends on many factors: size, length of limb, speed, the skill of the fighter. Some are unique to one fighter (which is why it's good to watch others fight. Their deportment on the field will often tell you what to watch out for even if you've never fought them before in your life.) Some are more general. I'll try and give you an idea of what to start looking for. Here is a list of basic tells:

Chargers

- o   Weight shift forward
- o   Head bobbing forward
- o   Tensing of shoulders, hips or neck (sometimes all three)
- o   Sudden intake of breath
- o   Holding breath
- o   Stomp
- o   Heel or toe "pop" (lifting off the ground).
- o   Some chargers will also adjust their blade position (ie drop to a low guard, take the tip offline, etc.)

Blockers

- o   Shoulders "squaring up" under strong attack
- o   Weight settling
- o   Stance deepening
- o   Powerful wrist and arm during parries and blade work
- o   Elbow close to body or "retreating under pressure"

     o   Not advancing and/or re-engaging after YOUR retreat/separation

Runners

     o   Leaning back

     o   Flinching

     o   Maintaining "too much" distance (too far away to engage),

     o   Cringing posture

     o   "Excessive" retreat from slow advance or slow simple attacks

     o   Weak parry

     o   No blade work

     o   Tends to overreact

Shifters

I don't even want to try. They may start out by having an actual tell, read your read on it, and then hold it out as bait to kill you with. Very difficult to describe on paper. Never consistent anyway.

How You Can Train to Become a Shifty Bastard/Bitch

Using an outline:

A. Assess your skills

1. Use video.
2. Get (outside yourself) opinions.
3. Make a list of the fundamentals and rate yourself.

a. Footwork
b. Point Control
c. Offense (thrust and cuts)
d. Defense (blocks and body evasions)
e. Timing and Speed
f. Tactical Thinking/Ability

B. Train the fundamentals that are weak:

1. Practice with a purpose
2. Start slow to program correct form
3. Increase control/speed
4. Use a partner to build sophistication (change timing, speed, angles, etc.)
5. Controlled Sparring (slowly building in realism)
6. Fight unknowns/travel as much as possible.
7. Tournaments (handle stress and bring to maturity your mental focus)

Train by yourself, with a partner, with a teacher/trainer, with a stylist, with a stranger: BUT ALWAYS WITH A PURPOSE. Even if that day is just a fun day, have some FUN dammit...

Assessment

Take a good hard look at yourself. Use videotape if you have access to the resources (we have. Several times). Honestly appraise your strengths and weaknesses. This can be easier than you think: What do you LIKE to do in a duel? What do you hate? What distances are comfortable? Which ones aren't? Which opponents give you the most trouble? Which ones are cake? Assess your: mobility, strength, balance, offense, defense, blade work, thinking. Give each one a grade on paper. This can be your blue print for success. Need more help? Ask! When I first started fencing, I asked a lot of questions (Boy, did I ask a lot of questions)! I asked other fighters I respected to comment on my fighting... "What am I doing well?" "What am I missing?" "How did you kill me just now?" (If they can't tell you, ask someone who can. Great fighters can tell you everything, I mean everything, that happens in a bout. Step by step.)

Training

Tristan and I often warm up with a drill disguised as free sparring (drill is something we do with newbies all the time, so we pay our dues. It's just that, by ourselves, we like to liven things up a bit). Initially there is very little footwork. We take it slow; with the large muscle groups in our legs, hips and back being worked gradually into larger and more violent movements. Our blade work is not random, however. It has a specific purpose. We sometimes do a "Regimental" pass. These were (historically speaking) duels with live steel between friends in the same regiment during the 17th and 18th Century. The object was to demonstrate skill at arms. Killing your opponent was considered very bad form (he is your mate, after all). In our version, the target is small: the sword hand or forearm, sometimes the off-hand is a legitimate target, the leading leg, etc. Sometimes we allow saber-like draw cuts only (again the targets are the limbs, no killing allowed). It turns out that killing is easy and wounding is hard. To win these little training exercises requires great skill and technique. We don't actually care who wins, it's the beauty, speed, tactical excellence, and precision of each pass that is judged. You can work on a specific area of defense, combination of weapons or any of the basic styles we've mentioned. You and a partner can make up games or drills that work on specific things, yet still encourage safety, tactical thinking, and good fun.

The Downed Fighter (DF)

This may seem at first blush to have nothing to do with an overview of basic fighter types and fighter analysis, but it does. In SCA rapier fighting, we continue to battle even when we lose the use of our legs. Can we analyze a "downed fighter" (DF) the way we do a standing one? Can we describe the optimal strategic and tactical missions of the DF in the melee setting? (Remember, down but not out. In fact there are definite ADVANTAGES to using or creating DFs for certain field conditions.) Can we factor in the skills/habits of the four basic fighter types when they are DFs? Can we predict how they will function when paired with a DF? Of course. We will look at the five basic combinations:

- A. You DF, your opponent is the UP FIGHTER (UF).
- B. You UF, your opponent is DF.
- C. You and a partner attacking a DF.
- D. You and a DF defending against an attacker.
- E. You attacking a pair of fighters (One is UF, one is a DF).

We will not consider the DF/DF scenario because mirror engagements are tactical stalemates and the chances of a double kill are high. In other words, it's a crap shoot.)

A. You as the DF

How a fighter approaches being a DF is readily apparent by the posture they take on the ground. When working as a DF, we recommend that you use the kneeling position, rather than the "leg(s) in front" position. Although "leg(s) in front" is popular, it only gives the illusion of stronger defense. There are serious weaknesses, which I will address when you are attacking a DF that adopts this posture. For now, assume all my comments about being a DF include your having taken the kneeling posture (if you have injuries or flexibility problems, the "Indian Style" is an acceptable alternative, but it limits the range of torso motion a bit and I find it hard on the lower back). You are, in effect, a Blocker when you lose your legs. Take every effective attribute of the Blocker and apply that knowledge to your preparation and training as a DF. You should practice every aspect of rapier fighting, including this one. If you are a poor DF, you are probably a poor Blocker. Adjust your MINDSET and your training commitment to include: parries, ripostes, draw cuts, the middle, and close ranges. The one factor that is outside DF's control that is critical for success is DISTANCE. Since the DF has no mobility, they have no control over the distance between the two fighters. They must rely on UF making an error. They can do things to help create that error, but without that basic flaw in UF's attack, a DF cannot win.

The Charger

You will need both hands (if possible) to defeat this type of fighter. The kneeling posture, itself, is an invite and a trap. You are encouraging an all out assault by leaving the ground in front of you temptingly clear. Be aware that (It is ironic that the CHARGER often adopts the "leg in front" posture when they are a DF. This gives us some insight as to what type of attack they fear and why they are CHARGERS themselves.) the CHARGER is coming, and soon. Thankfully, the DISTANCE question is solved. The CHARGER will be with you in a moment. Stay alert and don't drift off mentally. You will have very little time to adjust your defense once the CHARGER gets rolling. It's best to meet a CHARGER "square up" with two hands, "en passant" (strip style) when one-handed. You need to watch the "tell" peripherally and focus on the weapons coming at you. You will have to "wedge out" the incoming point(s) while keeping your own point on line. Most of the time, the CHARGER will run right onto it.

The Blocker

Here is the most difficult UF to face as a DF. You must play his game, and play it better, to survive against a BLOCKER. By engaging in blade play and conversation while gradually retreating with your torso and your parries, you may get the BLOCKER in close enough for a "mini-charge" using a strong thrust and a forward lean. The way to defeat the BLOCKER is to CHARGE in and overwhelm their defenses. Hard to do without legs, but it can happen. You can also play a pick game as a deformed RUNNER. By taking the lead hand from a BLOCKER, you can occasionally turn them into a poor man's CHARGER, because their off hand (as a primary tool) is weak. If this happens, your chances of success are increased (just be aware that a committed BLOCKER may change into a CHARGER. You cannot afford to be caught napping as a DF.).

The Runner

You must play the RUNNER in a similar fashion to the BLOCKER, but there is more of a "trout on the line" feel to it. You must try to appear as awkward and helpless as possible. The RUNNER must be brought into range gradually. If you commit to a "mini-charge" too soon or too often, you will scare them out of range and have to begin the dance all over again. Use the "lean away" and "retreating arm" sparingly. If you have a good read on a RUNNER, drop your blade to the floor or to the side (inviting them to close) and further confuse the issue of range. Watch out for hand/wrist/head picks by a RUNNER, it's usually their best shot.

The Shifter

Be prepared for a long afternoon as a DF. A SHIFTER may be patient and pick at you from long range like a RUNNER (thoroughly gauging your blade work, defense, MINDSET and range capabilities; as well as chipping away at your defensive tools until you have no limbs!) only to change gears after a bit of BLOCKER style conversation and CHARGE to bellybutton (if you have an "outie" it'll be touching them) range to slice you up. You must be totally focused and have the ability to shift your defenses to meet threats from any of the styles and any of the ranges, almost instantly. You must be able to read a SHIFTER'S decision to change styles or distances quickly as well. Like I said, a long, long day...

