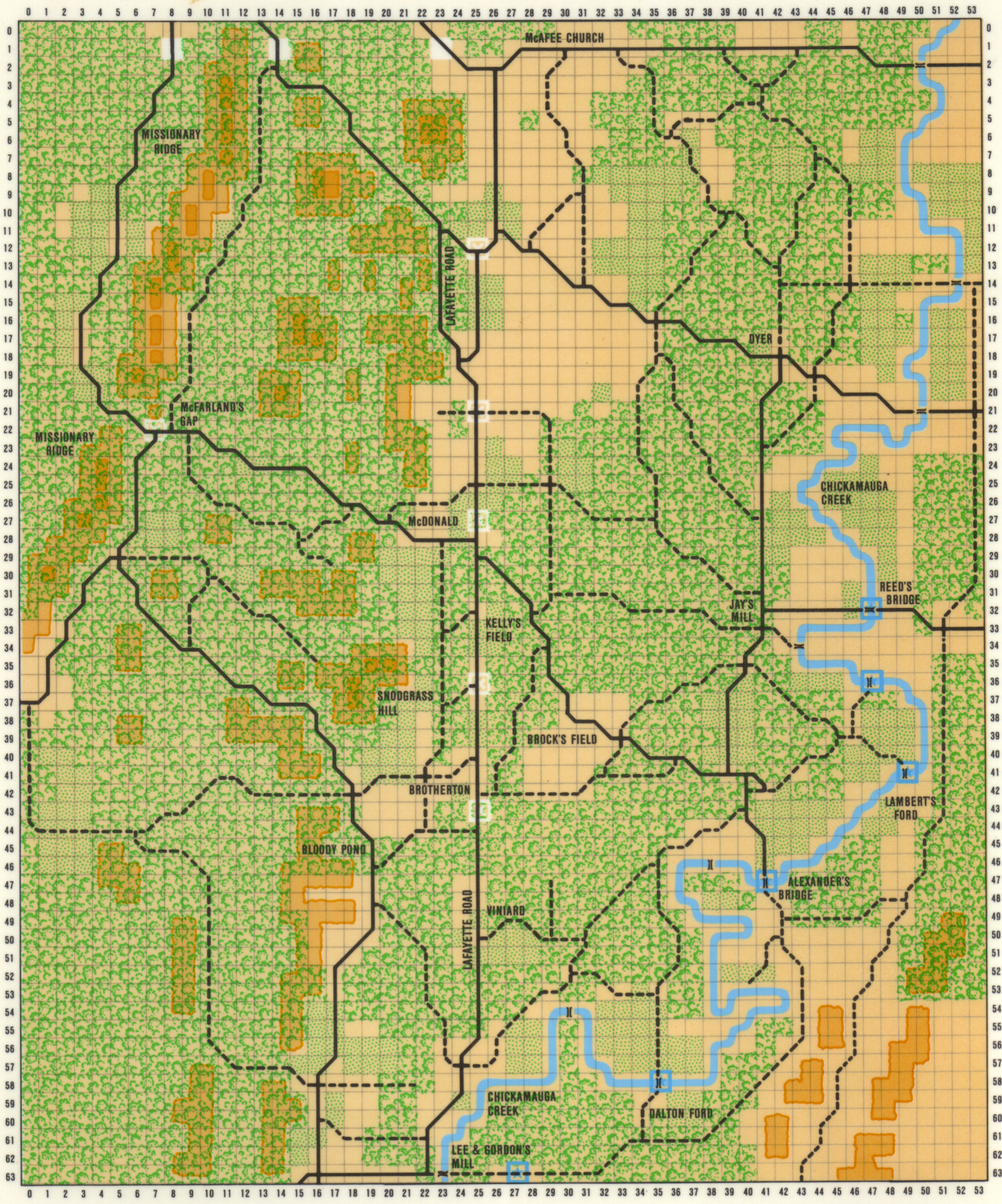




- | | | | | |
|-------------------|-----------------|-------------|--|--|
| | | | | Union Objective Squares
= 1000 points |
| | | | | Confederate Objective Squares
= 1000 points |
| | | | | Confederate Objective Squares
= 5000 points |
| Chickamauga Creek | Primary roads | Ridge | | |
| | Secondary Roads | Elevation 2 | | |
| | Bridge | Elevation 3 | | |

