



Tilly's Very Bad Day

Fast Play Rules for the 30 Years War

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I've been on the hunt for a set of wargaming rules for the Thirty Years War for a couple of decades. The hunt has taken so long that I've ended up writing my own.

I've called the rules "Tilly's Very Bad Day" in memory of the Battle of Rain (15 April 1632) where Field Marshal Johann Tserclaes, Count of Tilly, got hit by a Swedish cannonball. He, of course, subsequently died. A very bad day indeed.

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Vicent Tsao kindly proof read for version 1.1 and Richard (doctorphalanx) for version 1.2.

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Introduction

Recently Brett Simpson pointed me at a simple set of rules for the English Civil War called [Rupert's Very Bad Day: Battle of Marston Moor \(1644 AD\): Fast Play Rules for Students](#) by Matt Fritz. Rupert's Very Bad Day relies on lots of bases and base removal so isn't very friendly with my big bases and Thirty Years War units with both pike and shot on the same base. But I liked the simplicity, saw considerable potential, and really liked the name.

So I immediately began writing a version that would suit my pike and shot for the Thirty Years War which are based on big bases (80mm x 40mm). My initial draft started very close to Matt Fritz's work, and I remain heavily indebted to him, however the rules have evolved quite far from the original. The biggest similarity to the original rules is probably the name although even there "Rupert" became "Tilly".

I have introduced more types of stand (light horse, pike+shot, rabble), single stand units (hence pike+shot), a new concept called "resolve" to replace stand removal, morale rules based on resolve, terrain including the option to allow infantry to "defend the hill", distances based on base width, a more complex interplay of shooting and charging to reflect different national and unit attitudes to these combat options, increase purpose for commanders, optional troop quality (superior, ordinary, inferior, rabble) and hence an optional point system, and probably other things. Despite these additions, and the complexity they bring, I think the rules still allow "fast play".

Although I've got the Thirty Years War in mind "Tilly's Very Bad Day" should be applicable to the Eighty Years War and English Civil War.

Base Width and Tilly Unit of Measure (TUM)

All distances are relative to the base width for an infantry or cavalry unit. The specific base width you use does not matter, but having a consistent base width does. 40mm wide is a common base width for 15mm figures. Personally I use 80mm wide big bases with my 15mm figures. Some folk use 60mm wide bases for 25mm figures. Others put a lot of 15mm figures on a 120mm wide base. Brett uses 100mm wide bases with his 15mm figures. It is entirely up to you.

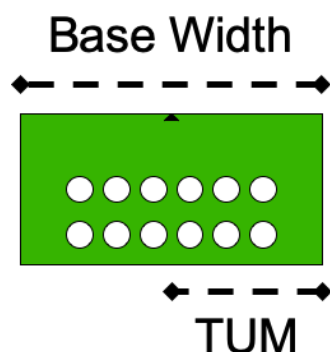


Figure 1: Base Width and Tilly Unit of Measure (TUM)

The actual unit of measure is one half a base width, called a "Tilly Unit of Measure" or TUM for short. This is half the base width of an infantry or cavalry unit. So if you use 40mm wide

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infantry bases then a TUM is 20mm. For my 80mm wide big bases a TUM is 40mm wide. The game uses measurements of 1, 2, 3, 4, 6, and 8 TUM.

The distance between two units is always measured between closest points.

Recruiting your army

This section describes the figures you need, how to base them, and how to form them into units, commands and an army.

Figures

I use 15mm figures but you can use any scale of figures. 2mm, 3mm, 5mm, 6mm, 10mm, 12mm, 15mm, 20mm, 25mm, 30mm and 54mm all work.

You can use cast metal, moulded plastic, 3D printed plastic, printed paper, whatever. If you want a quick start then have a look at [paper soldiers on Junior General](#).

Units

Every stand is a unit and there are several types of unit:

- **Commanders** are, well, commanders including the overall general and general in charge of each subordinate command (battle or wing); commanders coordinate movement of their units; commanders so nor fight independently but may join a unit during a move or charge to help them in melee; doing so risks becoming a casualty themselves.
- **Horse** are the vast majority of cavalry in the period; most are armed with pistols and swords; some use an arquebus or carbine as their primary weapon; they might wear $\frac{3}{4}$ armour or just a back and breast; they use shock or fire power as appropriate; also includes the relatively few lancers still in service.
- **Light horse** focus on skirmishing with pistol while mounted, harassing the enemy flanks, and joining in the pursuit, e.g. Croats, Hungarian Hussars, and Polish Cossacks.
- **Dragoons** are mounted infantry; they ride nags, so move faster than other infantry, but still dismount to skirmish with fire arms.
- **Pike+shot** are the main infantry type; a unit contains men armed with both pike and shot, and both types of figure appear on the same base.
- **Shot** are units containing only firearm armed men detached from the pike+shot units for special duties, e.g. commanded shot, forlorn hopes, or detached Spanish *manga* (sleeves).
- **Rabble** peasants with improvised weapons, and the most raw of recruits regardless of weapon type.
- **Cannons** have considerable firepower but, in this period, cannot move.

Pike+shot, shot, and rabble are infantry and fight on foot. Dragoons are mounted infantry so move like cavalry but fight on foot. Horse and light horse are cavalry and fight mounted.

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A unit is nominally a brigade of about 1-2,000 pike+shot, shot or rabble. Horse, dragoons and light horse have half that number. Cannons have a few hundred men to man about 8-16 guns. Commanders represent a handful of men.

Table 1: Unit Types lists all the attributes of the various units.

Table 1: Unit Types

Unit Type	Move (TUM)	Shooting Range (TUM)	Shooting To Hit	Melee To Hit	Resolve
Commanders	8 ¹	—	—	4-6	1
Horse	6 ¹	2	6	6 4-6 5-6 ³	3
Light horse	8 ¹	2	6	6	2
Dragoons	6 ¹	4	6	6	2
Pike+shot	3	4	6	5-6	4
Shot	3	4	6	6	3
Rabble	3	—	—	6	1
Cannons	Pivot	Unlimited	6	—	2

Notes:

- (1) Maximum move of 3 TUM in difficult terrain, charging, or rally back
- (2) Horse hit on: 6 when in difficult terrain; 4, 5 or 6 when charging the flank/rear of pike+shot, or charging any other units; 5 or 6 otherwise

Unit basing

As mentioned above a TUM is half the base width of a cavalry or infantry unit. So base width is a key choice. And you have lots of options but 40mm is common for 15mm, 60mm is common for 25mm, I use 80mm wide big bases with 15mm figures, and Brett uses even bigger 100mm wide bases.

All units have several figures on a stand. Commanders have 2 or three mounted figures on a square or circular stand 1 TUM in diameter. Cannon have the gun itself and 2-4 crew on a square base 1 TUM across (or if that is too small, try 2 TUM like the infantry and cavalry). All other troops are based on rectangular stand 2 TUM wide.

With my armies both infantry and cavalry stands are 80mm wide and 40mm deep. I use 15mm figures and use 12 infantry figures for pike+shot and shot units and 15 figures for rabble. For dragoons I use six skirmishing dragoons on foot, two horses, and two other dragoons as horse holders and/or mounted. Horse have six mounted figures and light horse four. But, really, you can choose anything that suits you, just like the base width itself.

The depth of the bases doesn't matter. Common depths for 40mm wide bases are 15mm, 20mm, 30mm. Personally my 80mm wide are 40mm deep for both infantry and cavalry; this is, of course, one TUM which I find kind of elegant. Folk who use 120mm wide

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bases also use a depth of 40mm. I think Brett has 50mm depth for his 100mm wide bases, so one TUM again. It is up to you.

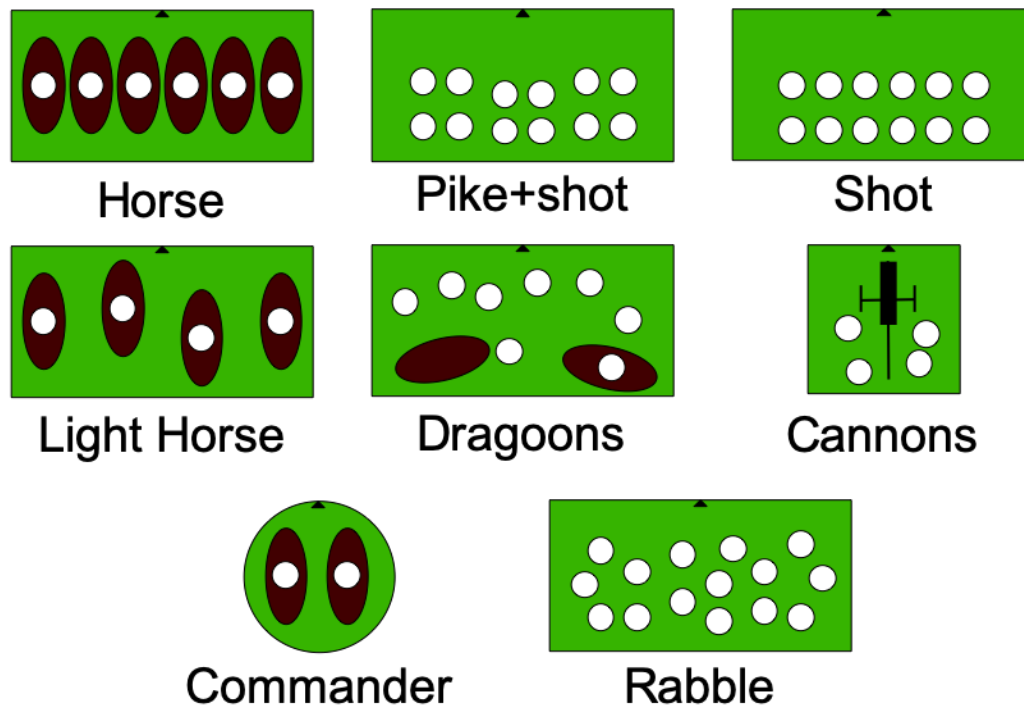


Figure 2: Unit types

Unit facing and position

Units have a front zone, two flanks zones, and a rear zone.