B. Attack a DF

Now that the basic groundwork has been laid, you should be able to think about how you would attack the four types when they become a DF. Tactical and strategic thinking are part of the overall fighter package. If you wanted to take a DF RUNNER'S arm (strategic goal) how would you do that (tactical problem)? Can you get them to extend it for you so you can just lop it off? Probably not. You'll have to leave a target open, a big fat invitation, to get that arm out where you can stick it. So you "channel" their attack and have a preset countermeasure ready to go when they make the fatal blunder. Get the idea? All the information just presented on how you are going to be attacked as a DF is applicable to killing a DF. Just reverse the rolls. Remember, you must make the "mistake" of closing to an appropriate distance, depending on the style you wish to employ. If you know you're getting "too close" you're not making a mistake, you're weighing a risk. There are two basic DF positions: "Leg(s) forward" and "kneeling."

The Leg Forward DF

The DF with their leg forward is being a bit unchivalrous, even discourteous, because they EXPECT you not to step on them. In a real fight, I'd "sewing machine" that lead leg until they begged for mercy. What the DF in this position is doing is attempting to channel your attack to one side or the other (as well as giving you something safety related to think about. Since my safety is always my responsibility, I don't give it over to another person lightly, especially if I can avoid it. That's just one reason I recommend the kneeling posture as a DF). OK, fair enough. How do I deal with it? Let's use the elbow as the defining landmark. If I'm talking about the INSIDE line, that's the side the elbow bends toward. The OUTSIDE line of approach is understandable because the elbow doesn't bend back, it locks. If you have some strip training, these are the FOUR (inside) and SIX (outside) line. Let's describe the scene a bit. Say the DF is right handed, still has their primary arm/weapon system, and has their right leg out (this is another thing that irritates me about this. I can stick either leg and THEY get to decide which one to leave out. If I could make a rule about this, I'd say that the wounded leg must always be left "dragging" out there for added realism). If and when they chose to lean back, they will probably

be leaning back on their left hand. The best way I've found to handle this posture is to work to the OUTSIDE OF THE FORWARD LEG. I want to keep them from pivoting around on their buttocks and whipping me with that lead leg. I want to keep it pinned. If, as I attack, I put my foot (my right foot; always use the same foot they are using. Do not go "mirror image," here) at their knee level on the outside of the leg (stepping on the pants leg is always a nice bonus), they cannot trap or sweep me with it, no matter what they do. Good idea, let's go with it. That leaves me with the upper body to defeat. Use what you already have learned about managing and killing BLOCKERS and you should do fine.

The Kneeling DF

Is probably a BLOCKER or a SHIFTER. Approach with extreme caution. They are probably going to be comfortable at most if not all of the ranges and have a few inches of mobility in the torso that other styles of DF don't have. Be aware of side slipping and body evasions by this type of DF. Estimate your ranges carefully. If you do charge in, be kind and do not bowl over the DF. Legs trapped under hips and buttocks can be seriously injured if the DF hasn't practiced this particular kind of stretching.

C. You and your Partner Attack a Downed Fighter

If conditions allow, move about 45 degrees apart and pulse your shots into different zones (for more information, see Chapter 5, The Pair). Take what is offered. Don't just go for the kill, you could get too deeply into DF's range and get killed. Their range is limited to what YOU give them: feet, legs, attacking arm, and (unfortunately) your head. Physical conditioning and flexibility are a factor when dealing with a downed fighter. Don't get so absorbed by the blade play that you start leaning in. I still do this one. Communicate with your partner and really WATCH what the DF is doing. Take care of your calibration and hold back if DF seems disoriented or inarticulate. I've seen DF's take 4-5 shots before they could get their mouths working and say "I'm dead." Be courteous, kind and forgiving. They're not going anywhere. A coordinated melee team should kill a DF in no more than three seconds (more like half that) if they're good.

D. You and your Legged Partner

When you are teamed with a soldier who gets legged, you should take a position behind the DF's trailing shoulder (For a detailed description of the disabled pair, See Chapter 5 The Pair). Our natural tendencies when blocking are to drive the incoming blade downward. This is bad news for the DF you are supposed to be working with. They can block more than two thirds of your body if you allow it and support their defensive sweeps. You should try and parry side to side while looking for opportunities to counterattack incoming arms, head and torso, in that order of preference. There is a narrow "kill zone" about the same height as your downed partner's head/shoulders and your hips. DFs can be easily killed in this zone and so can UFs. The primary defensive roll belongs to the DF. If they biff it, or allow you to be killed, tough. Teamwork implies shared trust and responsibility, if your partner botched it, too bad. Your interference with their blade work and defensive movements just gets you both killed faster. Remember to allow attackers to move into DF's range, If you keep pegging from long range like a RUNNER, the DF might as well be a rock. Have confidence in your partner's defensive abilities or find another partner. One other thing, if you allow yourself to be drawn forward of DF's position, you deserve to die (see next section).

E. Attacking a Pair (One UF, one DF)

If you've been paying attention, you may have already guessed that the best way to defeat a pair is to draw the UF outside the protective range of the DF. Essentially, you are then facing a string of individuals and can slaughter them easily (provided UF isn't just trying to sucker you in. You wouldn't fall for that, would you? Nawwww...). Divide and conquer as a rule. If the team stays together, work on them in the following manners: ENGAGE - Engage the weaker fencer of the pair and watch. If the UF is a RUNNER, you may scare them off. If UF is a CHARGER, retreat on the "tell", and kill them in series as explained above. Keep in mind the individual styles you see and form a strategy that could create your best opportunity to get the touch (based on individual weaknesses or unwillingness to modify a particular style for the melee team.) Play the distances. Move in and out, watching for over-commitment by either fencer. Then STRIKE (hey, if this was so easy, why would anyone need to train?) ISOLATE - Using your footwork, see if the pair will adjust their positions to maintain coverage of the overlapping ranges needed for proper defense. This works well if the UF is a CHARGER. If you see a gap, feel a mental displacement, etc. make a strong attack and see what happens. There is occasionally a "cascade failure" as both fighters over-react. I've taken 3-4 arms/legs in a couple of seconds as each fencer fails to get into correct line or position and then overcompensates. FEINT - Make a series of attacks on one fighter and see if the other one "goes to sleep." If you haven't attacked one for a couple of seconds, throw a shot and see if it lands. Fun to do when you pull it off. SPLIT FOCUS - Play BLOCKER to the pair without any intention of seriously attacking either and see what the pair does. Occasionally you can throw in a broad sweep, trapping all their defensive weapons and CLOSE to dagger range, killing both. Sad, but true. This one works best on teams you "feel" haven't worked together or aren't communicating well verbally/keying off each other physically. Works best if both seem to be passive fighters, i.e. RUNNERS OR BLOCKERS.

In Conclusion

There are no secrets. There are no mysteries. There are no short cuts. There are natural laws to human endeavors. Time and again we are asked "How do you do that? I could never get that good." The truth is ANYONE can do what we do. It'll be somewhat unique (we are all individuals here), but true excellence can only be achieved by the very simple methods we have outlined here. You can learn by watching and by doing; by asking and by teaching. If you bring passion, discipline and commitment (including the time and resources, of course) to anything you do, true excellence is sure to follow.

Chapter 14: On Formations

I must follow them, I am their leader... -- *Robes-pierre Montescu*

There are three main formations common to small unit conflicts. This section concentrates on the strengths and weaknesses of each in greater detail.

The Line

A line formation consists of each member of the unit standing shoulder to shoulder. Distance between soldiers can vary, although most lines operate with very close spacing (less than 12" between fighters).

The line is a very simple formation and is very easy to establish and control on the field. The line also allows the full offensive strength of the unit to be focused along a single axis (forward).

Problems

There are three areas of weakness in the line:

Bending

The ends can be "bent" by pressure from the flanks (Often called flanking). This pressure causes the line to deform, leaving one individual fighting at a point. Rather than defending the optimal 45 degrees required of the average line fighter, this individual has to defend an increasing area, often beyond the range of vision possible in armor and encompassing a greater angle than can be defended.

Exposed Rear

The line can be attacked from behind. Although this involves the prospect of "Death From Behind" it can be provoked among undisciplined troops by demonstration. When individuals, acting independently, turn to meet the new threat, the integrity of the line is disrupted and the unit can be wiped out in a matter of seconds.

Splitting

The line can be broken somewhere along it's length. In essence this creates two lines that are being flanked in opposite directions simultaneously. In light fighting, this is the most glamorous and least likely type of breach to be successful. Because of the limited number of fighters involved, there is probably only one fighter attempting to exploit the breach. This soldier is in the same position as the fighter on the flank who doesn't refuse the line and stands fast, acting as the pivot of the flanking pressure. This aggressive fighter is under assault at a wide angle and closing the distance to exploit the break. This is likely to cause the fighter's destruction within seconds.

