

THUNDER ON THE MISSISSIPPI CHARTS & TABLES (v1.6)

COMBAT CHART

		DEFENDER'S COMBAT VALUE (NOT INCLUDING ENTRENCHMENT BENEFITS)								ATTACKER'S COMBAT VALUE									
		1/2-3	4-6	7-11	12-18	19-26	27-37	38-49	50+	1/2-3	4-6	7-11	12-18	19-26	27-37	38-49	50-59	60-69	70+
ATTACKER'S DIE MINUS DEFENDER'S DIE	≤-8	-	-	-	-	-	-	-	-	3D	4D	5D	5D	6D	8D	10D	12D	14D	16D
	-7	-	-	-	-	-	-	-	-	2D	3D	4D	4D	5D	7D	9D	11D	13D	15D
	-6	-	-	-	-	-	-	-	-	2D	2D	3D	3D	5D	6D	8D	10D	12D	13D
	-5	-	-	-	-	-	-	-	1	1D	2D	2D	3D	4D	6D	7D	9D	11D	12D
	-4	-	-	-	-	-	-	1	1	1D	2D	2D	2D	3D	5D	6D	8D	9D	10D
	-3	-	-	-	-	-	1	1	1	1D	2D	2D	2D	3D	4D	5D	7D	8D	9D
	-2	f	f	f	f	f	1f	1f	1f	D	1D	2D	2D	3D	3D	5D	7D	8D	9D
	-1	F	F	F	F	1F	1F	1F	2F	D	1D	1D	1D	2D	3D	5D	6D	7D	8D
	0	D	D	D	D	1D	1D	2D	2D	D	1D	1D	1D	2D	3D	4D	5D	6D	8D
	+1	D	D	D	1D	1D	2D	2D	2D	D	1D	1D	1D	2D	3D	3D	4D	5D	7D
+2	Dr	Dr	1Dr	1Dr	2Dr	2Dr	2Dr	3Dr	Da	Da	1Da	1Da	2Da	2Da	3Da	4Da	5Da	6Da	
+3	Dr	Dr	1Dr	1Dr	2Dr	2Dr	3Dr	4Dr	Fa	Fa	Fa	1Fa	2Fa	2Fa	3Fa	4Fa	5Fa	6Fa	
+4	DR	1DR	1DR	2DR	3DR	3DR	4DR	5DR	fa	fa	fa	1fa	1fa	2fa	3fa	3fa	4fa	5fa	
+5	1DR	2DR	2DR	3DR	3DR	3DR	4DR	5DR	Ea	Ea	Ea	Ea	1Ea	1Ea	2Ea	2Ea	3Ea	3Ea	
+6	1DR	2DR	2DR	3DR	3DR	4DR	5DR	6DR	a	a	a	a	1a	1a	1a	2a	2a	3a	
+7	1DR	2DR	2DR	3DR	4DR	6DR	7DR	8DR	a	a	a	a	a	1a	1a	1a	2a	2a	
+8	2DR*	2DR*	3DR*	4DR*	5DR*	7DR*	7DR*	9DR*	a	a	a	a	a	a	1a	1a	1a	2a	
+9	2DR*	3DR*	4DR*	4DR*	5DR*	7DR*	8DR*	10DR*	a	a	a	a	a	a	a	1a	1a	1a	
≥+10	3DR*	4DR*	5DR*	5DR*	6DR*	8DR*	9DR*	11DR*	a	a	a	a	a	a	a	a	1a	1a	

