

Point Costs for Stands in Regimental Fire and Fury

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The following point costs for Regimental Fire and Fury stands were developed using a statistical method called Expected Value. It is the sum of the probability that a particular result will occur times the value of the result. In this analysis the value of a result is the number of stands lost and disorder results on the Musketry & Cannonade Table and Charge Table, and the speed of a unit from the Maneuver Table.

Analysis

The purpose of the analysis was to determine a value for the offensive capability of a stand. The effects of terrain were ignored to simplify the calculations. In all cases a unit in line moving over or fighting in open ground was used as the norm (think of a battle fought on the Bonneville Salt Flats). Table 1 contains the final values for each attribute for which a value was computed, as well as which game tables were used to compute that value. The values in Table 1 were developed by applying the Die Roll Modifiers (DRM) associated with each attribute in isolation and computing its value based on the probability of occurrence of each result. The values were summed over each table on which the attribute has an effect, the values were then normalized to the smallest value computed (Cold Steel) and rounded to the nearest whole number. Table 2 contains the values assigned to each game result. An explanation of the analysis used on each game table follows.

Maneuver Table: The values for the results from this table were normalized to an Infantry unit in line moving over open ground (which has a value of one). The probabilities of a result were taken from the Out of Command column for combat units (Infantry, Cavalry, etc.). Artillery is assumed to be limbered for the purposes of the table. The effect on a unit of being In Command was also computed for both the Immediate Commander and a Higher Ranking Leader, the value for the Higher Ranking Leader includes the effect of attaching him to the Immediate Commander of a unit. The effect of attaching a leader to a unit and the leader's movement were ignored for this analysis. Since the movement values are unit type specific (see Table 2), the values were averaged over unit types to obtain a single value. For Brave Colonel, the value averaged was the difference between a unit with a Brave Colonel and a unit without a Brave Colonel.

Musketry & Cannonade Table: The values for this table were computed using a unit of six (6) stands firing at an Infantry unit in line in the open. A value was computed for each weapon at each range band and the result multiplied by the size of the range band. The values for each range band were then summed and divided by six (6) to determine the value for a single stand using this weapon. The analysis was repeated for the Sharpshooter and Green Musketry attributes, then had the value from the initial computation subtracted from it and averaged across weapons to arrive at the values for these attributes. A value for the Buck and Ball attribute was computed using a range band of one (1) inch and added to the value of the Smoothbore Musket, but proved too small to show up in the final value.

Charge Table: The values for Charge Combat were developed by applying the Die Roll Modifiers (DRM) associated with each attribute in isolation and computing its value based on the probability of occurrence of each result. The value was then adjusted by applying the probability of charging home averaged over the Experience levels. The value for Cold Steel was computed as above using the probability for charging home with Cold Steel, the difference between a unit using Cold Steel and a unit conducting a charge without Cold Steel gave the value used for Cold Steel.

Morale: The value for each Effectiveness level (Fresh, Worn, Spent) was computed as given above. To compute a value for morale (spirited, reliable, unreliable), the values for the Effectiveness levels was multiplied by the number of stands before the unit dropped to the next Effectiveness level for each unit size given in the Effectiveness Table in the Regimental Fire and Fury rule book, then divided by the number of stands in the unit minus one (a unit of one stand is removed from the board). These values were averaged over all unit sizes to derive the value for each morale level.

Stretching the Rules: I have included a new type of stand for Unarmed (UA) units. It represents a unit using improvised weapons or very short ranged weapons, such as pistols. These units can only fight in Charge Combat. See Tables 4, 5 and 6 for an example of what these units represent.

Using the Tables

The value of a stand is the sum of the attributes from Table 1 which make up the stand. For example, the value of an Infantry stand of Veteran troops with Reliable moral, armed with Rifled Muskets with Bayonets (Cold Steel), is Infantry (3), Veteran (5), Reliable (3), Rifled Muskets (6) and Cold Steel (1), for a total of 18 points. The cost of a unit of these stands is simply the cost of the stand times the number of stands in the unit. For example the cost of a 12 stand unit of the above infantry stands would be 216 points (12*18). The Infantry, Cavalry, Mounted Infantry and Artillery tables (Tables 4 thru 7) presented below provide the values for stands of each Unit Type, Experience level, Morale level and Weapon choice per computed.