REBEL CHARGE

A T

CHICKAMAUGA

OPERATION COSTS TABLE

Numbers in parentheses refer to diagonal moves — directions 2, 4, 6, and 8 (1, 3, 7, 9 on the IBM key pad). For the BASIC game, please ignore the numbers and letters printed in green. ZOC stands for zone of control, which is a wargaming term for the squares next to a unit. P = Prohibited and N/A = Not Applicable.

TERRAIN/ACTION	INF./ DIS. CAV.	MTD. CAV.	LIMB. ART.	UNLIMB. ART.
Clear	2(3)	1(2)	2(3)	P
Fields	2(3)	2(3)	3(5)	P
Woods	4(6)	4(6)	8(12)	P
Bridge [1]	1(5)	1(5)	1(5)	P
Secondary Roads [2]	2	2	2	P
Primary Roads [3]	1	1	1	P
Enter higher elevation	+6	+4	+8	P
Change mode to column, mounted, or limbered [4]	2	2	N/A	4
Change mode to normal, dismounted, or unlimbered [5]	4	4	4	N/A
Enter or leave enemy ZOC	+2	+1	+3	P
Move from enemy ZOC to enemy ZOC [6]	+8	+5	+8	P
Fortify	8	8	P	8
Reorganize	2	2	N/A	N/A
Melee (attacker)	2	2	P	P
Melee (defender)	2	2	2	2
Fire in fire phase	2	2	P	4

Notes:

- [1] Units must be in column, mounted or limbered mode to enter a bridge square.
- [2] Regardless of other terrain in the square, a unit that moves from any road to a secondary road pays 2 operation points unless it is moving diagonally (directions 2, 4, 6, and 8), in which case, it doesn't benefit from the road. The unit must be in column, mounted, or limbered mode to receive the road benefits.
- [3] The same as Note 1 except the cost is 1 operation point.
- [4] The cost for CAV ART is 2 instead of 4 to limber. All units pay 1 operation point extra to change to these modes in woods.
- [5] The cost for CAV ART is 2 instead of 4. All units pay 2 operation points extra to change to these modes in woods.
- [6] In order to be able to move enemy ZOC to ZOC, a unit must be moving into a friendly occupied square.

FIRE AND MELEE STRENGTH MODIFIERS

TARGET LOCATION	FIRE MOD.	MELEE MOD.
Clear	1.00	1.00
Woods	0.60	0.60
Fields	0.90	0.90
Higher Elevation	0.70	0.70
Bridge	1.00	1.00

FIRING UNIT'S LOCATION	FIRE MOD.	MELEE MOD.
Bridge	0.60	0.40
All Others	1.00	1.00

SPECIAL CONDITIONS	FIRE MOD.	MELEE MOD.
Target unit is flanked	1.50*	1.50***
Firing unit is disrupted	0.50**	0.50
Firing unit is "routing"	0.50	N/A
Firing artillery in woods to woods	0.20	1.00
Firing unit out of ammo	0.30**	0.70

MODES	FIRE MOD.	MELEE MOD.
Normal	1.00	1.00
Column	0.30	0.30
Mounted	0.85	2.00
Routed	0.50**	0.50****
Unlimbered	1.00	1.00
Limbered	0.20**	0.50****
Dismounted	0.75	1.00

* During Final Defensive Fire, the modifier is 0.5 for the flanked unit firing.

** May only fire during Final Defensive Fire and with these modifiers.

*** The flanked defender in Melee and Final Defensive Fire has a modifier of 0.50. The flanker has a modifier of 1.50.

**** May only defend in Melee and with this modifier.

NOTE: The 0.20 fire modifier given to Artillery firing from a woods square overrides the 0.60 modifier the target would receive if located in woods.