DEFENDER'S DIE ROLL MODIFIERS (SEE 7.4)		ATTACKER'S DIE ROLL MODIFIERS (SEE 7.4)	
+2:	Defending across bridge, dam, ferry, ford	+1 to +4:	Flank attack bonus
+2:	Defending in a mountain hex (but only +1 if attacker also in mountain hex or attack is down a ridge)	-3 to +2:	Artillery modifiers
+2:	Defending against attack uphill across a ridge or bluff hexside	+1 or +2:	Defender's flanks refused
+1:	Defending in a hill hex (but +0 if attack is from hill, mountain, or down a ridge)	+1:	Assault action
+1:	Defending across a creek (+2 in rain turn)	+/-:	Ratio modifier
-1:	If at least 1/2 of the Combat Value in the hex is contributed by Demoralized-2 units	+/-:	Tactical modifier
		-1:	Attacks in rain turn
+1/+2:	Gunboat defensive support (OTR, GTC, BTC, TPC, TOM)	GAME-SPECIFIC MODIFIERS	
+1:	Thomas bonus (AIO)	+1:	Assault bonus from Lee (SJW, OTR, HCR, BTC, SLB, GTC, TPC, LLO); Jackson (SJW, HCR, SLB); Longstreet (GTC, BAC, TPC); Sherman (BAC); or Hood & Forrest (HSN)
+1:	Hunt bonus (BTC)	-1:	Union Panic in effect (SJW, AGA-in AGA panicked army only)
-1:	Union Panic is in effect (SJW)	+1:	Surprise attack or Cavalry charge (SLB)
-1/-2:	Confederate Garrison Demoralized (TOM)	+1:	Union Gunboat (TOM)
		-1:	Union infantry OOS (TOM)
		-1/-2:	Confederate Garrison Demoralized (TOM)
		+1:	Stafford Heights or Hunt bonus (BTC)
		-1:	Hooker Loses Confidence (SLB)
		-2:	March attack while Insubordinate (BAC)

KEY	DEFENDER'S DIE ROLL MODIFIERS (SEE 7.4)		ATTACKER'S DIE ROLL MODIFIERS (SEE 7.4)	
	# Manpower Value loss	D = Disorganized/Fatigue (& ammo loss)	+1:	Prepared
F = Fatigue -2	R = Unit is routed & demoralized -1	-1:	Hasty	
f = Fatigue -1	R* = Unit is routed & demoralized -2	-3:	Column of Route	
E = End Action	a = Unit may advance after combat	ATTACK TYPE IN MARCH		
r = Unit must retreat	<i>Italicized Results</i> = Union Panic in SJW	Note: A Combat value may fall between two columns on the Combat Chart (e.g. 3½). If so, round the value up by ½ and use the right column of the two possible choices.		

SUMMARY OF COMBAT RESULTS

D (Disorganized/Fatigued): The unit's Strength marker is flipped to the disorganized side. If already disorganized it remains so. The unit gains 3 Fatigue Levels (to a maximum of Level 4). If already at Level 4 it remains so. An active unit obtaining a "D" has its march action terminated.

F (Fatigue-2): The unit's Fatigue Level is increased by 2 (to a maximum of 4). If the unit is active, it may not expend any more MPs; its march is terminated.

f (Fatigue-1): The unit's Fatigue Level is increased by 1 (to a maximum of 4). If the unit is active, it may not expend any more MPs; its march is terminated.

E (End Action): An active unit may not expend any more MPs; its march is terminated.

r (Retreat): The unit must retreat 2 to 4 hexes (see 7.6 for restrictions).

R (Rout/Demoralized-1): The unit is routed (retreat 4 to 6 hexes). The unit also gains Demoralize-1 marker. If it already is Demoralize-1, flip it to Demoralize-2. If it already is Demoralize-2, its Manpower Value is unaffected.

R* (Rout/Demoralized-2): The unit is routed (retreat 4 to 6 hexes). The unit also gains Demoralize-2 marker. If it already is Demoralize-2, its Manpower Value is reduced by 1 in addition to the normal Manpower loss result.

a (Advance): The unit may advance after combat.

ATTACK SUMMARY

ATTACK	INFANTRY MP COST	CAVALRY/MTD INF. MP COST	COMBAT MODIFIER TO ATTACKER'S ROLL
Column Of Route	0*	0*	-3
Hasty	1	2	-1
Normal	2	4	None
Prepared	4	8	+1

* A column of route attack may not be declared if a unit's remaining Movement Allowance is 0.