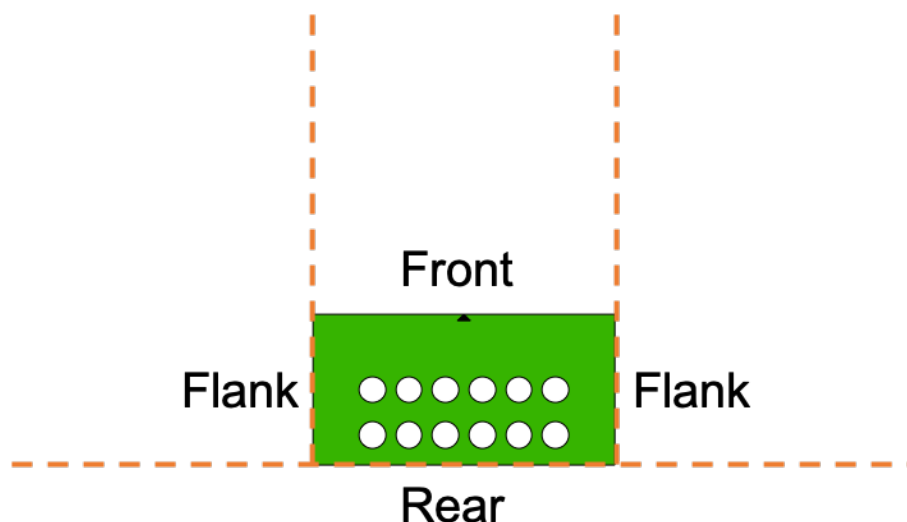


Figure 3: Unit facing

A unit defines enemy units (and friendly when it matters) in terms of their relative position.

To front: If any part of the enemy (or friendly) unit is in the front zone. This is true even if part of the unit is also in a flank zone.

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To flank: If the enemy (or friendly) unit is not to front, and any part of it is in one of the flank zones. This is true even if part of the unit is also in the rear zone.

To rear: If the enemy (or friendly) unit is entirely within the rear zone. So it is neither to front nor to flank.

If it matters for any reason, e.g. being in or out of terrain, line of sight, or being uphill of another unit, the position of a stand is assumed to be the centre point of the stand.

Resolve

Units start with a resolve of 1, 2, 3, or 4 depending on their type. A resolve of 3 is typical. Resolve is used for shooting, melee, and command checks. Each hit inflicted on the unit in shooting or melee weakens the unit's resolve by one. When a unit is reduced to a resolve of zero the unit is routed and removed from the table. Resolve can be recovered through heroics and being rallied by a commander. You can use resolve markers (my preference), tiny dice, or a roster to record the current resolve of each unit.

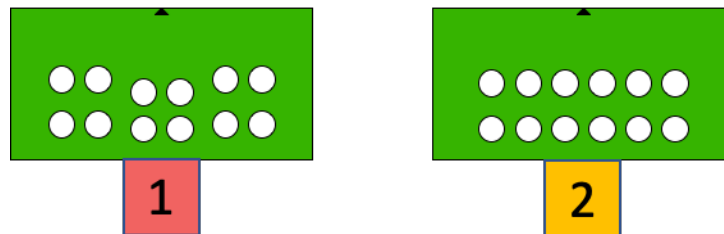


Figure 4: Resolve markers

Optional Rule: Unit Quality

Historical units ranged from inexperienced recruits to hardened veterans. In the game unit quality is defined as one of rabble, inferior, ordinary, or superior. Ordinary is the default. Superior, inferior and rabble units differ in resolve, ability to conduct changes of direction, and points cost.

Points are introduced to allow greater balance between opposing armies even when the component units differ in number and quality. An army is made up of 45 to 90 points corresponding to the 15 to 30 units of the basic rules.

Superior: Superior units were viewed by both themselves and their contemporaries as significantly better quality than others of their troop type e.g. veteran Spanish tercios, veteran German Cuirassiers, and the Swedish Yellow brigade. Being superior is about attitude not equipment however some superior units would also have had better quality arms and armour than their counterparts. In game terms:

- Increase the resolve of superior units by one.
- Superior units can make two turns, wheels, and/or about faces in a turn, one at the start of their move and one at the end of their movement (only in a Move step; not in a Charge step).
- Superior units cost 4 points.

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Ordinary: By default all units are ordinary. Commanders and cannon are always ordinary. In game terms:

- Normal rules apply for resolve and change of direction.
- Ordinary units cost 3 points.

Inferior: Inferior units are poorly trained troops and/or those affected by adverse campaign conditions. In game terms:

- Deduct one from the resolve of inferior units.
- Inferior units cannot use oblique, sideways, or backwards movement; wheels are normal, other changes of direction (turn, about face) replace the entire movement.
- Inferior units cost 2 points.

Rabble: Rabble units are, well, rabble i.e. peasants with improvised weapons, and the most raw of recruits regardless of weapon type. In game terms:

- The normal rabble rules apply so they only have 1 resolve and changes of direction are restricted to wheel.
- They cost 1 point.

For example, ordinary pike+shot have a resolve of 4, but a veteran pike+shot unit would start with a resolve of 5, and a recently recruited pike+shot unit would start with a resolve of only 3.

With units costing +1 point for superior and -1 for inferior, two inferior units have the same point cost as one superior unit. Army lists allowing 45 points would gain your army 11 superior units (1 spare point), 15 ordinary units, 22 inferior units (1 spare point), or 45 rabble.

Army Lists

Choose an army size of 15 to 30 units depending on the historical context. Unless playing a scenario both sides get the same number of units. Within that number an army:

- **Must** have one commander for each command in the army (wing or battle)
- **Can** have up to four cannons
- **Can** have up to two dragoons
- **Can** have up to two shot
- **Can** have up to two rabble
- **Can** have up to two light horse (Only Spanish outside the peninsular and German Catholic armies)
- **Must** have pike+shot and horse to fill up the numbers, in any proportion that is historically appropriate
- **Can** have up to four Superior units, if using the Optional Rule: Unit Quality.

Commands

Armies are divided into commands. Each command must include a commander. Commands contains 3 to 8 units including the compulsory commander.

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Example cavalry heavy army

Armies of the period varied enormously but a cavalry heavy army might have contained 9,000 infantry, 9,000 cavalry, and 24 guns. Under these rules, assuming 1,500 men to an infantry unit, 750 for cavalry, and 12 guns for cannons, this historical army might turn into a game army with the order of battle given in Figure 5: Example Armies (a). This is a conventional order of battle with the foot in the centre and cavalry and cannon on the flanks. The Right Wing is bigger only because I decided to weight the attack on that flank. Although a small reserve is held back, the wings and centre would all be likely to deploy in two rows with infantry units in a chequer board formation and cavalry units one behind the other.

(a) Cavalry heavy army of 25 units	(b) Infantry heavy army of 25 units
Right wing 1 x Commander 6 x Horse 1 x Cannons Centre 1 x Commander 5 x Pike+shot Left wing 1 x Commander 4 x Horse 1 x Cannons Reserve 1 x Commander 2 x Horse 1 x Pike+shot	Right wing 1 x Commander 4 x Horse 1 x Cannons Centre 1 x Commander 6 x Pike+shot Left wing 1 x Commander 2 x Horse 1 x Shot 1 x Dragoons 1 x Cannons Reserve 1 x Commander 5 x Pike+shot

Figure 5: Example Armies

The other example army, Figure 5: Example Armies (b), is an infantry heavy army. Such an army might have contained 12,500 infantry, 4,00 cavalry, and 16 guns. For this army I used 1,000 men to an infantry unit, 500 men to mounted unit, and 8 guns for cannons. The pike+shot have to deploy in the centre zone of the table, so I've put all in the centre and reserve commands. I've put a shot unit (commanded shot) and the dragoons (who are mounted infantry) in the left wing to compensate for the lack of cavalry.

Markers

You will need a bunch of markers to aid game play.

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Resolve Markers: I use resolve markers to indicate the current resolve of each unit. My resolve markers are 1cm x 1cm counters, double side with a "1" on one side and a "2" on the other. Markers tend to be less fiddly than the main alternative of tiny dice.

Shooting Markers: I use a line of cotton wool for shooting markers. These help me remember which units have shot during a turn. Units can only shoot once per turn and if they shoot they cannot charge.

Charge Declaration Markers: I use arrows to indicate charge declarations. They get removed once the charge happens.