Solutions

Flank attacks can be met by a "flying squad" that meets the sortie before it engages the main line. The primary mission of this team is not to kill the attackers but to slow their advance, destroy mobility (by legging), and drive them in toward the center (thereby disrupting THEIR main line). This requires fighters with a high degree of skill and self discipline. They cannot afford to be so engaged that they lose mobility or get killed. Someone from the team must survive (even to the point of abandoning a teammate) to inform the commander of events on the flank involved. Another solution is to anchor one or both flanks on terrain or boundaries that cannot be defeated. If one flank is left "hanging" while one is held inviolate, a flying squad or "cavalry unit" must harass and contain the enemy's attempts to turn the exposed flank. This is a bit easier because the anchored flank can be covered with minimal supervision and reinforcements. Another solution is to throw a suicide or forlorn hope at the flankers, with the mission of taking ONE fighter, preferably an officer, with them. This is tricky and often requires the sacrifice of a highly capable fighter. It should be used as a last resort. Another solution made possible by our peculiar form of
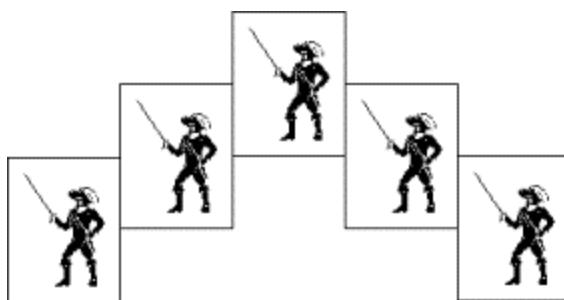
conflict, is to create an "instant pill box" by putting two fighters on their knees and one above. This creates a dead zone at the pivot point that can break the flank advance and the main line pressure simultaneously until the line can be reformed or recovered.

Attack from behind can be defeated by ignoring it (a form of hiding behind the rules, but it does require discipline and poise by the unit's members). Beware of victory conditions that require you to deal with this threat at sometime to prevent victory by the enemy. Another solution is to maintain a reserve or "hit team" whose job it is to sweep back and forth behind the main line "cleaning up." The deaths of this team without warning can, again, result in the destruction of the unit in seconds, depending on the rules

Breaks in the line, or weak flanking attacks for that matter, can be defeated by dressing the line through a general retreat called by the commander. Even a retreat of a few feet can repair the problem. Fighters need to have a general understanding of this, in which case they can retreat en mass without an order (we have found ourselves doing this on occasion), or they need to practice responding to an order as a group. I learned it in this form: "Blue Company, on the command, retreat ten feet...(pause so everyone can repeat the order out loud)...RETREAT! RETREAT! RETREAT!"

The Funnel

The funnel formation (wedge, diamond, or column formation) is similar to the line formation, but the fighters are now staggered. Wedges are typically used to split an enemy's unit's line.

Problems

There are three main problems with the wedge formation:

Hard to Control

The response of any column, wedge or diamond to contact at the front is distortion of the formation. The leading elements are engaged or dead. They stand or retreat slightly, widening the temporary line as their comrades are engaged or move forward in support. This leaves a number of fighters behind the line, with trailing elements even further back. This is what causes the characteristic funnel shape. The most obvious problem is communication. The commander is either dead (if he was leading from the front) or screened from the contact and unable to get through his own troops to evaluate or advise the front.

Flank Attacks

The flanks are vulnerable. If the frontal attack is combined with a flank attack, all of the problems already outlined (fighting on two fronts, stress on individuals at the pivot points, enemy in the rear) are there in spades. However, in light fighting this is probably not the case.

The flanks are often screened or out of reach, not because they are not exposed to attack (if the enemy could have attacked the flank they would have done so initially. It's safer and more effective to hit from the side) but because stealth is practically impossible (under daylight conditions anyway) or undesirable; through codes of conduct, by rules or nature of terrain.

Dead Fighters

Dead fighters leaving the field stream though their own comrades, further disrupting communications, or line integrity.

Solutions

The solution to any modern ambush is to assault it, or run through it. If the attack comes from the left, drive toward the left, etc. In light fighting, the solution is not so simple. If the column was attacked at the front, the enemy may be overeager, incompetent, or doing exactly what they wish to do. It is imperative for you, the commander, to break up the flow of action with decisive moves. Here are the most obvious suggestions:
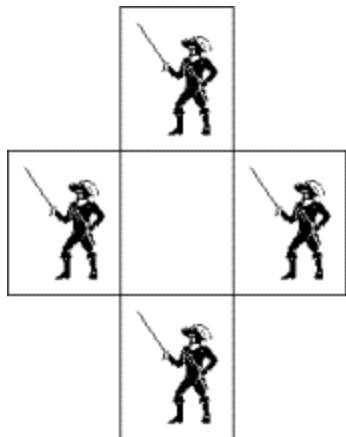
Retreat. Attacking in a funnel shape is inefficient and impractical, but it's great for retreat. As the team moves backward, find a bottleneck and crawl inside. If a natural bottleneck cannot be found, try to anchor the team on the nearest boundary. As the unit retreats, move fighters into position to guard the new flanks, support the withdrawal and hold the choke point with fresh legs. The commander in the rear can accomplish all of these things if he keeps a level head and the team follows orders.

Send a strong flanking unit out to whichever side seems most promising (I know, I know. A major commandment is: never divide your forces in the face of an unknown enemy.). This move can take the pressure off the front engaged, reform the line after rolling back the enemy into a more manageable frontal position or get your unit chopped up in detail. Tough. That's why you get paid the big bucks.

This also brings up the delightful points we have learned about running retreats. Falling back to a bridge, gate or natural terrain feature requires practice. As the fighters leave the conflict, the pressure on those that remain increases. The pace of withdrawal can increase to the point of uncontrollability (this is known as a ROUT). Throwing out a skirmisher, berserk or forlorn hope can sometimes be the only way to slow the avalanche of oncoming enemies. This takes discipline on the part of those who are leaving (panic is considered bad form) to do it by the numbers. It requires judgment on the part of the commander to feel the timing needed for success. Wait too long, you lose the team, run too hard or too soon and you can do the same thing.

The Circle

A circle formation is a funnel formation which as been bent until the flanks meet. Typically, fighters in a circle formation face outward, although movment of the circle formation may include instances where all fighters face along the axis of movement. Circle formations typically occur when a unit has been outflanked and encircled by their opponents. Accordingly, the fighters in the unit turn outward to meet their opponents.

Problems

There are two areas of weakness in the circle:

Splitting

The circle can be broken. In effect, everyone on either side of the break is being flanked or attacked from the rear. This makes every individual or bunkered team responsible for a pivot point. They are not only responsible for the conflict immediately in front of them, they have to maintain awareness of the 35 degrees on either side of them, where comrades are supporting or engaged or in trouble or overrun. Get the picture? This formation is fine for projectile weapons but you won't see a Roman legion happy with it (interlocking fields of fire allow a single fire team to cover every angle BUT the 35 degrees directly in front of them. These areas are covered by both teams on either side. This is similar to the division of labor in the normal light fighter line. A circle, however, is just a continuous bent line for contact fighters. Which is why those Romans were so anal about keeping a straight line.).

Limited Retreat

There is no escape that makes sense. If the balloon is punctured, the walls retract and dissolve in moments. A team on the other side of a break is faced with the insane choice of facing outward or facing inward, or BECOMING A SMALLER CIRCLE. They have to face all threats right? There's already one behind them so they face fore and aft...in effect becoming a smaller circle. This is known in the literature as "Inviting defeat in detail."

Solutions

Try to have a "quick reaction force" that can roam around meeting probes by the enemy. You should have good vision and good lines of communication within the circle. You should have shorter distances to go to reinforce also. The sooner you can discern the main thrust the sooner you can stall/block it, break the circle and envelope the enemy. Obviously, the sooner you can safely leave this formation the better.

Retreat from the circular formation is...damn, words fail me as to how difficult it is. If you end up with this situation, form up in the center as quickly as possible, pick a direction and go like hell.

Conclusion

We in the fencing community face unique problems in mass fighting. Shields are small or nonexistent, so forming the standard shield wall is impractical. Our blades are offense and defense both. Room to deflect between teammates forces us to separate slightly so we each can maneuver correctly. The fortunes of war can change in seconds. Our only advantages are our communications with our fellows, our maneuverability, and our ability to kill three or four foes in as many seconds. Terrain for melees is often completely open or devoid of natural obstructions; which is why I am emphasizing the use of boundaries or anchoring formations with "pill boxes" or flying squads. A straight line is fairly paramount because we are still using personal hand held weapons. Reviewing cavalry tactics (I didn't discuss the "formation that is no formation" a Zen concept that the Mongols on their ponies found effective against static formations.) or modern armor/tank tactics could be a useful supplement to the information offered here. The ability of individual fighters, while mitigated somewhat by the team concept, is still a powerful force on the field during these battles. You, as a commander, still have a lot to do and be responsible for. Individuals with solid training and instincts can still do much on their own initiative but your input and observations during the conflict can provide your unit with the winning edge.