General Exception: If the defender is in loess terrain, a +1 MP penalty applies to the MP cost to undertake that attack (e.g., a Prepared attack carried out by an infantry unit against a loess hex would cost 5 MP, not 4)

RATIO CHART

Attacker to Defender Ratio	1-13 or less	1-12	1-11	1-10	1-9	1-8	1-7	1-6	1-5	1-4	1-3	1-2	1-1
Attacker's Ratio Modifier	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0

Attacker to Defender Ratio	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	10-1	11-1	12-1	13-1	14-1 or more
Attacker's Ratio Modifier	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13

ARTILLERY MODIFIER SUMMARY

ARTILLERY VALUE DIFFERENTIAL					
(Attacker's Artillery Value Minus Defender's Artillery Value)					
DEFENDER'S TERRAIN	-4 OR LESS	-3 TO +1	+2 TO +4	+5 TO +7	+8 OR MORE
Clear	-3	-2	NE	+1	+2†
Rolling	-2	-1	NE	+1*	+1
Rough/Hill/ Loess@	-1	-1*	NE	NE	+1*
Wds/Cty/Mtn	NE	NE	NE	NE	NE
Swamps\$	NE	NE	NE	NE	NE

* Just prior to combat, roll a die. If the roll is even, indicated modifier is used; if the roll is odd, no modifier is used.

† Just prior to combat, roll a die. If the roll is even, the +2 modifier is used; if the roll is odd, a +1 modifier is used instead.

@ Also applies to provisional swamp hexes in non-rain turns.

\$ Also applies to provisional swamp hexes in rain turns.

NE: No Effect

Note: If the total of the defenders' *printed* Artillery values (not counting entrenchments) in the hex is 1, a -2 modifier is converted to -1. If the total of the defenders' *printed* Artillery values (not counting entrenchments) in the hex is 2, a -3 modifier is converted to -2.

RETREAT CHART

Prior to entering each hex in a retreat, check Retreat Chart 1 or 2 (see 7.6). A unit must retreat into a hex using the “Retreat Description” with the lowest “Priority Number”.

RETREAT CHART 1			RETREAT CHART 2		
A player must use Retreat Chart 1 in the following circumstances: <ul style="list-style-type: none"> • For the first hex entered in a normal or voluntary retreat • For each of the first four hexes entered in a rout or cavalry retreat • If in a retreat, rout, or cavalry retreat, the retreating unit exits an enemy ZOC 			A player must use Retreat Chart 2 in the following circumstances: <ul style="list-style-type: none"> • For the second, third, or fourth hexes entered in the normal or voluntary retreat, assuming the unit is not exiting an enemy ZOC • For the fifth or sixth hexes entered in a rout or cavalry retreat, assuming the unit is not exiting an enemy ZOC 		
PRIORITY NUMBER	MANPOWER LOSS*	RETREAT DESCRIPTION	PRIORITY NUMBER	MANPOWER LOSS*	RETREAT DESCRIPTION
1	0	Retreat follows road, pike, trail, or RR into a hex more distant from active enemy unit than hex retreated out of. That hex is neither in an enemy ZOC nor enemy occupied.	1	0	Retreat is not into an enemy ZOC or enemy occupied hex.
2	0	Retreat does not follow road, pike, trail, or RR, and the hex retreated into is more distant from the active enemy unit than hex retreated out of. That hex is neither in an enemy ZOC nor enemy occupied.	2	0/1•	Retreat is into an enemy ZOC, but not an enemy occupied hex.
3	0/1†	Retreat is not into a hex more distant from active unit than hex retreated out of. The hex retreated into is not in an enemy ZOC or enemy occupied.	3	3	Retreat is into an enemy occupied hex.
4	0/1•	Retreat is into an enemy ZOC, but not an enemy occupied hex. Retreat is into a hex more distant from active enemy unit than hex retreated out of.	NOTES APPLYING TO RETREAT CHARTS 1 AND 2 * A cavalry unit does not suffer Manpower loss in a cavalry retreat even if it retreats into a hex calling for Manpower loss on a Retreat Chart. Exception: If it retreats into an enemy occupied hex, it loses 3 manpower. † Use number to left of slash for Manpower loss if retreat or rout is along road, pike, trail, or RR. Otherwise use number to right of slash for Manpower loss. • Use number to left of slash for Manpower loss if retreat or rout is along a road, pike, trail, or RR into a friendly-occupied hex. Otherwise use number to right of slash for Manpower loss.		
4	1/2•	Retreat is into an enemy ZOC, but not an enemy occupied hex. Retreat is not into a hex more distant from active enemy unit than hex retreated out of.			
5	3	Retreat is into an enemy occupied hex.	OVERRIDING RETREAT PRIORITIES If, by adhering to retreat rules, there is no possibility of avoiding surrender of a retreating unit due to “retreat restrictions,” a player may “override” retreat priorities no more than once in that retreat (see 7.6).		
Note: A hex “more distant from the active enemy unit” is defined as one that places the retreating or routing unit one hex further from the active enemy unit triggering the retreat than the hex from which the retreating unit exits, counting by the shortest path possible.					