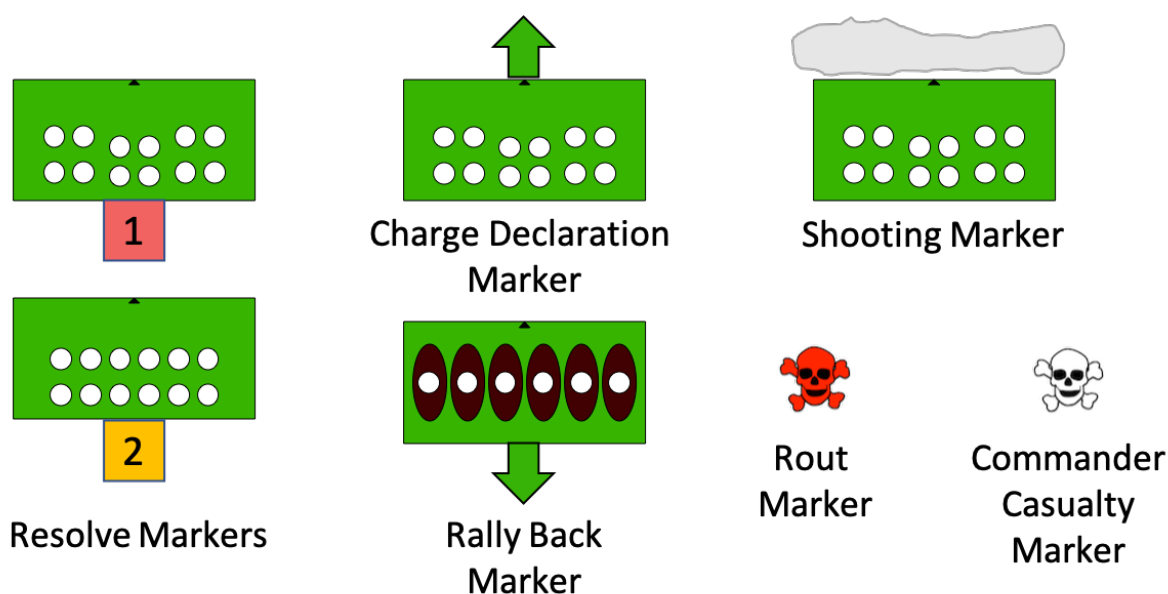


Figure 6: Markers

Rally Back Markers: I use the same arrows to help me remember which cavalry units must rally back. I remove the marker once the rally back happens.

Rout Markers: I use little red skulls for rout markers. They go down when a unit routs and are removed when an enemy unit has benefited from heroics in Phase 4. Morale.

Commander Casualty Markers: I use little white skulls for commander casualty markers. They go down when a commander becomes a casualty from melee or shooting. I remove them when surviving units in the command lose resolve in Phase 4. Morale.

Game set up

This section describes how to determine the attacker/defender, how big a table you need, the terrain to put on table, and deployment.

Size of game

A small game will have about 10-18 units a side on a small table. A big game will have about 19-36 units a side on a big table.

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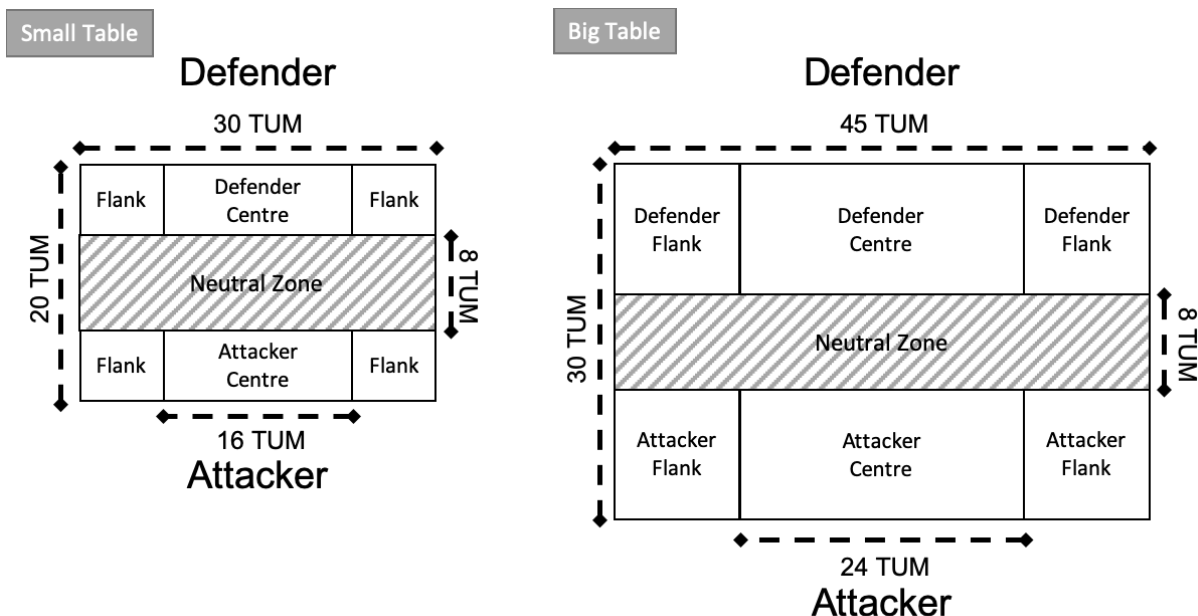


Figure 7: Table size and deployment zones

The wargaming table

For a small game the suggested wargaming table is about 30 TUM by 20 TUM although you should feel free to tweak the table size to something convenient for you. Some common examples:

Table 2: Small Wargaming Table

TUM	Base Width	Official Table Size (30 TUM x 20 TUM)	More Convenient Table Size
20mm	40mm	60cm x 40cm (2' x 1' 4")	60cm x 60cm (2' x 2')
30mm	60mm	90cm x 60cm (3' x 2')	90cm x 60cm (3' x 2')
40mm	80mm	120cm x 80cm (4' x 2' 8")	120cm x 90cm (4' x 3')
50mm	100mm	150cm x 100cm (5' x 3' 4")	150cm x 120cm (5' x 4')
60mm	120mm	180cm x 120cm (6' x 4')	180cm x 120cm (6' x 4')

For a big game the suggested table size is 45 TUM by 30 TUM. Again, these are just suggestions.

Table 3: Big Wargaming Table

TUM	Base Width	Official Table Size (45 TUM x 30 TUM)	More Convenient Table Size
20mm	40mm	90cm x 60cm (3' x 2')	90cm x 60cm (3' x 2')
30mm	60mm	135cm x 90cm (4' 6" x 3')	150cm x 90cm (5' x 3')
40mm	80mm	180cm x 120cm (6' x 4')	180cm x 120cm (6' x 4')
50mm	100mm	225cm x 150cm (7' 6" x 5')	240cm x 150cm (8' x 5')
60mm	120mm	270cm x 180cm (9' x 6')	270cm x 180cm (9' x 6')

For a small game the centre zone is 16 TUM and for a large table the centre zone is 24 TUM. The flank zones are whatever space remains outside the centre zone. Regardless of the size of the table, the depth of the central neutral zone is fixed at 8 TUM.

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Initiative

Each player rolls a die. The highest scorer wins initiative and becomes the attacker in the sequence of play. Re-roll ties.

Terrain

The defender places 1-2 terrain features on the small table and 1-4 features on a big table. You can have at most one road, one village, and one river/stream, You can have at most three rough ground, three hills, and three woods.

Villages, rough ground, hills, and woods are at most 12 TUM long and at most 8 TUM wide. For example, with my 80mm wide bases TUM is 40mm so area terrain features must fit within an rectangle 480mm long and 320mm wide, of course they can be much smaller than that.

Roads and rivers/streams are about 1 TUM wide and must stretch, more or less straight, from one table edge to that opposite, and can cross area terrain features.

Villages, rough ground, woods, rivers/streams are always difficult terrain. Hills can be either gentle or difficult. Difficult hills have rough ground or woods on top, or steep sides. Difficult terrain restricts movement to 3 TUM for all troops and limits the melee ability of horse and light horse.

Field fortifications, usually a bank and ditch, are allowed if the historical scenario allows. Fortifications give the garrison a combat advantage.

Open terrain includes all areas of the table without difficult terrain. Gentle hills are, for example, open terrain. Roads make no difference to the classification of open or difficult terrain, it depends on what is underneath the road.

Deployment

Deployment is by commands and then cannons. The deployment sequence is:

1. Deploy a command at a time, alternating sides, starting with defender; exclude cannons from this step and leave the deployment of all cannons to the end.
2. After all other troops are on table, deploy the cannons one at a time, alternating sides, starting with the attacker.

Each side can deploy anywhere from their base edge to a line 4 TUM from the centre of the table. That means there is a 8 TUM wide neutral zone across the table, where neither side can deploy.

All pike+shot units must deploy in the friendly centre zone. The centre zone is 16 TUM on a small table and 24 TUM on a big table.

Other units can deploy anywhere in the friendly deployment zone, whether the centre, either of the flank zones, or a combination.

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Sequence of Play

The sequence of play for a turn has the following steps:

- Phase 1. Attacker
 - Step 1.1. Attacker Move
 - Step 1.2. Defender Shoot
- Phase 2. Defender
 - Step 2.1. Defender Move
 - Step 2.2. Attacker Shoot
- Phase 3. Close Combat
 - Step 3.1. Declare Charge
 - Step 3.2. Charge
 - Step 3.3. Point Blank Shooting
 - Step 3.4. Melee
 - Step 3.5 Rally Back
- Phase 4. Morale
 - Step 4.1. Command Morale
 - Step 4.2. Unit Rally
 - Step 4.3. Unit Heroics
 - Step 4.4. Army Morale



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Phase 1. Attacker

The Attacker Phase has only two steps: Attacker Move; Defender Shoot. All the movement and shooting rules are covered in rules for this phase, although they also apply to other phases and steps. Phase 2. Defender is identical to the Attacker Phase but with the roles reversed.

Step 1.1. Attacker Move

This section covers the general move rules. These general rules also apply to charging, however, a charge has specific constraints described in Phase 3. Close combat.