Chapter 15: Death From Behind

21. "Death from behind" will be allowed in specifically designated scenarios. This is performed by a combatant approaching from behind and signaling death to the second combatant by either placing a blade before his vision or laying a blade on his shoulder, and calling at a minimum "death (dead) from behind, My Lord/Lady." The second combatant is considered "dead" as soon as the blade is within his vision or as soon as it touches his shoulder. The second combatant will not attack or try to duck/spin/twist away from the first combatant at the moment of death. (Rules from Estrella War Treaty, 1998-9)

Death From Behind (DFB) is a recent addition to the Light Weapons Fighting landscape here in the Northern Outlands. Since we began field testing this melee convention, we have gathered information in the following topic areas:

- Performing DFB safely
- Reading DFB
- DFB and Communications
- DFB and Formations
- Our Philosophy/Argument against using DFB in SCA LWF

Terminology

This chapter makes use of a wide variety of acroynms and technical terms. This section attempts to define several of the more common terms.

Death From Behind (DFB)

An attack made to a fighter's rear.

Red Fighter (RED)

The fighter attacking using DFB.

Blue Fighter (BLUE)

The fighter responding to a DFB attack.

Rear Guard Fighter (R.G. Fighter)

A fighter whose task is to watch the unit's rear and engage opponents attempting to use DFB.

Serial DFB

A series of DFB attacks along the rear of a unit made in quick succession.

No Fixed Post (NFP) Fighter

A fighter who has left the line to engage opponents in the rear.

Performing DFB Safely

We found a four step process was necessary to make DFB reasonably safe and polite to both fighters involved:

- RED makes an oblique approach
- RED places the blade on the shoulder
- RED makes the verbal pronouncement
- RED waits for and accepts BLUE's acknowledgment

In a side note: Some Outlands Rapier Fighters have been experimenting with a simple touch using the tip of the rapier. This "touch" from behind didn't work well because BLUE fighters were unclear if this was being caused by an opponent or a comrade. Many times soldiers adjust their spacing and position with one hand on their partner's shoulder. With a weapon (dagger, scabbard, etc.) in this hand it was often impossible for the adjacent soldier to discern what this touch was. The addition of a verbal warning on the part of RED ("Dead from behind, my lord..." etc.) was required for clarification and helped greatly. Placing the blade on the shoulder worked well; especially when RED placed the blade in the plane of vision. This required RED to stand off to one side or the other (approx. 35º off the center line) to present the blade (1/3 to 1/2) correctly. Frequently, the initial reaction to DFB by BLUE was to back up (occasionally BLUE was backing up in response to some activity to their front and the movement was totally unrelated to the use of DFB by RED) . DFB from an angle prevented collisions as the two fighters were not directly in line, one behind the other. We found that placing the blade ON TOP OF THE TRAILING SHOULDER, whether this was the primary weapon hand or not, worked best. This helped to prevent BLUE from turning into the arm or furniture of RED. It allowed maximum room for RED to avoid collision or entrapment of weapons, limbs or legs. To prevent misunderstandings, disputes and courts of inquiry, (and as a courtesy) we found that RED should make the kill and then WAIT FOR A RESPONSE. In the heat of a melee this occasionally took some time. Until the kill has been registered verbally or non-verbally, it is best for RED to stay and repeat the phrase "Dead from behind..." until it is acknowledged by BLUE. The style of DFB used in the following engagements was as follows: 1/3 to 1/2 of the blade on top of the trailing shoulder, within the line of vision, accompanied by the verbal warning, "Dead from behind..." followed by a pause to gauge the response of said fighter (preferably some kind of acknowledgment); no other engagement until this moment was resolved (this included no killing of RED by other BLUES turning away from the line). At no time was RED to make a close

approach and place the blade across the throat (as in Heavy Combat). This put the quillions and other furniture too close to the face and throat area and was deemed extremely unsafe.

Response to Various DFB Attacks

This section examines several different tactical situations involving DFB and some possible counter-tactics. While a prompt reaction to a DFB situation is paramount to preventing disruption of a unit, the very best defense is not to let any fighters into the rear area of a unit. However, considering the small unit size available in most melee scenarios, using fighters to watch your unit's rear takes offensive strength away from the front line. Flankers can prevent DFB in some cases, depending on the location of the flankers relative to the main unit.

DFB on the Interior of a Line

This scenario pre-supposes that a solo RED has passed the BLUE flank and has made it well into the rear without being engaged or threatened by rear guard or reinforcements.

Problems and Responses

- The first BLUE who is killed by the initial DFB attack has several responsibilities:
  - BLUE must acknowledge they are being killed by RED and do so in such a way that the rest of the line is alerted. We found that BLUE must say "I AM DEAD FROM BEHIND" warning the fighters to each side.
  - BLUE must make a nonverbal signal to others too far away to hear (in the Army a gas or nerve gas attack requires specific verbal and nonverbal signals to be made by those soldiers in the immediate vicinity). In this case BLUE held their swords inverted before themselves (but some 12 to 16 inches above the head) giving a clear nonverbal signal as well as yelling "I'M DEAD FROM BEHIND". Just saying "dead" didn't cover it, as other BLUES assumed the kill was made by the REDS across the line in normal melee fashion.
  - BLUE must make a safe exit from the area of conflict. Unfortunately, there are not many safe directions to go with a RED engaging the BLUE line from behind and BLUE comrades engaged to the front to either side. Since BLUE is surrounded on three sides by fighters engaged in multiple directions, we did the tricky thing and had the dead BLUE exit toward "backyard" RED, interfering with their continued engagement of the BLUE rear as much as possible (similar to a runner in baseball sliding into second base to "break up" the double play).

- The next problem was how to engage RED quickly to prevent "serial DFB." Since the BLUES in the line could not know which way RED was traveling, the fighters on either side of the initial DFB were responsible for turning and dealing with RED. The more experienced/expert fighter was thought to be the better choice in holding off RED and protecting the rear of the BLUE line. In actual practice, however, either fighter could and did "call it" by simply saying "I'm turning..." or "I've got it..." and engaging RED. This depended on factors like level of awareness and aggressiveness. An aggressive "shooter" was often too busy at the front to respond quickly enough. A "defensive minded" fighter was often quicker to perceive the danger, turn and respond. This situation is similar to a pop fly being handled by two infielders: one calls the other off.

- It is imperative for the two fighters nearest the break to go to "maximum defensive fire" as they cannot afford to be killed by the main RED line at this time. If two or three BLUES go down quickly, the line is broken and defeat almost certain.

- The rest of the line has to respond by closing up the gap (a natural response, given training and experience) using the standard verbal "close it up" and passing this command down the line. Moving toward a dangerous DFB site without turning to meet the danger requires discipline and confidence in the teammates "on scene " handling the problem. This kind of esprit comes from constant practice and experience. It can be gained no other way. The BLUE front has to step up it's "rate of fire" to cover the break point as well.

DFB on the Flanks

This scenario pre-supposes that a solo RED has passed the BLUE flank and is engaging the "corner man" in an attempt to turn the line.

Problems and Responses

- The first BLUE who is killed by the initial DFB attack has limited responsibilities:
    - o The BLUE in this position has to make it clear that they are the end of the line. BLUES two or three positions into the interior may not know or remember that they are near the flank. If BLUE shouts "CORNER DEAD" all the fighters know this to be an unusual thing and can respond accordingly.
    - o BLUE should use the inverted sword symbol to let the others know they have been killed from behind.
    - o DFB BLUE should STAND STILL for a few seconds after dying for a couple of safety reasons. They are being engaged front and back and have one flank sealed by comrades. There is only one safe direction to exit and it may be in the line of fire within seconds. The BC response will explain in a moment why this is so.

- Testing proved that the best way to neutralize RED was to have the soldier next to the dead "corner man" stand fast and continue to engage to the front. THE SECOND BLUE in line should turn and deal with RED (this is the same response described in Chapter 6 The Team). This keeps the RED line from closing and crushing the BLUE flank. The BLUE in second position must stay home and fight forward (hopefully taking a leg or other useful thing before getting killed. Remember: rear guard, running retreat and forlorn hope are the most difficult defensive tasks in war.

- The rest of the line has to respond by closing the gap (a natural response given training and experience) as described above (remembering to step up their "rate of fire" as they traverse the line).

DFB on the Bridge

This scenario pre-supposes that a solo RED has approached the BLUE line from the rear. The tactical situation is not limited to bridges and can occur in any situation where a unit's flanks are covered by terrain or obstacles, such as a bridge, corridor, tunnel, or gate.

Problems and Responses

Testing has found that resources must be committed to protect the rear in tight quarters like those found in this class of scenario. The actual techniques are of interest and are described below.

- The rear guard has several responsibilities.
    - They must maintain constant communication with the front BLUES as to what is happening behind them. This is best accomplished if R.G. BLUE sacrifices one hand and places it on the belt of the front BLUE directly "behind" them (The language is going to get sticky here so stay with me on this.) rather than attempting to maintain communications verbally. This physical contact allows both soldiers to keep their eyes on the business before them at the expense of mobility, but still allows for instant communication. In the enclosed environment stated above, this loss of mobility was considered acceptable.
    - If this contact is broken, the front BLUE then has to turn and assist R.G. BLUE. If these "push me-pull you" teams are salted down the line (say every three soldiers), there is little chance of the whole line being overwhelmed by the RED front. Two soldiers dealing with a solo RED are better than one.
    - R.G. BLUE cannot afford to be legged. Mobility and communication are their sole responsibilities. Better to die, acknowledge death verbally, break contact and allow the front line to respond as in Scenario #1 than to get left behind; because that is my recommendation. The BLUE line commander should delegate a new R.G.BLUE for duty rather than hold up the whole team with an immobilized soldier.
    - Once a front BLUE has assumed rear guard responsibilities for any reason (even a false alarm), they should not attempt to switch tasks and return to the front. This is too disruptive and confusing. They should simply take station and grab a belt, thereby informing a front facing BLUE that THEY are the next R.G. BLUE if the current soldier breaks contact for any reason. If the rear guard becomes "overstocked," the NFP (no fixed post) BLUES can approach the commander or the line team leader for reassignment: OR they can task themselves (a smart commander will delegate this as an option to a BLUE before the fighting commences) to a "forward" (in this case toward the rear) skirmisher/spoiler/observation post.