I would suggest that in a point based game of Regimental Fire and Fury each player be given a point's budget of 500 to 900 points based on the number of stands available, the quality of the armies being portrayed and the size of battle desired. This should allow each player to raise a force of 3 to 6 maneuver units.

Acknowledgement

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Table 1. Raw Stand Costs

Attributes		Value	Table		
			Mnv	M&C	Chg
Commanders					
Immediate Commander	Gallant(+1)	3			
	Able(0)	2			
	Poor(-1)	1			
Higher Ranking Leader	Gallant(+1)	5			
	Able(0)	4			
	Poor(-1)	3			
Units			Mnv	M&C	Chg
Infantry		3			
Cavalry		6			
Mounted Infantry		5			
Field Artillery		4			
Horse Artillery		6			
Experience			Mnv	M&C	Chg
Crack (Crk)		7			
Veteran (Vet)		5			
Trained (Trn)		4			
Green (Grn)		2			
Morale			Mnv	M&C	Chg
Spirited (spt)		4			
Reliable (rel)		3			
Unreliable (unrel)		2			
Small Arms			Mnv	M&C	Chg
Repeater (RP)		9			
Breechloader (BL)		7			
Rifle Musket (RM)		6			
Inferior Rifle (IR)		5			
Rifle Carbine (RC)		5			
Smoothbore Musket (SM)		3			
Shotgun & Hunting Rifle (SH)		3			
Artillery			Mnv	M&C	Chg
Heavy Rifled Gun (HR)		81			
Light Rifled Gun (LR)		73			
Heavy Smoothbore Gun (HS)		64			
Light Smoothbore Gun (LS)		51			
Heavy Howitzer (HH)		60			
Light Howitzer (LH)		44			
Other			Mnv	M&C	Chg
Brave Colonel		1			
Sharpshooters		2			
Green Musketry		-1			
Cold Steel		1			

Table 2. Table Result Values

Maneuver		Musketry & Cannonade		Charge	
Double Quick	1.33 / 2	Withering Fire	2(+)	Swept from the Field	2(+)
Well Handled	1 / 1.5	Telling Fire	1	Driven Back	1
Tardy	0.5 / 0.75	Galling Fire	0.75	Hard Pressed	0.75
Fall Back	0	Lively Fire	0 / 0.5	Desperate Struggle	0
Panic	-1.33/ -2 / -1 / -1.5	Desultory Fire	0	Falter	-0.75
				Recoil	-1
				Repulsed	-2(+)

Many of the values for the results in the above table are based on unit types. The values are as follows:

- **Double Quick, Well Handled and Tardy:** the first value is for Infantry and Field Artillery, the second value is for Cavalry, Mounted Infantry and Horse Artillery.
- **Panic:** the first value is for Infantry, the second value is for Cavalry and Mounted Infantry, the third value is for Field Artillery, the fourth value is for Horse Artillery.
- **Galling Fire:** the value is the average of a stand loss (1) and a disordered result (0.5).
- **Lively Fire:** The first value is for Musketry, the second value is for Cannonade.
- **+ or -- :**The value for **Withering Fire, Swept from the Field** and **Repulsed** depends on the value of the modified die roll. This was accounted for in the analysis.