Being "in command"

Units must be "in command" to move. There are three ways to be in command, so a unit can move if the unit:

- Is a commander
- Is within 8 TUM of the commander for that command (the commander cannot, of course, be a casualty, and other commanders do not count)
- Makes a command check (necessary when the commander is a casualty or distant)

Command check

If you want a unit to move, but the commander is far away or a casualty, you have to make a command check. If a unit wishes to charge in that phase it must check command again (see Step 3.1. Declare Charge). Similarly a unit must check command again to rally back (see Step 3.5 Rally back).

To make a command check roll 1d6 for each point of the current resolve. Every 6 rolled is a hit. Scoring any hit means the unit can make a move. No hits means the unit is out of command and cannot move this step.

Movement allowance

Units have a maximum movement allowance that they cannot exceed during the current step in the sequence of play. All charge moves are at most 3 TUM. If any part of a move is in difficult terrain the movement allowance drops to 3 TUM. Non-charge moves in open terrain are up to: 8 TUM for commanders and light horse; 6 TUM for horse and dragoons; 3 TUM for pike+shot, shot and rabble; 0 TUM for cannons as they cannot move.

Movement = change of direction then straight

For horse, light horse, pike+shot, shot, rabble, dragoons movement is:

1. change of direction to start
2. followed by an straight line move

Both the change of direction and straight line move are optional. So a unit could do a change of direction and then stop, or do a straight line move with no prior change of direction.

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Change of direction

The only change of direction possible for rabble is a wheel. Other, non-commander, units have a number of changes of direction available to them, but can do one, and only one, of these in a move:

- **Wheel:** At the start of their move units can wheel up to 45°. Measure the straight line distance covered by the outside corner and deduct this from subsequent movement allowance.
- **About face:** At the start of their move units can about face (180°) to end facing in the opposite direction. No movement penalty.
- **Oblique:** Units can advance on an oblique angle, up to 45°. The unit remains facing in the original direction but advances on a diagonal path. No movement penalty.
- **Turn:** Replacing their entire movement the unit can turn 90° to end facing sideways.
- **Sideways:** Replacing their entire movement the unit can shift directly sideways by 1 TUM, either left or right.
- **Backwards:** Replacing their entire movement the unit can move directly backwards. The unit must move at least 1 TUM and at most 3 TUM. The unit's facing is unchanged.

The diagram illustrates the various changes of direction:

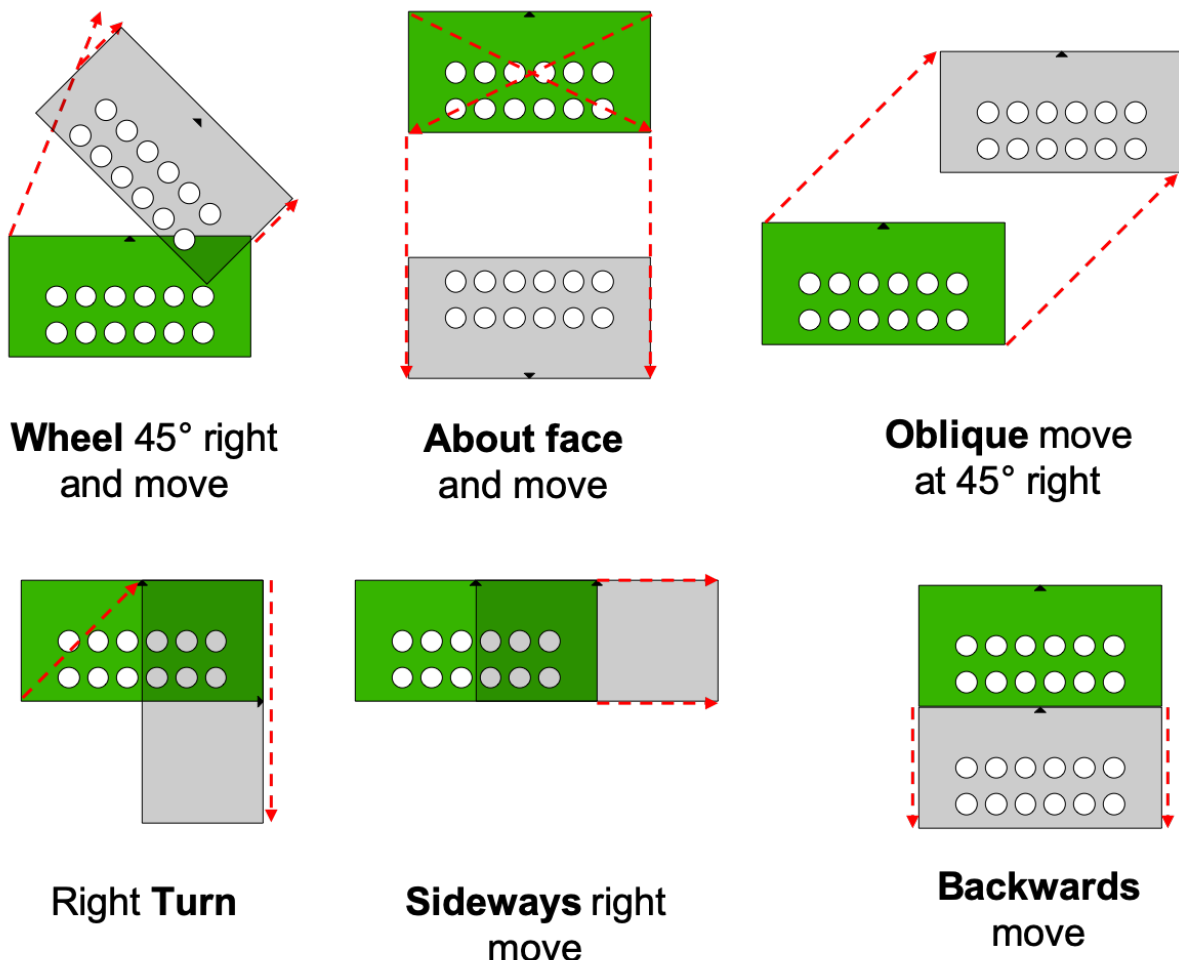


Figure 8: Changes of direction

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A wheel is the only possible change of direction when charging.

Cannons movement

Cannons cannot move but can pivot on their centre point to get a new arc of fire. Cannons cannot both pivot and shoot in the same turn. So put a shooting marker (cotton wool) next to a cannon that pivots.

Commander movement

Commanders can move in any direction and make any changes of direction they want during their move as long as the total movement path is within their movement allowance.

If unattached commanders are in the way of enemy unit's move, then just move the commander out of the way.

Enemy buffer zone

When a unit conducts non-charging movement it may not enter an invisible buffer zone around non-commander enemy units. A charging unit ignores the buffer zone of enemy units.

For a unit that is 1 TUM or more from non-commander enemy units at the start of non-charging movement, the buffer is 1 TUM. The unit cannot go closer than 1 TUM of any non-commander enemy unit.

For a unit that is already within 1 TUM of any non-commander enemy at the start of non-charging movement, the buffer is the distance to the closest non-commander enemy unit before the unit moves. At the end of movement no enemy unit can be closer than the previously measured buffer.

In all cases measure at the closest two points between units.

Zones of Control (ZOC)

Every non-commander unit has a zone of control (ZOC) that prevents enemy units moving across its front. The ZOC is 3 TUM directly in front of the unit. Units inside an enemy ZOC have limited choice of movement, they must do one of the following:

- remain stationary
- move closer to the enemy unit (possibly by charging)
- move directly away from the enemy unit

If a unit is in two enemy ZOCs the unit responds to the ZOC from the closest enemy unit.

Interpenetration

Units cannot interpenetrate enemy. Friendly interpenetration is only possible for certain types of units – see Table 4. Allowable interpenetrations are defined by the moving unit, the type of move, and the interpenetrated unit.

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Table 4: Allowable interpenetration

Moving unit	Type of move	Interpenetrated unit
Horse or light horse	Straight forward or backwards	Horse or light horse
Horse, light horse, or dragoons	Straight forward or backwards	Shot
Shot	Straight forward or backwards	Horse, light horse, or dragoons
Any	Any	Cannons
Any	Any	Commander
Commander	Any	Any

There are no restrictions on interpenetrations by or of commanders and cannons. Other interpenetrations, those involving horse, light horse, dragoons, and shot, have additional restrictions:

- The units must be facing exactly the same direction or that opposite
- The units must line up so the sides of the two units are aligned
- The moving unit must fully clear the far side on the unit being interpenetrated
- The move must be straight forward or backwards as specified above

A backwards move is a change of direction that replaces the whole move. A straight forward move can be preceded by a wheel, about face or turn but the interpenetration must occur during the straight forward part of the move.

Step 1.2. Defender Shoot

This section covers the general shoot rules. All of the general shoot rules apply to the Defender Shoot step and Attacker Shoot step. Point Blank Shooting has specific constraints described in a later section.

Shooting marker

At the start of a turn (turn, not phase or step), remove all shooting markers (cotton wool) from both Attacker and Defenders. This is so we can track which unit shoots.

Cannons, horse, light horse, dragoons, shot, and pike+shot can shoot once per turn. Place a shooting marker (e.g. cotton wool) near any unit that shoots. Shooting markers are to remind you that these units have shot and hence cannot shoot again or charge.

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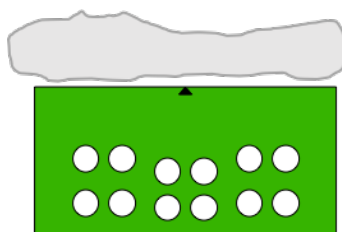


Figure 9: Shooting marker

Shooting criteria

Even if a unit has the general ability to shoot it cannot shoot at a particular moment if any of these conditions apply:

- The target is out of range
- The target is out of arc
- The shooter is in contact / melee with any enemy
- The target is on the far side of blocking terrain (village, wood, crest of a hill).
- The target is on the far side of friends or enemy
- The target is beyond a narrow gap (less than 2 TUM) between friendly units and/or blocking terrain

Shooting order

Shooting happens target unit by target unit. Within a shooting step, all shooting at a particular target unit must happen at the same time. The shooting player decides which target unit to shoot at next.