The Fire and Melee strength modifiers would support the following examples:

1. A target unit in woods on higher elevation than the firing unit would result in modifier of 0.42 (0.7×0.6) in the Fire Phases and the Melee Phases.
2. A target unit flanked by a firing unit in clear terrain would give the firing unit a 1.5 modifier in the Fire and Melee Phases. In the Fire Phases, the flanked unit would fire with a 1.0 modifier (if it had a target) but would melee with a 0.5 modifier.
3. An artillery unit in woods firing at a unit in woods would receive a 0.20 modifier (not 0.2×0.6 — the 0.2 supersedes).

ADDITIONAL MODIFIERS FOR FIRE AND MELEE

Leader Bonus: Direct Modifier. A leader with bonus of 20 would give a modifier of 1.2.

Target Density: 1% more casualties per 50 men when more than 1000 men are in the target square. 1% less casualties when less than 1000 men. Maximum modifier of 1.4.

Density of Firing Units' square: (non-artillery) If over 1000 men are firing from the square, a modifier of .01 per 50 men over this number is applied (1200 men = .96 modifier).

Fortification Level: The firing unit is penalized by 10% per level that the target is fortified. A fortification level of 5 would give a modifier of 0.5.

Effectiveness: Semi-Direct Modifier. Strength is reduced by .01 for every 2 points effectiveness is below 100. An effectiveness of 90 would give a .95 modifier.

Fatigue: Semi-Direct Modifier. Strength is reduced by .01 for every 2 points of fatigue. Fatigue of 20 would give a modifier of .90.

Command Control: Direct Modifier. A rating of 1.1 would give a modifier of 1.1.

Artillerymen: Each gun requires 16 artillerymen to fully support it. When artillery fires, it receives a modifier proportionate to the number of men it has to man its guns. A Union artillery unit with six guns would need 96 men to function fully. If it lost 19 men, the unit would receive a modifier of 0.8.

Random Modifier: Modifier of 1.3 to 1.5 determined randomly.

Unit Outmaneuvered: Firing Unit receives modifier of .5.

Successful Attack: Firing Unit receives modifier of 1.5.

Scattered Artillery Fire: Artillery receives modifier of .3.

Maximum and Minimum Modifiers: All modifiers are cumulative with a maximum of 2.0 and a minimum of 0.2.

All modifiers are cumulative as shown in the example below:

A unit firing under the conditions below would receive the indicated modifiers (all modifiers are multiplied together).

- Firer has 2000 men in square	= 0.80
- Target in woods	= 0.60
- Target has 3000 men in square	= 1.4
- Firer in column mode	= 0.30
- Firer has 75 effectiveness	= 0.80
- Firer has 15 fatigue	= 0.93
- Firer has leader bonus of 15	= 1.15
- Firer has command control of 1.3	= 1.30
- Random modifier is 1.3	= 1.30
TOTAL	0.29

A unit above with 2000 men would fire with a strength of 580. (With rifles at range one, it would kill 23 men plus a random of 7 to 11.)

WEAPON/RANGE CASUALTY TABLE

WEAPON TYPE	ABBREV.	RANGE IN SQUARES	1	2	3	4-6	7-10
Rifle	RFL		4	2	0	0	0
Spencer	SPN		8	4	0	0	0
12 lb. Napoleons	NAP		14	4	2	1	0
12 lb. Napoleons/ 10 lb. Parrotts	N/P		11	5	3	1	1
12 lb. Napoleons/ 3" Rifles	N/R		11	4	3	1	0

WEAPON TYPE	ABBREV.	RANGE IN SQUARES	1	2	3	4-6	7-10
12 lb. Napoleons/ 6 lb. Smooth bores/ 10 lb. Parrotts	NSP		12	5	2	1	1
10 lb. Parrotts/ 3" Rifles	P/R		8	5	4	2	1
12 lb. Lights/6 lb. James/3" Rifles	LJR		10	5	2	1	0

The number under the range column corresponding to the proper weapon type is the number of men suffered as casualties per 100 men firing for small arms (the top two on the list) and per one gun for the artillery. The casualties derived here are further modified by various strength/casualty values.