CAVALRY RETREAT DIE ROLL MODIFIERS FLANK ATTACK EXAMPLES

The cavalry retreat modifiers below apply to all *GCACW* games, superseding all previous modifiers. Modifiers are cumulative.

+?	Terrain: If a cavalry unit occupies a location where it would receive a positive die roll in combat due to terrain (for occupying a mountain or hill hex, or for being separated from the active unit by a river, creek, or ridge hexside) that same modifier is used to increase their roll in the cavalry retreat.
+2	Very Large Force: If the cavalry unit(s) in the hex have a combined Combat Value of 3 or more, counting entrenchments. Exception: If the cavalry unit(s) are Confederate, the modifier is increased to +4 in <i>OTR</i> , <i>AGA</i> and <i>SIV</i> .
+2	Large Force (Confederate player in <i>OTR</i>, <i>AGA</i> and <i>SIV</i> only): If Confederate cavalry unit(s) in the hex have a combined Combat Value of 2 or more and less than 3, counting entrenchments.
-2	Demoralized: If all the cavalry units are Demoralize-1 or -2.
-2	Fatigue: If all cavalry in the hex are at Fatigue Level 4.
-2	Supply: If all cavalry in the hex are out of supply (Advanced Games only where cavalry can be out of supply).
-2	Small Force: If the cavalry unit(s) in the hex have a combined Combat Value of more than ½ and 1 or less, counting entrenchments. Exception: In <i>OTR</i> , <i>AGA</i> and <i>SIV</i> , Confederate cavalry units ignore this modifier.
-4	Very Small Force: If the only cavalry unit in the hex has a Combat Value of ½. Exception: If the cavalry unit is Confederate, the modifier is altered to -2 in <i>OTR</i> , <i>AGA</i> and <i>SIV</i> .

See rule 7.4 for details.

+4	The two enemy units exert ZOC into the 6 shaded hexes adjacent to the defender. If one enemy unit attacks, the attacker has a +4 basic flank bonus since all 6 hexes are “covered.” The final flank bonus remains +4 as there are no applicable conditions reducing the basic flank bonus.	
+3	The two enemy units exert ZOC into the 6 shaded hexes adjacent to the defender. Unit A is friendly to the defender. If one enemy unit attacks, the attacker has a +4 basic flank bonus since all 6 hexes are “covered.” The final flank bonus is reduced to +3 as 1 of the 6 covered hexes is occupied by a unit friendly to the defender.	
+2	The two enemy units exert ZOC into the 5 shaded hexes adjacent to the defender. If either enemy unit attacks, the attacker has a +2 basic flank bonus since 5 of the 6 hexes are “covered.” The final flank bonus remains +2 as there are no applicable conditions reducing the basic flank bonus.	
+1	The two enemy units exert ZOC into the 5 shaded hexes adjacent to the defender. If either enemy unit attacks, the attacker has a +2 basic flank bonus since 5 of 6 hexes are “covered.” The final flank bonus is reduced to +1 as 1 of the 5 covered hexes is occupied by a unit friendly to the defender. Had another unit friendly to the defender occupied Hex 1, the final flank bonus would have been reduced to 0.	
Note: If the enemy units occupy or exert a ZOC into a hex adjacent to the defender, and those enemy units have a Combat Value less than ¼ the defender’s Combat Value, that hex is not considered “covered.”		