Shooting range

Cannons have unlimited range. Horse and light horse have a shooting range of 2 TUM. Shot, pike+shot and dragoons can shoot 4 TUM. Range is measured from any part of the unit.

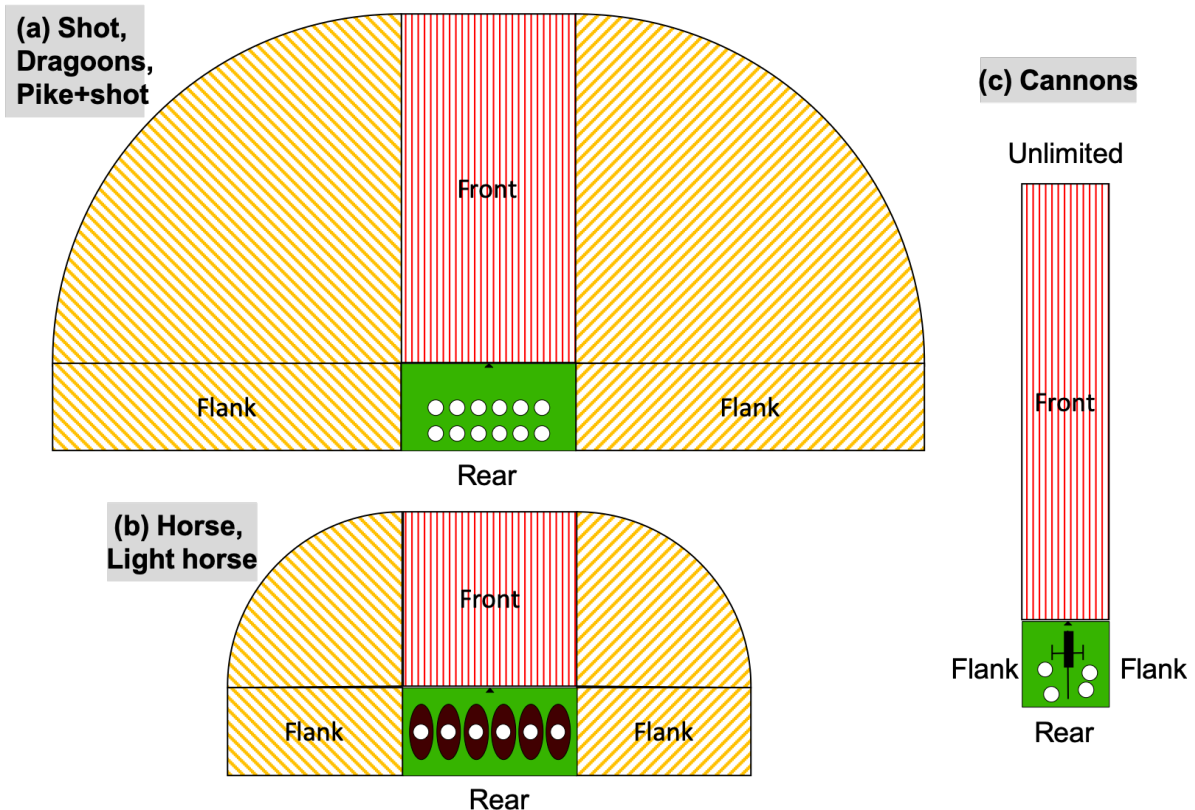
Cannons pivot or shoot

Cannons cannot both pivot and shoot in the same turn. If they pivoted this turn, then they cannot shoot - they should have a shooting marker (cotton wool) next to a cannon to prevent shooting.

Shooting arcs

Units shoot at maximum effect at enemy targets to their front. Cannons can only shoot to their front. Other units can shoot at a target to the flank but flank fire is restricted to 1 resolve. Units may not fire to the rear at all.

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Shoot front before flank

If a unit has enemy within range to front, then it must shoot straight ahead. However, if there are any friendly units in range to front, the unit cannot shoot to front.

If the unit has no enemy in range to front, or is prevented from shooting to front because of friends, then it can shoot at enemy to flank. However, a unit cannot shoot to either the left/right flank if there are friendly units on that flank.

If there is more than one possible target, shoot at the closest.

Shooting dice

Each unit shooting at a target enemy units gets a number of shooting dice. The primary shooting unit has the most shooting dice (current resolve). Shooting as a secondary unit and/or to the flank reduces the shooting dice to one. Shooting at infantry in difficult terrain or fortifications reduces the shooting dice further.

Shooting dice:

- Unit's resolve if the primary shooting unit shooting at enemy to front
- 1d6 if primary shooting unit shooting at enemy to flank
- 1d6 a secondary shooting unit
- -1d6 modifier when shooting at dragoons, pike+shot, or shot in difficult terrain or fortifications

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Roll 1D6 for each shooting dice of the unit. When shooting all units hit on a 6. Weaken the enemy resolve by 1 for each hit. If the target's resolve reaches zero, the unit routs; place a rout marker and remove the unit from the table.

Primary and secondary shooting units

If there are more than one friendly unit shooting at a particular enemy unit, the player must choose the primary unit. All other units are secondary. The primary unit fires with full resolve. Secondary units fire with only 1 resolve. Use different colour dice for each unit because only those that hit can benefit from unit heroics.

Infantry defending difficult terrain

Infantry have an advantage when defending difficult terrain. Units, regardless of their type, roll one less die when shooting at dragoons, pike+shot, or shot in difficult terrain or fortifications. For example, a horse unit with 3 resolve would throw 2d6 rather than 3d6 when shooting at dragoons in a field.

Commanders and shooting

Commanders neither shoot nor can be shot at. If attached to a unit that takes hits during shooting a commander can become a casualty (see Commander casualties).

Commander casualties

A commander attached to a unit that takes hits, from either shooting or melee, can become a casualty. Roll 1d6 and depending on the score the commander is a casualty and removed from the table. The score needed to become casualty depends on whether the attached unit was routed or not:

- 5-6 if the attached unit took hits and routed
- 6 if the attached unit took hits but did not rout

This is the only way that a commander can be eliminated.

I use commander casualty markers to record when a commander has become a casualty. This is so I remember to apply the morale effects on the command in Phase 4. Morale.

Shooting example

In Figure 10 the French and their Weimarian allies have just moved, and the Spanish-Imperial units can shoot in response. The dotted line illustrate musketry range. The Spanish-Imperial player can choose which enemy units to target and in which order.

Shooting at the French pike+shot: Although in front of the Imperialist pike+shot, the French pike+shot are not a valid target for that unit because the Spanish pike+shot are also in front of the Imperialists and block their fire. The Spanish pike+shot could shoot at the French pike+shot but instead chooses to shoot at its neighbour, the French horse.

Shooting at the French horse: Both the Spanish shot (resolve 3) and Spanish pike+shot (resolve 4) shoot at the French horse. The player chooses the pike+shot unit as the primary shooter because it has a higher resolve. As primary shooter the Spanish pike+shot throw

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4d6 (one die per resolve) and the Spanish shot rolls just 1d6 (secondary shooters always through one dice). The player rolls all dice at the same time but uses red for the pike+shot and white for the shot to track which unit has a chance of unit heroics. All shooting requires a six to hit. The red dice come up 1, 2, 6, and 6 so get two hits. The white dice come up with a 6 so get one hit. That makes three hits in total, which is rout because the French horse only has three resolve; place a rout marker (red skull). Both Spanish units inflicted a hit on the routing unit so, later in the turn, the player will have to choose which will benefit from unit heroics.