Table 3. Commanders Cost

Immediate Commander			Higher Ranking Leader		
Gallant	Able	Poor	Gallant	Able	Poor
3	2	1	5	4	3
<ul style="list-style-type: none"> • Immediate Commanders are Brigade Commanders and Artillery Commanders • Higher Ranking Leaders are Division, Corps and Army Commanders 					

Table 4. Infantry Stand Cost

Experience	Crack			Veteran			Trained			Green		
Morale	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel
Weapons												
RP	23	22	21	21	20	19	20	19	18	17	16	15
BL	21	20	19	19	18	17	18	17	16	15	14	13
RM	21	20	19	19	18	17	18	17	16	15	14	13
IR	20	19	18	18	17	16	17	16	15	14	13	12
SM	18	17	16	16	15	14	15	14	13	12	11	10
SH	17	16	15	15	14	13	14	13	12	11	10	9
UA	14	13	12	12	11	10	11	10	9	9	8	7

- RM, IR and SM stands include Cold Steel (CS) in their cost. If the unit does not have bayonets (no CS), subtract one (1) from the cost of the stands in the unit.
- SM stands include the cost of Buck and Ball.
- RP, BL and SH stands do not include CS in their cost and should not include it because these weapons do not have fittings for bayonets.
- UA stands for unarmed stands. These stands are armed with improvised weapons (knives, clubs, etc) and only fight in Charge Combat (think of the citizens of Lawrence, Kansas).
- Green stands have the Green Musketry reduction (-1) included in their cost.
- If the unit has a Brave Colonel, increase the cost of each stand in the unit by one (1).
- If the unit is a Sharpshooter unit, increase the cost of each stand in the unit by two (2).

Table 5. Cavalry Stand Cost

Experience	Crack			Veteran			Trained			Green		
Morale	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel
Weapons												
RP	26	25	24	24	23	22	23	22	21	20	19	18
BL	24	23	22	22	21	20	21	20	19	18	17	16
RC	22	21	20	20	19	18	19	18	17	16	15	14
SH	20	19	18	18	17	16	17	16	15	14	13	12
UA	17	16	15	15	14	13	14	13	12	12	11	10

- None of the above stands have CS included in their cost. The cost of each stand in the unit is increased by one (1) if the unit is capable of a CS charge (is armed with sabers).
- UA stands for unarmed stands. These stands are armed with pistols and only fight in Charge Combat (think of early war Confederate cavalry).
- Green stands have the Green Musketry reduction (-1) included in their cost.
- If the unit has a Brave Colonel, increase the cost of each stand in the unit by one (1).

Table 6. Mounted Infantry Stand Cost

Experience	Crack			Veteran			Trained			Green		
Morale	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel	spt	rel	unrel
Weapons												
RP	25	24	23	23	22	21	22	21	20	19	18	17
BL	23	22	21	21	20	19	20	19	18	17	16	15
RM	22	21	20	20	19	18	19	18	17	16	15	14
IR	21	20	19	19	18	17	18	17	16	15	14	13
SM	19	18	17	17	16	15	16	15	14	13	12	11
SH	19	18	17	17	16	15	16	15	14	13	12	11
UA	16	15	14	14	13	12	13	12	11	11	10	9

- RM, IR and SM stands do not include Cold Steel (CS) in their cost. If the unit does have bayonets (unlikely), add one (1) to the cost of the stands in the unit.
- SM stands include the cost of Buck and Ball.
- RP, BL and SH stands do not include CS in their cost and should not include it because these weapons do not have fittings for bayonets to my knowledge.
- UA stands for unarmed stands and are only included for completeness as I can not think of an example of an unarmed Mounted Infantry unit.
- Green stands have the Green Musketry reduction (-1) included in their cost.
- If the unit has a Brave Colonel, increase the cost of each stand in the unit by one (1).
- If the unit is a Sharpshooter unit, increase the cost of each stand in the unit by two (2).

Table 7. Artillery Stand Cost

Field Artillery				
Experience	Crack	Veteran	Trained	Green
Weapons				
HR	92	90	89	87
LR	84	82	81	79
HS	75	73	72	70
LS	62	60	59	57
HH	71	69	68	66
LH	55	53	52	50

Horse Artillery				
Experience	Crack	Veteran	Trained	Green
Weapons				
HR	94	92	91	89
LR	86	84	83	81
HS	77	75	74	72
LS	64	62	61	59
HH	73	71	70	68
LH	57	55	54	52

- Damaged stands cost one half (.5) of the above amounts.