A Philosophical Statement/Argument Against The Use OF Death From Behind In SCA Light Weapons Fighting

This letter was originally focused on the Estrella War of 1999, but it highlights many concerns we have about DFB in general. We object to this tenet of war on three grounds: Safety, Historical Validity, SCA Goals and Objectives.

Safety

Unlike the heavy fighter, we depend for much of our safety on the good intentions and skill of our foes. Our weapons are very hard, our armor very soft. We haven't got a shield to hide behind and a great heavy helmet to wear as we make a close approach to an opponent's back. We have banned much of the close fighting that is so clearly documentable because it can't be done safely (much the same way mourning star type weapons are banned by the heavy community. In a side

note, you mentioned "training" as a viable solution to the unpredictable reaction of a fighter being challenged from behind. I checked with my local heavy source and asked him, "What happens when you attempt DFB on Master Maelgwn or Sir Hoegarden?" He said," I drop everything and go for a big bear hug. They whirl around and get crazy if I do it any other way." This, about two fine and gracious fighters with twenty plus years of SCA heavy fighting under their belts in an environment where DFB is the norm.) All we need is a quillion in the throat or a pommel to the temple to end our fun real quick. We are fighting people we don't know, with weapons we are not fully conversant with, in an environment that is already stretching the control and rational thinking of the participants. All it takes is one slip, and the whole fencing community is in deep doo-doo. I think this risk alone outweighs any benefit or added "realism" we might have gained. There are lots of people who hate, despise or banish fencing around the known world. A record of injury may be a cultural norm within the heavy community, but we have had very few "incidences" of a serious nature: yet look at the reaction in certain quarters. A compromise that I favor is touching the back/shoulder or laying the blade within the field of vision on the shoulder and gauging the reaction during conversation. This allows the DFB approach to be from a reasonable distance without getting our furniture too close to the face/throat of our opponent. Remember, our opponents tell us when a good blow has been landed. DFB somewhat muddies the water, *unless*, we wait for our opponent to call the blow..."GOOD, I'M DEAD." or some other acknowledgment should be required to prevent running, slapping behavior by a fighter who has flanked the line.

Historical Validity

Without taking a personal slap at those who say "War is War, it's unrealistic NOT to take any advantage and use DFB." Let me state that this was only true within our period of study when applied to the peasant, levies and common mercenary. WITHIN THEIR OWN CLASS, the nobility on both sides survived battle to fight again and again. Ransom was commonplace. The fighting community clearly adopted conventions in the face of tactical and strategic common sense because they were *noble*, **and so have we**. Taking one's own arm, allowing an opponent to recover their balance, frame of mind, and even their weapon, are all standard conventions within the SCA. Why do we throw away a tactically superior position time and time again? A fight is a fight, isn't it? Is this realism?

SCA Goals and Objectives

I have heard statements that show DFB proponents are speaking with a twentieth century mind set influenced by the growth of "every man" armies of the 17th and 18th century and advanced by two blood lettings in this century that defy comparison. Yes, war has gotten considerably more ugly in the last three or four hundred years. But a man of the 15th century (who wouldn't have been using a rapier in war anyway) was only beginning the long road down to the corrupt state that war has reached today. He would have recoiled in horror at attitudes and behavior that we consider normal. If we follow this twentieth century logic, we should be stealing the equipment of our opponents the night before. We should be ambushing them in their tents while they're asleep. War is war, right? I hold that killing an opponent from behind is dishonorable. It is the first step down that road to twentieth century savagery that we are on today; where even women, children and noncombatants are burned, boiled and burst apart with weapons being used miles and continents away. It flies directly in the face of those ideals we cherish and hold dear. I cannot show I am the better fighter using DFB. I cannot test my skill. I cannot demonstrate the

valor within my heart (like taking my own arm or leg) that allows me to defeat my opponent without any tactical advantage, but through pure skill at arms. I heard it said that there was a great deal more fellowship and goodwill at last year's war. The SCA is dedicated to that kind of fellowship. Will this convention of war help or hinder that growth of good feeling? Is that which we hold as good and noble to be sacrificed on the alter of realism? Is that why we play? I hold that DFB helps to polarize and divide the individuals of the fencing community, rather than encourage goodwill and growth. We are still a small and fragile band. While strong here in the Western USA, there are places where fencing is dying or being destroyed. In the larger picture, we as fencers need to stand together, not apart. I ask that you weigh very carefully the benefits and the costs associated with this convention. Our position is clear. I already have a bitter memory of how this convention stained my first ever war. I do not care to expand this to a collection of incidents or have the fellowship of the sword strained needlessly.

Conclusion

DFB requires practice and experience to use/thwart effectively. It requires additional planning by the commander. It requires differing allocation of troops (a reserve and/or rear guard becomes essential) and those troops must understand their responsibilities. I can think of nothing worse than to be a rear guard unit that loses contact with the main body and gets wiped out; then stands on the sidelines watching their teammates get rolled up. Discipline, maturity, experience and a "defensive" mind set are essential to performing these critical tasks. Line fighters must be trained to react quickly to the threat from the rear to avoid wholesale chaos and envelopment by an opposing team. This requires going through the motions (similar to an offensive line going through blocking assignments without pads/contact). Telling you about this means nothing unless you spend the time doing it. Calling out the different kinds of deaths, signaling non-verbally, calling the turns, waving each other off, maintaining "push me-pull you" contact etc. - all must be practiced. Use the scenarios presented, drill and have "live fire exercises." Good luck and good hunting.

Chapter 16: Weapons Design And Attributes

One of the biggest problems facing most light weapons fighters is tuning their weapons to their particular physical makeup and fighting style. Randal and I have often been asked to look at another fighter's weaponry and have been appalled at how poorly another weapon handles. This chapter will focus on various aspects of weapon design, such as blade length, blade rigidity, weight, balance, and hand protection.

The Functional Weapon

The rapier has always been a style weapon. History notes time and time again that the sword was an essential part of a gentleman's attire. Accordingly, the rapier was often highly ornate and stylized. From an engineering point of view, however, decoration doesn't improve performance -- it improves appearance. On the field, though, the kill is going to be decided by skill and technology. A better skilled fighter starts with a distinct advantage, but if his opponent is using a better weapon, than some of that skill is going to be offset by the technology.

The funtional weapon is going to be a very plain weapon. If you plan to wear a sword, we would recommend that you have two blades -- a dress blade for walking around and a combat blade for

fighting. The combat blade will be as simple as possible -- light, small hand guard, long hilt, and a rigid blade.

Weight

The weight of a blade is an indirect measure of the weapon's speed. Heavier weapons require a greater force to move and accordingly, require a greater force to stop. Mass, speed, force, and time are all related via the impulse equation

mv=Ft

which states the mass (*m*) times velocity (*v*) equals the force (*F*) times the time (*t*). In general, this equation is a simpler form of Newton's 2nd law *F=ma.* Assuming a fighter's strength and time of motion is constant (*F=constant, t=constant*), then increasing the mass of the weapon causes a decrease in the velocity of the weapon. If two fighters of equal strength use weapons of differing weights, then the fighter with the light weapon will achieve a higher velocity. Conversely, the time to reach equal velocities will be less for the figther with the lighter weapon.

In short, a light weapon has disctinct speed advantage over a heavier weapon. In order for weapons of differing masses to achieve the same velocity at the same time, one of the fighters will have to exert a much larger force. This requires the fighter using the heavier weapon be stronger in order to make the heavier weapon perform as well as the light weapon.

In addition to affecting the speed of the weapon, the weight of the weapon also determines how quickly the fighter using it will fatigue on the field. The work done in moving the weapon is

W=Fd
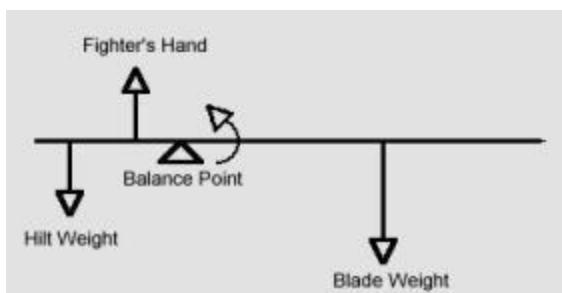
where work (*W*) is equal to force (*F*) times distance (*d*). Thus, the heavy weapon requires more energy to move it than the light weapon. By combining this equation with the impulse equation above, the mass of the weapon can be related directly to the work required to move it.