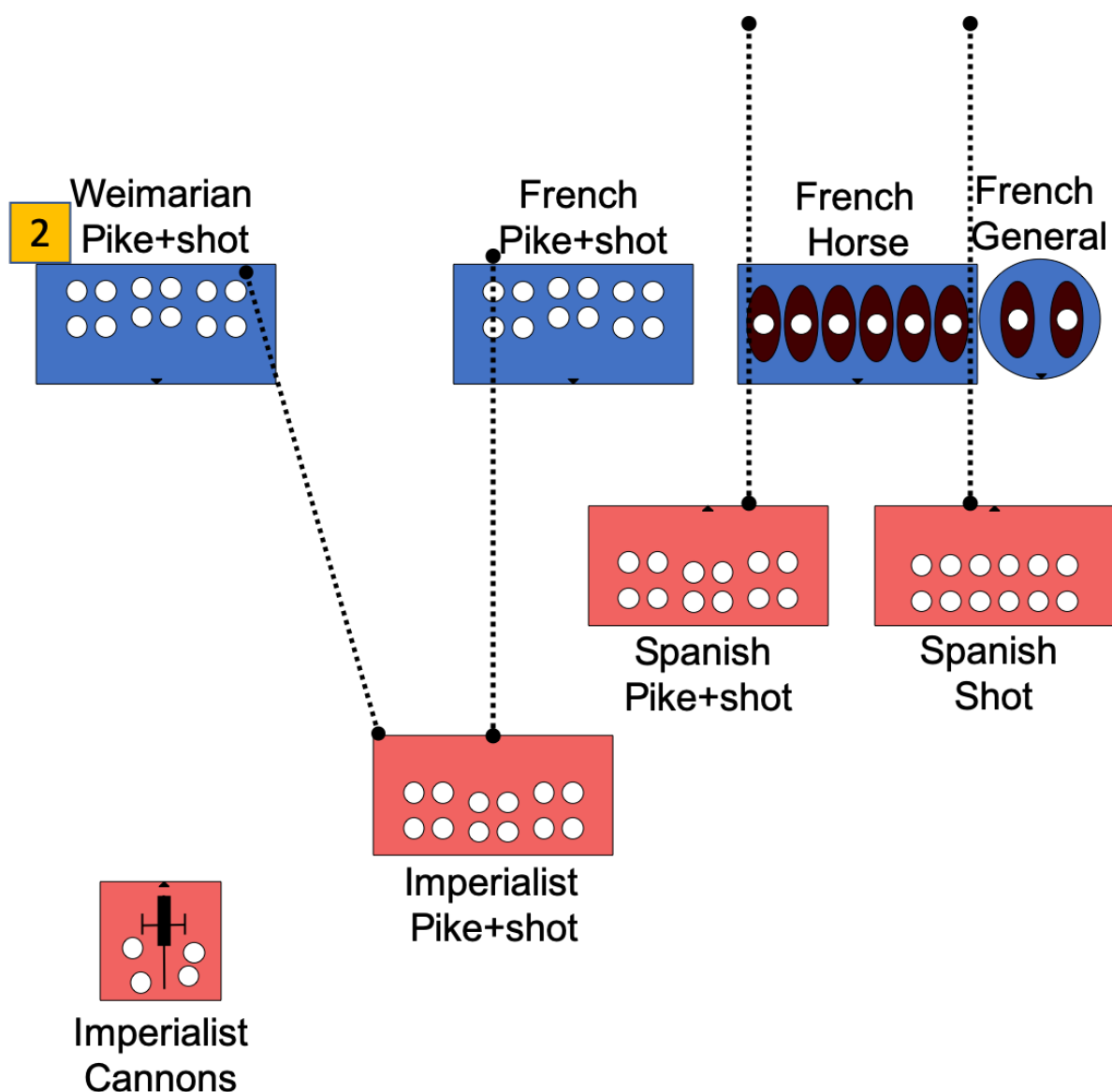


Figure 10: Shooting example

Shooting at the French general: Commanders cannot be shot at directly. So the French general can only be affected by shooting at the unit they are attached to, in this case the French horse. That unit took hits and the French general may become a commander casualty. This normally requires a roll of 6 on 1d6 but as the unit routed it is a 5-6. The Spanish player rolls and gets 5 so the general is a casualty and a commander casualty marker is placed (white skull).

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Shooting at the Weimarian pike+shot: The Weirmarians are in front of the Imperial cannons so are a valid target. The player chooses the cannons as the primary shooter, and this units rolls 2d6 (one per resolve) The Imperialist pike+shot shot can also shoot at the Weimarians, but they are shooting to the flank and are the secondary shooter; either condition reduces their shooting to one dice. The cannons score a 1 and 2, so no hits. The pike+shot score a 6, so get one hit. The Weimarians were already at resolve of 2 and after losing resolve go to a 1. Replace (or flip) the "2" resolve marker, with a "1" resolve marker.

After shooting all of the Spanish and Imperial units receive a shooting marker to indicate they have used their shooting for the turn.

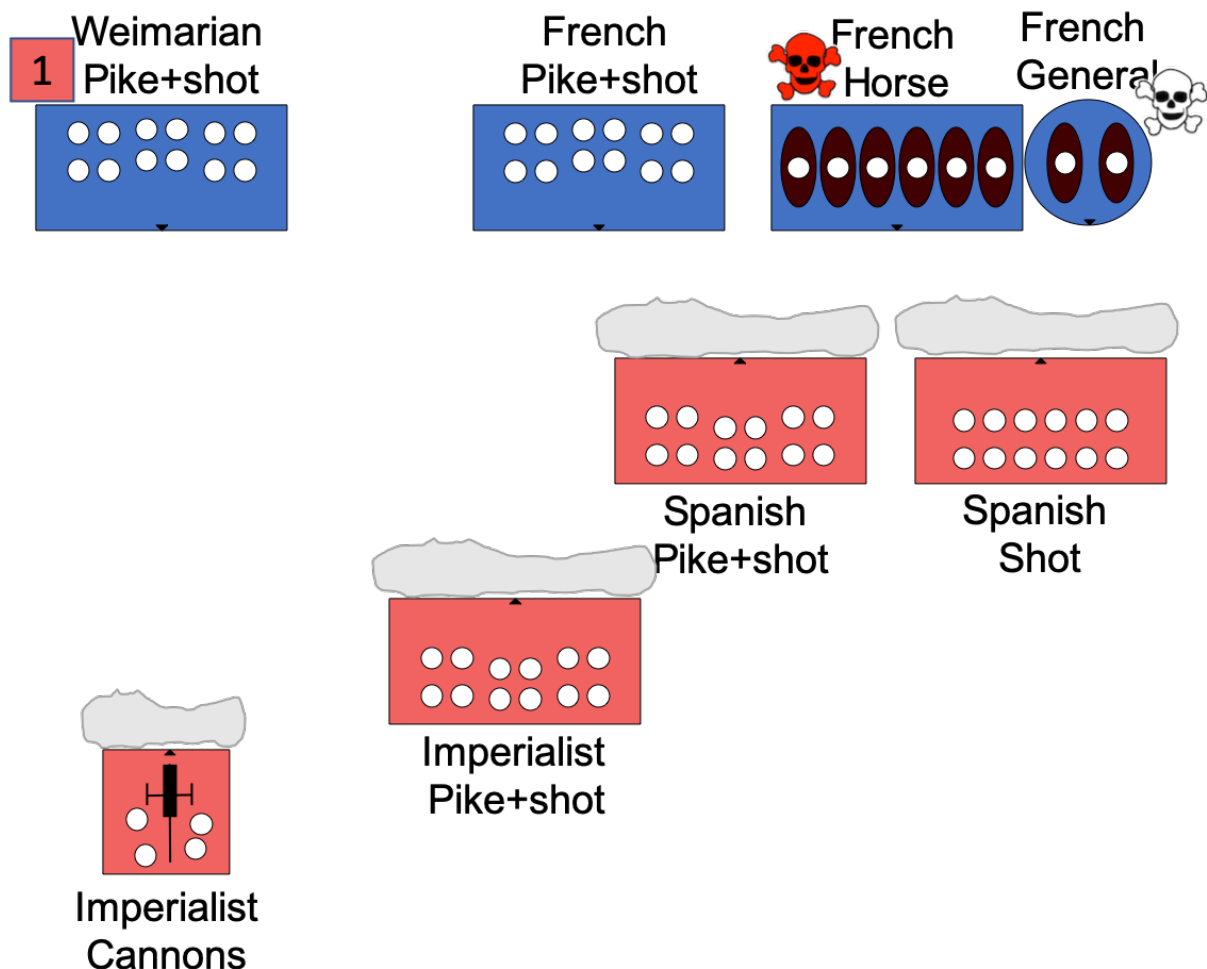


Figure 11: Shooting example - results

Phase 2. Defender

The Defender Phase is exactly the same as the Attacker Phase except the roles are reversed. It includes:

- Step 2.1. Defender Move (see Step 1.1. Attacker Move)
- Step 2.2. Attacker Shoot (see Step 1.2. Defender Shoot)

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Phase 3. Close combat

The Close Combat Phase includes charging and the resulting melee. It also includes rally back by cavalry.

Step 3.1. Declare Charge

You have to declare charges before any charges actually happen. Declaring a charge can be verbal but I place charge markers (shaped as arrows) next to every unit the player would like to make charge. All of these declared charges must be legal, but not all of them will happen.

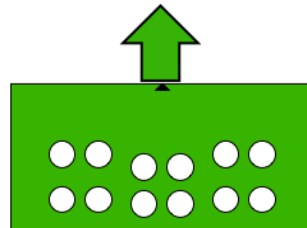


Figure 12: Charge declaration marker

Charging criteria

A unit, other than commanders, may only declare a charge if the unit:

- did not shoot this turn
- is not locked in melee
- can contact an enemy unit by charging

A charge is a move into physical contact with an enemy unit. Units can charge even if they have moved earlier in the turn. All the normal movement rules apply to charges with some additional constraints. All charge movement allowance is 3 TUM, regardless of troop type. Mutually charging units meet half way. The only allowable change of direction within a charge is a wheel at the start of the move.

Charge front before flank

If a unit, other than commanders, has enemy within charge reach to front, then it must charge straight ahead, with no change of direction. If the unit has no enemy in reach to front, then it can wheel to charge an enemy to flank. If a unit charges to flank it must do so with the minimum possible move (wheel and straight) to reach the target.

Commander charges

Like other chargers, commanders can make an optional wheel at the start of the charge but other changes of direction are not allowed. Commanders may charge with a unit they are attached to already, or charge to attach to a unit that is charging, or charge to attach to a unit that is locked in melee from a previous turn.

Step 3.2. Charge

The charge step is where the charges actually happen. Depending on circumstances some charges will be cancelled.

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Cancel charges

Certain charge declarations cancel out enemy charge declarations:

1. Any charges on a flank or rear of a unit cancel charge declarations by that target unit
2. Cavalry (horse, light horse) charges cancel charge declarations by target infantry (pike+shot, shot, rabble, dragoons)

If you are using charge declaration markers, then remove the marker for cancelled charges.

Conduct charges

Move the charging units in this order:

1. Attacker cavalry (horse, light horse)
2. Defender cavalry (horse, light horse)
3. Attacker infantry (dragoons, pike+shot, shot, rabble)
4. Defender infantry (dragoons, pike+shot, shot, rabble)
5. Attacker commanders
6. Defender commanders

If you are using charge declaration markers, then remove the marker for charges as they happen.