W=mvd/t

Fast attacks executed with a heavy weapon over a long range (ie full extension) are going to create the most work for the fighter. In order to compensate for the increased velocity and distance and decreased time, the only option is to decrease the weight in order to decrease the overall work.

Balance

While the weight of the weapon dictates the speed, the balance of the weapon (ie distribution of the weight) dictates the handling of weapon. The figure below illustrates the distribution of weight in a weapon:

The weapon is simply a lever which rotates about a balance point. The fighter exerts a force on the weapon to control the translation and rotation of the weapon. The distribution of the weight along the length of the weapon is consolidated into two primary forces: the weight of the hilt (guard, hilt, and pommel) and the weight of the blade. In order to keep the weapon level, the sum of the moments about the balance point must be equal to zero.
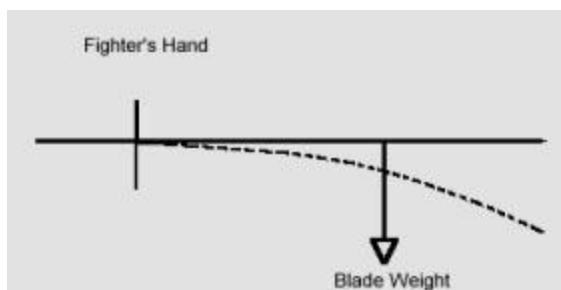
$$SM = F_{Hilt}r_{Hilt} + F_{Fighter}r_{Fighter} + F_{Blade}r_{Blade} = "0"$$

where the force F is the force and r is the distance to the balance point. Each force generates a moment either clockwise or counterclockwise depending on the sign of the force and radius. The distribution of weight in the weapon determines the size of the forces in blade and hilt and consequently determines if the weapon is hilt heavy or blade heavy. If the weapon is blade heavy, the blade will have tendency to point downwards while in a hilt heavy weapon the blade will tend to point upwards.

In a well-balanced weapon, the moments generated by the hilt and blade are nearly equal and the weapon doesn't have a tendency to rotate. Accordingly, the weapon is much more stable during combat and requires less control on the part of the fighter in order to keep the point from rotating off the line of the attack. This results in better point control and increased accuracy during attacks.

Blade Rigidity

Another factor controlling the accuracy of the weapon is the rigidity of the blade. A weapon's blade can be considered a cantilever beam extending from the fighter's hand. Accordingly, the blade will always experience some bending under it's own weight.

When the sword is move vertically, the change in velocity results in an additional force on the blade. The faster the motion, the greater the force. The forces acting on the blade bend the tip away from the direction of motion. For a very rigid blade, the amount of bending is very small as the blade resists the forces. In a very flexible blade, the bending is much greater, resulting in a much larger offset in the tip's position. For a large offset, this can result in the tip hitting much lower than the anticipated target area. Depending on the amount of bending, the result could be a complete miss or a dragged tip.

The stress on the blade due to bending is computed using the following formula:

$$s = Mc/I$$

The rigidity of the blade is based on the blade's composition and moment of inertia. Of the two, the most important factor is the moment of inertia of the blade which is directly related to the blade's shape. The moment of inertia is not a constant and also depends on the axis along with

the blade is bent. For a rectangular beam, the moment of inertia is given by the following formula:

$I = \frac{1}{12} bh^3$

where b and h are the cross-section dimensions of the blade. The base b is parallel to the axis of bending and the height h is perpendicular to the axis of bending. For a square blade, the moment of inertia is the same in both the x and y directions. For a rectangular blade, though, the moment of inertia can differ substantially in the x and y directions, resulting in different bending perfomance.

The most rigid blades are shaped like a I-beam as this particular shape is extremely resistant to bending. Most sword blades exhibit this shape by incorporating a fuller into the blade to adjust the shape. The fuller although the blade to be lighter while retaining stiffness.

Appendix A: Tales from the Tavern

This section is dedicated toward recounts of various melees the Blue Company fighters have participated in. These accounts illustrate a variety of the principles described in this handbook and are good examples of what to do and not to do in combat. And most of them are really amusing to boot.

Barkeep, Another Tankard of Ale!

No shit, there I was at the Brigands Bizarre (A.S. XXIX) playing in the tavern brawl down by the feast hall. The melee was utter chaos with fighters everywhere. The table were a real obstacle as I couldn't fight with my usual low guard stance. Every time I'd strike at an opponent, I'd end up catching the blade on a table leg or bench. Needless to say, I found myself across a table from the infamous Lady Angelique Rive de Hellsgate. Her off-hand weapon caught my eye as she was wielding a large wooden tankard. After exchanging the some pleasantries regarding various threats to our inner anatomy, we proceeded to cross steel. The tankard was quite effective at deflecting my shots and I decided to treat it as an odd shaped buckler. In the midst of a particularly nice thrust, Lady Angelique whipped her blade over and pinned mine to the table. Then, she slammed the tankard down on top and with a twist of her wrist, trapped by blade between the tankard and table. There is nothing like that moment of dawning comprehension that one's demise is quite near. Lady Angelique then lifted her rapier and with a vicious set of thrusts, broke my through my off-hand defense and ran me through the heart.

Moral: Never underestimate that odd off-hand weapon.

Tristan Grey

Damn Students

No shit, there I was at Gate Crashers (A.S. XXIX) playing in the village melees. I had brought one of my more advance students, Alexandre Bernajoux, along for the experience. About midway through the day, I had the good fortune to be defending the village as part of a trio of guards. Our opponents were none other than Bernajoux and Lord Mikel . My comrades and I formed into a loose line and moved forward to engage. Bernajoux and I squared off against each other and went into en garde with the low guard. The village within which we were fighting was situated on a large patch of sand. I was soon to discover that the sand had another lurking danger besides making footwork difficult, filling boots, and making armor unbearable to wear. I decided

to feint towards Bernajoux's sword arm and then disengage up to a face thrust. As I made my initial attack, Bernajoux swept his sword up to execute parry VI. Unfortunately, Bernajoux's tip was a little low and in addition to bringing the blade up, he also flung a large quantity of sand at my mask. The mesh did nothing to stop the onslaught of soil and the next thing I knew my eyes and mouth were full of sand. I started staggering about and ended up crashing into the comrade on my right. Bernajoux was a little stunned, but Lord Mikel wasted no time. He lunged forward and ran me through.

Moral: Always anticipate how the terrain is going to affect your fighting.

Tristan Grey

Never Talk to a Pirate

No shit, there I was at Gate Crashers (A.S. XXX) playing in the village melees. This year, most of the soon-to-be-formed Blue Company was also in attendance. As part of the warmup battles, a single fighter was told to raid the village against a pair of guards. I had the dubious honor of defending the village against Don Tryffin Mac Ualraig. We chased Don Tryffin around the buildings for several minutes. Don Tryffin then leveled the field by killing my comrade. Feeling rather cocky at this point, I struck up a conversation with Don Tryffin. In the midst of pushing him down the hill, I decided to be really cocky. "Tryffin, " I said, "you know, of course, that you don't fight Tristan Grey. You fight Sniperio!" "Who?" replies Don Tryffin. "Sniperio!" I said and did a really fast face thrust from low guard. The shot caught Don Tryffin square in the face and the melee was over.

Moral: Talk less, fight more.

Tristan Grey

Death From Below

No shit, there I was left for dead on the end of the field. A fighter from the other side had take my legs. So I sat frustrated, while the rest of my team pushed the opposition backward. I tried to get the attention of my team, who, by now was almost at the other end of the field. They stayed in a perfect line with their backs to me. How could I get their attention. Yelling was not a success, nor was sitting there. I finally got the attention of a quick and decisive team member. He realized that everyone had forgotten my lowly presence on the ground. By pushing on one end, he managed to get my team to turn around the opponents. They now had their backs to me. And even better, they were retreating right towards me. I wondered how long they would retreat, and did they remember that I was there. As a quick and simplistic plan began to unfold, I poised myself. It could be almost as easy as shooting a line of cans off a fence. And so it was. I proceeded to pick off 4 fencers in a row before the line broke up. The look of shock was definitely a "Kodak moment". They had forgotten me. My team was then taking over the few remaining fencers who did not receive one of my shots to the back. Yes, we won.

Moral: Don't forget that fencer on the ground -- they may bite you in the ass.

Arcadia de Medina

Good Shot?

No shit, there I was caught up in the moment -- me, the one who hates to melee -- so swept up that I contemplated being a rhinohide. I had to be told that yes, the hit was good. This is a very bad situation.

Moral: If you can't remember it's just a game, you have no business being on the field!

Regan Davis

Why Fighters Train

No shit, there I was hot and heavy in the line. Suddenly, Kyle moved into head shot range. No thoughts, pure instinct and a really pretty kill.

Moral: If you train enough, you won't have to think about all the shots, really.

Regan Davis

Don't Underestimate the Dead!