Charge examples

Figure 13 has four examples of charge declarations, the resulting charges, and, in one instance, point blank shooting. The French-Weimarian Alliance are the attacker and the Imperialist-Spanish alliance are the defender.

Example (A) the Imperialist horse and Weimarian horse declare charges on each other. Both charges happen, with the Weimarians as the attacker moving first, and the two units meet half way.

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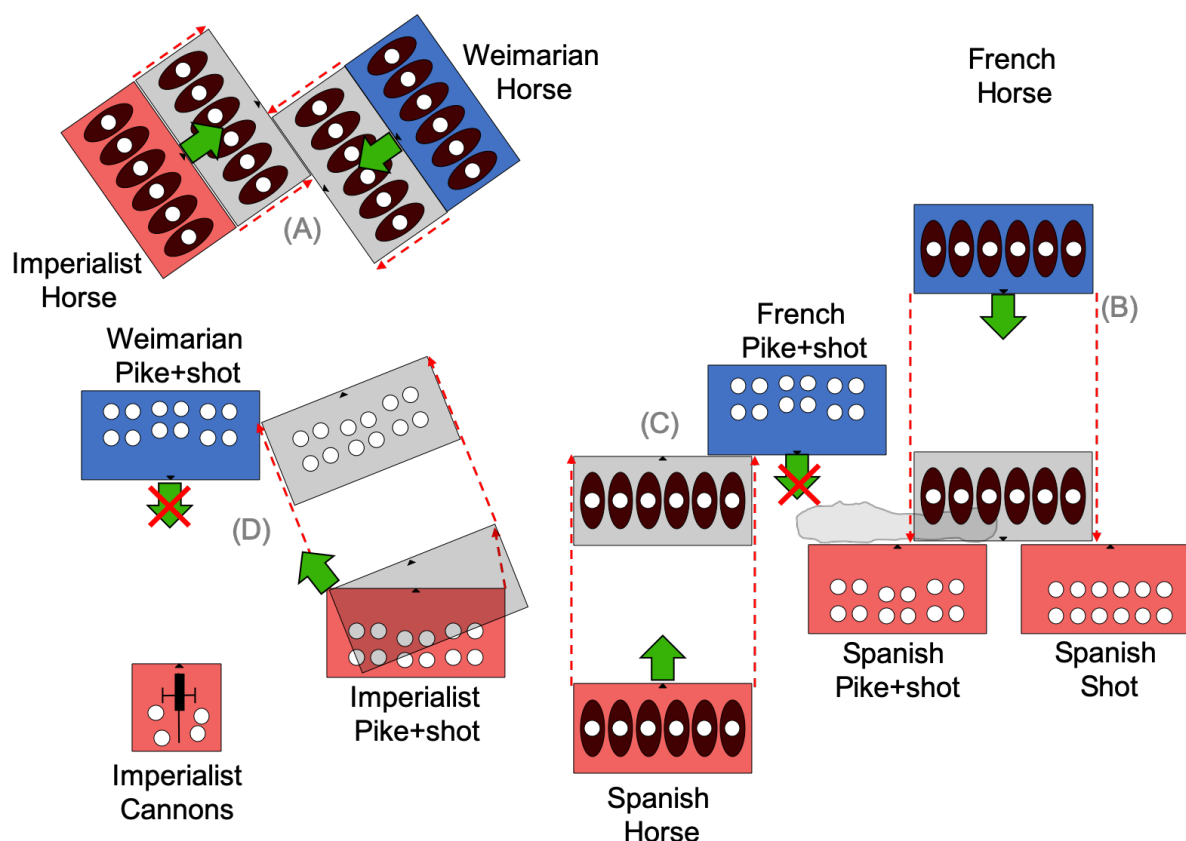


Figure 13: Charge examples

Example (B) the French horse declare a charge on the two Spanish infantry units (pike+shot and shot). The Spanish player did not bother declaring a charge as any infantry charge would be pre-empted by a cavalry charge. The Spanish pike+shot unit has already fired so cannot conduct point blank shooting. However, the Spanish shot unit had reserved its fire and so has the opportunity for point blank shooting as the charge contacts.

In example (C), the French pike+shot unit declares a charge on the Spanish pike+shot unit. However, the Spanish horse unit also declared a charge on the French pike+shot unit. The Spanish cavalry charge pre-empt the French infantry unit's charge, and the French charge declaration is cancelled.

In example (D), the Weimarian pike+shot declares a charge on the Imperialist cannons. They cannot declare a charge on the nearby Imperialist pike+shot because the cannons are to front. However, the Imperialist infantry have no enemy to front, so can wheel to flank, hence declare a charge on the Weimarians. This cancels the Weimarian charge and saves the guns.

Step 3.3. Point Blank Shooting

A unit can sometimes shoot at an enemy unit charging it. A unit can conduct point blank fire if the:

- Unit did not charge this turn
- Unit is the target of a charge
- Unit is a type that can shoot
- Unit has not yet shot this turn

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- Charger is in arc of fire

Otherwise the normal shooting rules apply.

A unit that had its own charge cancelled can, if it meets the criteria above, conduct point blank shooting.

In the example in Figure 14 the Spanish pike+shot unit has already shot at the French pike+shot unit. The Spanish shot unit has reserved its fire because of the French horse lurking nearby. Sure enough, in the Charge step, the French horse charge straight ahead at both Spanish units. The Spanish pike+shot has already shot and may not fire at the charging horse. However, the shot unit can and will shoot at the charging French horse at point blank range.

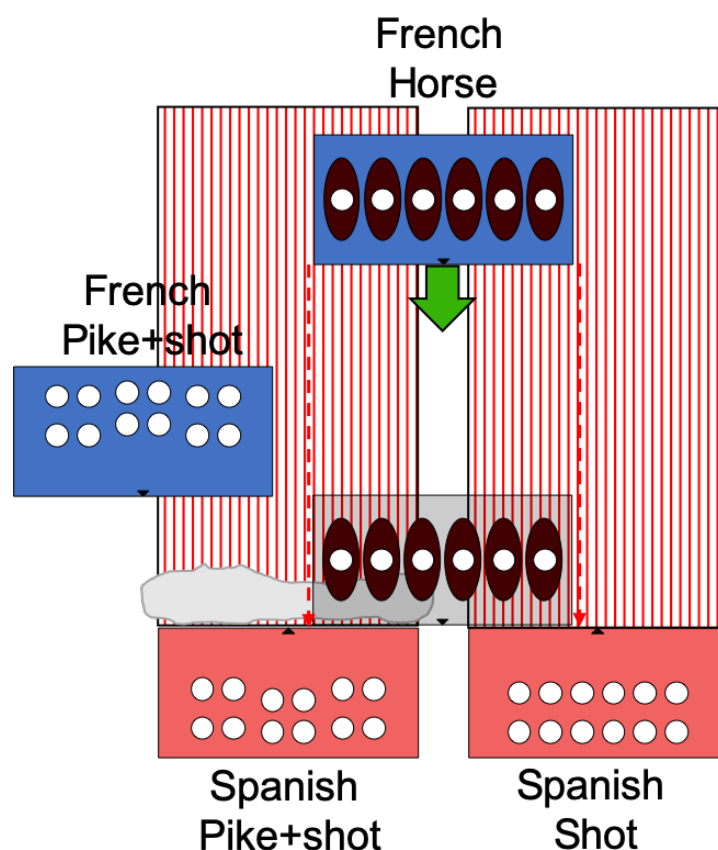


Figure 14: Example point blank shooting

Optional Rule: Evade

Instead of shooting at chargers at point blank range, dragoons, shot, and light horse can evade. An evade is only possible if all of these conditions apply:

- the unit was eligible to shoot at point blank range (and chooses not to)
- the evade move gets the unit out of contact with all enemy
- the unit is in appropriate terrain for the unit type

Light horse can only evade if they start in open terrain. Dragoons and shot can only evade if they start in difficult terrain.

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An evade move is a compulsory rally back (see Step 3.5 Rally back). Place a rally back marker next to the unit to remind you to do the move in the appropriate step.

Despite being in contact, the two units do not fight. The charger remains in place after the evade.

Step 3.4. Melee

Enemy units that in base to base contact are in melee. This can be as a result of a charge this turn or due to being locked in melee. All units in contact participate in melee.

Choosing which melee to fight

Players alternate choosing a melee to fight, starting with the side that has most units charging this turn.

Melee dice

Each unit in melee with an enemy unit gets a number of melee dice. The primary melee unit has the most melee dice (current resolve). Melee as a secondary unit and/or to the flank reduces the melee dice to one. Shooting at infantry in difficult terrain or fortifications reduces the shooting dice.

Melee dice:

- Unit's resolve if the primary melee unit in melee with enemy to front (none to flank or rear)
- 1d6 if primary melee unit in melee with any enemy to flank (none to rear)
- 1d6 a secondary melee unit in melee to front or flank (none to rear)
- 0d6 if in melee with any enemy in rear
- -1d6 modifier when charge uphill against infantry (dragoons, pike+shot, and shot) or charge infantry in fortifications
- 1d6 if attached commander

Roll 1d6 for each melee dice of the unit. Both sides should roll at the same time. The score to hit depends on the unit. Rabble, shot, dragoons and light horse hit on a roll of 6, pike+shot hit on a roll of 5 or 6, and commanders involved in a melee hit on a roll of 4, 5, or 6. The "to hit" score for horse depends on the context. Horse hit on:

- 6 when in difficult terrain
- 4, 5 or 6 when charging the flank/rear of pike+shot, or charging any other units
- 5 or 6 otherwise (including charging the front of pike+shot)

Weaken the resolve of the target unit by 1 for each hit. If a unit's resolve reaches zero, the unit routs; place a rout marker and remove the unit from the table. If a unit is fighting a melee with more than one enemy unit the player can choose to divide his hits against the enemy units in any way he chooses.

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Fighting to flank or rear

A unit's ability to fight is limited when in melee to its flank or rear. A unit in melee with any enemy on the flank can fight with only one resolve. A unit in melee with any enemy to the rear cannot fight at all.

On the following turns the unit can change facing, if there is space, to increase its strength in melee.

Primary and secondary melee units

If there are more than one friendly unit in melee with a particular enemy unit, the player must choose the primary unit. All other units are secondary. The primary unit melees with full resolve. Secondary units melee with only 1 melee dice. Use different colour dice for each unit because only those that hit can benefit from unit heroics.

Infantry defending uphill or fortifications

Infantry (dragoons, pike+shot, and shot) have an advantage when defending uphill and/or defending fortifications. Units, regardless of their type, roll one less die in melee when charging uphill against infantry or against infantry in fortifications. Use the centre of the units involved to determine which is uphill. For example, a horse unit with 3 resolve would throw 2d6 rather than 3d6 when charging a pike+shot unit defending the crest of a hill. A pike+shot unit with 2 resolve would throw only 1d6 when charging shot unit entrenched behind fortifications.

Commander in melee

A commander cannot initiate melee and cannot be the target of a melee attack. A commander can only participate in melee when attached to another unit. In melee a unit with a commander attached rolls an extra die for the commander and the commander hits on a 4, 5, or 6. Commanders can become casualties (see Commander casualties within Step 1.2. Defender Shoot).

Cannons in melee

Cannons do not fight in melee. If they are contacted by a charge they are eliminated without a fight.

Step 3.5 Rally back

Horse and light horse can rally back. A rally back is a backward movement as described in the Change of direction section.

These criteria govern whether a horse or light horse unit rallies back:

- A unit that drew or won in melee **cannot** rally back
- Units that lost in melee **must** rally back.
- Units that chose to **evade** must rally back
- Otherwise a unit **may** rally back

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A unit lost in melee if it suffered more hits than it inflicted. If it suffered the same number of hits as it inflicted it drew the melee. If it scored more hits than it inflicted then it won the melee.

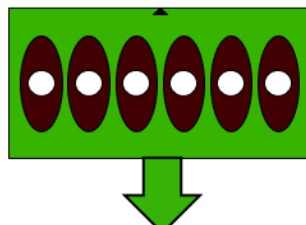


Figure 15: Rally back marker

If you are using rally back markers, place the marker when you choose to rally back a cavalry unit (you can change your mind about this) or a cavalry unit loses in melee (when it must rally back). Remove the marker once the unit has completed the rally back.

Rally back examples

Figure 16 has voluntary and compulsory examples of a rally back. In example (A) the unit French Horse 1 and the Spanish pike+shot shoot at each other. This doesn't go well for the horse and the French player decides to rally back his horse and places a rally back marker to remind himself. The move only happens in Step 3.5 Rally back. French Horse 1 moves backward 3 TUM and interpenetrates the second unit of Horse. Now French Horse 2 will try its luck against the Spanish.

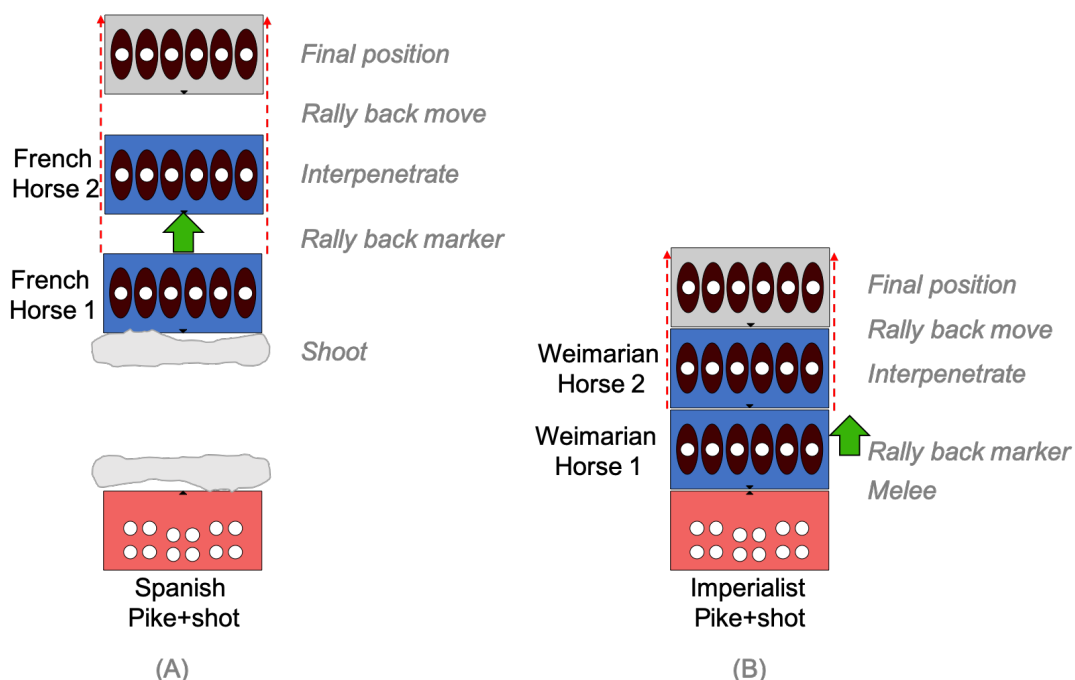


Figure 16: Cavalry rally back examples

In example (B) the unit Weimarian Horse 1 has charged the Imperialist pike+shot unit. In the melee the Weimarians inflicted 1 hit and suffered 2 hits, thus losing the melee. They must rally back. The French player places a rally back marker. In Step 3.5 Rally back the

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Weimarian Horse moves backward through the supporting unit and stops on the far side, only 2 TUM from its original position. This leaves Weimarian Horse 2 ready to charge.

Locked in melee

If opposing units survive a melee and remain in contact, these units remain locked in melee. Units that are locked in melee cannot move or shoot in the next turn, but will fight again in the next melee step. Typically this is infantry and any cavalry that did not rally back.

Phase 4. Morale

Commander casualties impact command morale. But commanders can rally units. And successful units can boost their resolve. The army morale is what wins or loses the game.

Step 4.1. Command Morale

In the turn a commander becomes a casualty, weaken the resolve of all surviving units in the command by 1. If a unit's resolve reaches zero, the unit routs and is removed from the table (enemy units do not benefit from this rout via heroics so don't bother with a rout marker). There is no further effect on the command.



Figure 17: Commander casualty marker

I use commander casualty markers to remind myself to weaken the resolve of the affected command. Place the marker when the commander becomes a casualty and remove it when the command is affected.

Step 4.2. Unit Rally

A commander attached to a unit can strengthen the resolve of that unit by 1 point. You can only recover resolve weakened during the game (melee, shooting), and only up to the original total.

Step 4.3. Unit Heroics

For each enemy unit routed this turn, one friendly unit can strengthen its resolve by 1 point. You can only recover resolve weakened through melee or shooting, and only up to the original total.

There are some rules to select the unit that benefits from heroics. The friendly unit must have scored a hit on the enemy unit this turn. If the enemy unit was routed in melee, the friendly unit chosen must have scored a hit on the enemy in melee. If there is a choice between a unit won in melee against the routed enemy and another that didn't, then you must choose the unit that won in melee.

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Figure 18: Rout marker

I use rout markers to keep track of (1) units that rout and (2) units that have benefited from heroics. Place a rout marker when a unit routs and remove it when a unit benefits from heroics due to the rout.

Only routs lead to heroics. Commander casualties do not lead to heroics.

Step 4.4. Army Morale

At the end of any turn, a side loses the battle if they have lost at least $\frac{1}{3}$ of the original units. Lost units include routed units and commander casualties. The other side is the victor. A draw is possible if both sides lose in the same turn.

For example, a Swedish army has lost 8 units out of an original total of 25 units. The army break point is $\frac{1}{3}$ of 25, i.e. $8\frac{1}{3}$ units. The 8 lost units is less than $\frac{1}{3}$ of the army, so the Swedes have fragile morale but will keep fighting. When the army loses one more unit, taking it to 9 out of 25, the army morale collapses and the Swedes lose.

Optional Rule: Variable Army Morale

If you want a chance for a losing side to fight on then use the variable army morale rule. At the end of each turn the side with the greatest number of lost units rolls 1d6 and adds the number of lost units (unit routed or commander casualty). If the modified score is $\frac{1}{2}$ of the original number units or more that side loses the battle.

For example, a French army had 25 units at the start of the battle. Half of that is $12\frac{1}{2}$ units. In turn 4 their losses had reached 7 units, more than their Spanish opponent. They roll 1d6, scoring 3, and add the 7 lost units, giving a total of 10. This is less than half and the French fight on. In turn 5 the French lose another 3 units routed (making 10 lost in total). They roll again, scoring 4, and add the 10 lost units, making a modified score of 14. This is more than 12.5 so the French army flees the field.

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Further resources

Check out my website, [Steven's Balagan](https://balagan.info), for additional material on wargaming and Tilly's Very Bad Day:

- [Category: Tilly's Very Bad Day](#)
- [Download Tilly's Very Bad Day](#)
- [Big Bases](#)
- [Thirty Years War](#)
- [Eighty Years War](#)
- [English Civil War](#)
- [Pike and shot big bases](#)

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