No shit, there I was, DEAD! Wait, let me explain. We were the guards of a city in charge of protecting the money in it from the thieves that were threatening to invade. The thieves only had one life, the guards had multiple lives provided we waited 40 seconds to be revived. The thieves could enter the gates as many times as they wanted provided they were still alive. Their purpose was to steal as much money as possible. As we prepared for our encounter, we developed a strategy in which we decided to allow the thieves to enter without opposition and we would get them as they headed out. Yeah, right! The thieves entered the gates with caution. Seeing us just standing there and not knowing exactly what we were doing, they just attacked us instead of going straight for the money. Result: they killed us all and for a while the city was left guard-less and the thieves were ransacking at their will. All I could think of while I was dead was: "1..2..3..Great! ..4..5..6..7.. So much for that one! ..8..9..10..11..12.. They are stealing everything..13..14..15..16..17.. and hence ..18..19..20..21.. have more money ..22..23..24..25..26..than the rest of the teams. ..27..28..29 ..30..31.. This is not pretty ..32.. But then the tide changed a bit. One by one we all came back and started to get them. Probably the best one we got was their captain who was trying to steal a big trunk of treasure and as he rounded a corner, he found 4 or so blades in his way. Now with the number of thieves running out and the all the guards back, we had trapped the remainder inside the city gates with money in their hands. Needless to say, they all died. None got credit for the money that was taken out of the city. Amazingly enough, we were victorious.

Moral: Never underestimate the dead, especially if they can come back to life!

Tatiana Bonacieux

Running Away

No shit, there I was with my comrades of the infamous Blue Company. We were in a training melee involving fighting around barriers. The barrier itself was more than six feet tall and ten feet long. The Company was concentrated on the right flank, the enemy's left, when Captain Tristan sent Arcadia and myself to press around the barrier (to our left) and attempt to take the enemy in the rear ("Death From Behind" being allowed.). We had just passed the barrier itself when Manfred and three of his ugly rogues stopped us. During the ensuing clash, Arcadia was legged. I fought on at her side and things grew tolerably warm. She was eventually killed, so I advanced to the rear at speed (but not in any way panicky). Upon rejoining my fellows (and

incidentally guarding the flank of our line against a counter-attack), I gave my report in a timely and concise manner. "Uh...HELP?" I said. "Bernajoux, take off and help Randal," responded my Captain, resolutely. Together Bernajoux and I renewed our assault around the left side of the barrier. After a few moments to assess, we pressed home the attack and defeated the rascals, taking several from behind. Victory was ours.

Moral: The mission comes FIRST. Dying gloriously is irresponsible if you don't win. Sadly, you must occasionally leave a comrade behind. I should have left Arcadia sooner. If the enemy had split their forces, they could have taken the Company from behind...and I would have failed to notify them in time.

Randal the Malcontent

Too Slow Out Of The Blocks

N.S., There I was at the 1997 Outlands Rapier Collegium. Robert de Marchet was our trusty commander; and like a good one, was asking for our input. The scenario required us to capture a resurrection talisman from our opponents and return it to our side of a "village." The houses were laid out in a diamond pattern, obscuring us from our opponents and preventing either side from knowing, in advance, the opposing disposition of troops. We thought it seemed reasonable to have our commander and his supporting guards lead us onto the field and direct us to our assigned flank. We were too slow deploying that way; the other team just rushed out en mass and took the village square. Within seconds they rolled up both flanks pushed us back to our resurrection talisman and wiped us out. Total slaughter.

Moral: Ideas that seem good in conference don't always translate to the field. Quick and dirty often beats slow and elegant.

Randal the Malconent

It's always Marshal, Marshal, Marshal!

N.S., There I was at the 1997 Outlands Rapier Collegium. There were three teams for the melees with two playing and one marshaling. I took my marshaling station in a burned out building and prepared to watch the fray. And what a ghastly fight it was too. Back and forth the two sides struggled, neither gaining a decisive advantage or learning enough from their mistakes to change tactics. Yawn. But a good fighter pays attention, gathers information and shares it with his team. These two blundering squads fought for ten minutes and victory was only decided after time ran out. I got together with my teammates and we chattered fast and furious. When Robert de Marchet led us onto the field, we had learned a lot and victory was ours in about six minutes.

Moral: Watch and LEARN. Observation as a spectator or scout can give invaluable advantages to a smart fighter, or a smart team.

Randal the Malcontent

Behind You!

N.S., there I was at Estrella War XII when a fighter crept up on my teammate, Alexandre Bernajoux. Sensing an imminent Death From Behind, I waited for the slime to approach. Looking for the telltale arm to arise across his field of vision, I whirled and plugged the marauder...alas too late. He had already killed my partner.

Moral: Warning someone of a problem is better than losing a teammate. "Raider on your right" or something appropriate gives them the option of telling you to handle it or covering their back during the sudden whirl that is sure to follow your pronouncement. Be loose and ready, but be smart and conservative too.

Randal the Malcontent

Red Rover, Red Rover, Send Randal Right Over!

N.S., there I was at that pesky 1997 Rapier Collegium again. Robert de Marchet had assigned Guillaume de Gonzac and Bernajoux Dulac and yours truly to assemble as the Human Threshing Machine of Doom! Our job was to get out there and KILL. As we took the field, our worthy opponents met us at the extreme left flank at a choke point between the outer boundary and a building. It was so tight only two fighters could engage at once. I stood there for a while watching the fighting (I was squeezed off the line and stood behind the building). Suddenly it occurred to me that they had three or four fighters tied up and Bernajoux and Guillaume were holding them just fine. I told them I couldn't help and was going to find the commander for reassignment. They had no objection so I left. Robert de Marchet was delighted to see me and had work for me as well. "Go hook up with the newbie and press the center a bit. I'll take my guard and help on the right." We implemented his plan with spectacular results. The group Bernajoux and Guillaume held were eventually taken from the rear and slaughtered/pushed back into the moat. Prisoners were taken and I helped.

Moral: Experienced fighters should find something useful to do. Act as a runner, provide support, something. Just remember to inform everyone of what you're doing. Get orders if you can but, if you have to, take the initiative and DO SOMETHING.

Randal the Malcontent

Sir, No Sir!

N.S., there I was at Estrella XII again. The bridge battle was (yawn) still going strong and well into it's third hour (or so it seemed). Donna Anrea rushed up to me as I lay stretched out on the ground. "You need to get up there," she said. "No," I said. "I'm fighting right here." My boot touched the end of the hay bale bridge I was laying behind. Later Don Christian came huffing up with a similar order. "Sir, no sir," was my response (General Tryffyn had told Blue Company to stay back MUCH earlier in the day). Later, at something like five to one odds, we swept them from bridge to take the day. Moral: Following orders is hard. Understand part of me wanted to do what the don/donna said to avoid conflict and rudeness. I just didn't. And won.

Randal the Malcontent

A Deer In The Headlights

No shit, there I was at Queen's Heart 1997. I was fencing against Don Raggno in the quarter finals when suddenly I disarmed him. He turned his hand over and I struck downward and his sword fell on the ground. Don Raggno stepped back a bit and the marshal came forward (probably going to recover the sword). I stepped over it, placing it behind me and proclaiming in a loud voice, "Do you yield?" Needless to say Raggno was shocked. But the rules clearly do not require me to return the fallen weapon. It was his golden opportunity for some theatrical comment or action like: "Do your worst, I'll not yield to a scoundrel!" or "I throw myself upon the mercy of the Queen and beg her to stand for me!" or "I'll fight you unarmed if I have to,

scallywag!" or "Run me through, and be damned!" The point here is to be brave and daring in the face of certain defeat. To show a little spirit, a little class. Instead, Don Raggno said, "Uh...I'd rather not." How quaint. The king himself had to bring Don Raggno a sword. I kept my recovered weapon and now fought Florentine. Unfortunately Raggno's heart wasn't in it and he quickly fell. Had it been Don Tryffin, I might have died also; he's taken me that way before.

Moral: Our combat is supposed to entertain. It's supposed to be high drama. It's not whether you win or lose, it's how good you can look doing it. STYLE, man, STYLE. Don't flub an opportunity for theatrics.

Randal the Malcontent

P l a n A h e a d

N.S., there I was at Gate Crashers 1997. One of the scenarios involved recovering a chest of gold (in this case a plastic blue bucket) and taking it out of the city gates in a ten minute time period. I noticed that after an initial search for the chest, which could not be found, fighters began to engage and slaughter each other anyway (there was resurrection involved). Aracida de Medina and I continued to search and eventually found the bucket wedged 12 feet up in the boughs of fir tree. While Arcadia guarded me, I (eventually with the help of a marshal's staff) released the bucket and RAN toward the city gates. This brought up an interesting issue of safety. The scenario was run several times with the bucketeer RUNNING toward the city gates every time. There was even a case where a defender from the other team was guarding the gate and a bucketeer RAN right by them. Rather than tackling or imposing their tender body between this kamikaze and the gate, the defender (showing commendable poise) let them go.

Moral: THIS IS BAD. Poor design leads to unsafe behavior. Worse, the problem wasn't corrected the FIRST time it happened. Perhaps a better ending to the scenario would be: the team with the bucket must protect and defend the bucketeer for thirty seconds, wherever the bucket is found.

Randal the Malcontent

BEHIND US...HELLO!

N.S, there I was at Estrella XII, During a practice melee, we started using Death From Behind. I asked our commander, "Anyone guarding our backs?" "Oh, sure," he replied, "these guys are on it..." Sure. Right. Halfway through the battle, while engaged with Don Tryffin, a voice floats over my right ear, "Dead from behind, my lord." Ironically I'm watching the same thing happen to him. "What happend to our support?" I wondered. "Oh, they got killed," someone said. Moral: DEATH FROM BEHIND SUCKS! No, seriously though, the duties of a rear guard are different than those of a front line trooper. Don't get killed. Fall back early and often, as your front line advances. Engage defensively those who are harrassing your line from behind. Leg them and leave them if possible. Communicate with the line you are protecting. IF YOU DIE, DO IT LOUDLY.

Randal the Malcontent

A Mooving Experience At A Cattle Raid

NSTIW... learning a few things about melees during Cattle Raid in Bo Farrach, 1998. Bernajoux and I stumbled upon a couple of more terms/commands that might be useful. Woods battles

allow pairs and individuals to channel and limit attacks from greater numbers. They are, however, very disruptive of the line and to communications. A pair, even with one fighter legged, can hold onto a position effectively for some time. A single strong fighter can hold out for as long as a minute (a very long time), if they think conservatively and fight defensively. Which direction the defenders are facing also made a big difference. When the enemy entered a clearing, we let them in and held them in pockets by standing on the periphery and using the trees as a firewall. This prevented mad rushes and hard presses by superior numbers. Contrariwise, when defending a narrow path between the trees, we fought as close to the mouth of "the funnel" as possible, and then gradually retreated. This also prevented quick movements by the enemy. It kept multiple fighters from engaging us effectively. EXAMPLE: Two teams fought a battle that had a military objective (transporting a VIP from one side of the copse to the other). My team (the brigands) feared a breakthrough further down the line (by the Burgermeister and the guards); so we thought of a way to "close the door." My mate, Bernajoux and I would quickly breaking off and retreat to a prepared "choke point" position. This, we felt, would halt the advance of the guards, and their cargo, long enough to regroup, reinforce or even win the day. We came up with a command that could be useful in battles where the lines have poor communication or cohesion. Like a MASH unit that is too near the engagement to be effective, we used the term "BUGOUT." "BUGOUT" - A complete disengagement and re-assembly at a known fallback position. Independent commands need to communicate quickly and efficiently within themselves. Should the situation deteriorate (away from an independent command) fighters can still be reformed and organized.

Randal the Malcontent

A Mooving Experience At A Cattle Raid II

NSTIW...During one of the covered bridge battles, my team was tasked with killing or forcing the defenders off of the bridge itself. I noticed the opponents, through attrition on both sides and the fog of battle, had developed a strong position. They had good fighters on both wings and were steadily pinching us against the right hand wall (as we faced them). We had a legged fighter to anchor our center with a tall fighter in support who had good range and a strong position. It occurred to me that if I vacated my position and went to the left side, Bernajoux could follow me as I punched through that flank and we would have them seriously rolled. Even if I failed to make it, the disruption of their position would be a good thing. We really needed to make something happen before they picked us off, one by one. I called to B and, since we didn't have a term for what I wanted to do, he thought I expected him to change places with me. As it turned out, the disruption caused the "cascade failure" I was looking for and everything worked out. I think this could be a useful term/strategy. "RONIN" - A tactical loss intended to disrupt/destroy an enemy formation that is too well balanced and formidable to defeat through slow attrition. As in the phrase..."I'm going RONIN." A salute to the 47 ronin who sacrificed themselves for honor's sake, and won. I think it would be best used on a flank. I have no confidence in it when used on the center of an opposing formation.

Randal the Malcontent

Man in Trouble

While at Outlandish in 1998, Alexandre Bernajoux and myself where running around the resurrection melee as a pair of flankers. Our mission was to search and destroy. While finishing

off a group of Tinkers, Bernajoux nudges me and says "Hey, look! Randal is legged!" I looked over to where he was pointing, and sure enough, Randal the Malcontent was on his knees engaged with several fighters. We ran over and slipped through a gap in the trees. Meanwhile, rest of the Blue Company had heard from Robert that Randal was in trouble and they converged like bees to honey. In about 20 seconds, we had reformed from scattered pairs and trios into a solid line and started dishing out some trouble. In doing so, the enemy retreated and we advanced -- leaving Randal sitting behind us.

Moral: Situational awareness in a trained unit can be an awesome power on the field. Always keep your eyes and ears open during combat.

Tristan Grey

Did You Lose Something?

While at a Dragonsspine fighter practice prior to the Estrella War, the Blue Company and the Dragonsspine light weapons fighters were conducting some melees. In one of the scenarios, I attempted a hand shot at the opponent in front of me. I missed the shot and started to pull the blade back for another attempt. However, the tape on the end of the tip was starting to peel back and caught on his glove. In response to my hand shot, he yanked his hand back and in doing so, also yanked the sword right out of my hand. The blade landed right between the two lines of fighters. I call out "Armed!" and drop to my knees in a desparate attempt to retrieve the weapon while defending like an absolute madman with my dagger. I wasn't able to retrieve the sword, but I did manage to survive for quite a while just with the dagger.

Moral: Equipment takes quite a beating during a melee. Make sure your gear is in good shape prior to combat.

Moral: Don't hesitate when something out of the ordinary happens. Many fighters will simply freeze and eat a blade. Always continue to fight unless a hold is called. Don't become easy pickings for an alert fighter on the other side who is just waiting for you to lose your concentration.

Tristan Grey

Leg 'em and Leave 'em

While at a Caerthe war practice for the Estrella War, Random and myself were put together as a flanker team. Our job was to get around the enemy's left flank and bend their line so the main unit could take advantage of the open defense. Arcadia advanced the unit about halfway up the field and then called for flankers. Random and I broke off and slipped around to the left, trying to get around behind the enemy line. We ran into Don Jean Eric and his partner. We engaged and my first shot was to Don Jean's front foot. He dropped and I called "Fall Back!" Random and I then retreated, leaving one of the enemy's top shooters legged on the edge of the field. This definitely made engaging the remaining enemy units a lot safer.

Moral: Kills aren't always important. Unless the melee is last man standing, always include hand picks and foot shots when engaging. A legged fighter can easily be dispatched later. If you leg someone, have your unit fall back and make the enemy leave them behind.

Tristan Grey

Can You Do That?

Alexandre Bernajoux and myself where at the main field on the Sunday morning of the Estrella War. The Outlands had taken the rapier war point the day before and we were hoping to get in some pickups. There were several hay bales scattered over the area from the scenarios during the previous day and Bernajoux and I were jumping in, out, and over the bales as we warmed up. I was trying out a new dagger I had recieved as a gift from Randal and Bernajoux and working on using the haybales to extend my range, restrict Bernajoux's movment, and hone my footwork. Another light weapons fighter showed up and Bernajoux stepped out for a quick breather. We started out on the ground, but as he pushed me back, I jumped up on the nearest hay bale and continued fighting. The other figher stopped and asked "Can you do that?" I assured him that I was comfortable with it and that he should give it a go. He also jumped up on a hay bale and we fenced back and forth over a narrow "wall" for several minutes. Afterwards, we discussed the bout and he was very interested in the different use of terrain.

Moral: Light weapons is a martial art. One should be prepared to fight whenever, whereever, and however.

Tristan Grey

Appendix B: Recommend Bibliography

While there are many non-fiction books on small unit leadership, such as U.S. Army training manuals, management training guides, and military history books, we've found that some of the best examples can be found in a variety of fictional works, both books and movies. Books are generally recommend over movies in that most movies do not have the time to accurately protrait many of the problems encountered in small unit leadership. At a minimum, I would recommend *Starship Troopers* (the book, not the movie) and *Aliens*. Both go a long way in examining the dynamics of leadership and what makes the difference between a good leader and a bad leader.

Small Unit Leadership

Books

Drake, D. *Counting the Cost*.
Drake, D. *Rolling Hot*.
Drake, D. *The Sharp End*.
Drake, D. *The Voyage*.
Drake, D. *The Oblique Approach*.

Heinlein, R. *Starship Troopers*.

Regan, G. *SNAFU: Great American Military Disasters*. New York: Avon Books, 1993.

Steakley, J. *Armor*.

Sun, Tzu. *Art of War*. Translated by R.D. Sawyer. New York: Barnes & Noble Books, 1994.

Movies

Aliens
A Bridge Too Far
Seven Samurai
The Big Red One

The Devil's Brigade
The Dirty Dozen

Martial Arts Philosophy

Books

Hyams, J. *Zen in the Martial Arts*. New York: Bantam Books, 1982.

Ming-Dao, D. S*cholar Warrior*. San Francisco: HarperSanFrancisco, 1990.

Musashi, Miyamoto. *Five Rings*.

Movies

Circle of Iron

Appendix C: Contact Information

Tristan Grey

Charles Farris
7373 W. Florida Ave. #6B
Lakewood, CO 80232

Email: *charlesf@devilsthumb.com*
Email: *tristangrey@juno.com*

Randal the Malcontent

Randal Ames

Email: *rtmalcontent@juno.com*