THUNDER ON THE MISSISSIPPI CHARTS & TABLES

ADVANCED GAME SEQUENCE OF PLAY

1. RANDOM EVENTS PHASE

2. LEADER TRANSFER PHASE

3. ATTACHMENT PHASE

4. THE ACTION CYCLE

ACTION PHASE

- A. Initiative Segment
- B. Activation Segment

5. RECOVERY PHASE

6. VICKSBURG SIEGE PHASE

7. THE STRATEGIC CYCLE (ONLY ON TURNS DIVISIBLE BY 5)

- A. Strategic Segment
- B. Union Depot Segment
- C. Union Supply Status Segment
- D. Vicksburg Fort Degradation Segment
- E. Vicksburg Garrison Demoralization Segment
- F. Manpower Adjustment Segment
- G. Confederate Army of Relief Segment
- H. Union Army of Maneuver Segment
- I. Confederate Reorganization Segment

8. TURN INDICATION PHASE

- A. Vicksburg Surrender Segment
- B. End of Game Segment
- C. Turn Track Segment
- D. Pontoon Bridge Segment
- E. Turn Marker Segment

ARMY OF RELIEF TABLE

DIE	RESULT
1 or less	NE
2	NE
3	NE
4	+1 Box
5	+1 Box
6 or more	+1 Box

NE: No effect

+1 Box: The Army of Relief marker is advanced one box on the Army of Relief Track

Army of Relief Table Die Roll Modifiers (cumulative):

- 2: In Turn 15 Strategic Cycle
- 1: In Turns 20, 25, and 30 Strategic Cycles
- 1: If the Strategic Events Table result in the current Cycle is "Johnston Sick"
- +1: In Turn 50 and all later Strategic Cycles
- +2: If the Strategic Events Table result in the current Cycle is "President Davis Pushes Johnston"
- +1: If the RR station in Jackson is not destroyed
- +1: If the Army of Relief marker occupies Box 0

RANDOM EVENTS TABLE

Dice	May 1 – May 4 (turns 2–5)	May 5 – May 31 (turns 6–32)	June & July (turns 33–70)
2	Late Rain	Late Rain	Late Rain
3	Union Intelligence	Late Rain	Grant Drunk
4	Delay Unit Entry	Delay Unit Entry	Extreme Heat
5	Movement Bonus	Union Water Crisis+	Union Water Crisis+
6	Confederate CP^	Confederate CP^	Late Rain
7	Confederate CP^	Union Intelligence	Heat
8	Confederate MP^	Confederate MP^	Confederate MP^
9	Confederate MP^	Accelerate Unit Entry	Heat
10	Accelerate Unit Entry	Heat	Heat
11	Union Intelligence	Rain	Rain
12	Late Rain	Heavy Rain	Heavy Rain

^MP: Movement Paralysis; CP: Command Paralysis

+Convert to No Effect if the previous Turn had Late Rain, Rain, or Heavy Rain

STRATEGIC EVENTS TABLE

DICE	RESULT
2	Variable Reinforcement
3	Siege Attrition and Union Mine Operations&
4	Union Extended March Bonus or Port Hudson#
5	Johnston Sick and Jackson Confederate Redoubt&
6	Union Extended March Bonus or Union Mine Operations+
7	Union Extended March Bonus or French Arrives Early%
8	Union Extended March Bonus or Variable Reinforcement*
9	President Davis Pushes Johnston and Jackson Confederate Redoubt&
10	McClermand Relieved
11	CSA Attacks Milliken's Bend
12	Variable Reinforcement

& Both results occur.

Union Extended March Bonus applies from Turns 5 through 20; Port Hudson applies starting Turn 25.

+ Union Extended March Bonus applies from Turns 5 through 20; Union Mine Operations applies starting Turn 25.

% Union Extended March Bonus applies from Turns 5 through 20; French Arrives Early applies from Turns 25 through 45; No Effect after Turn 45.

* Union Extended March Bonus applies from Turns 5 through 20; Variable Reinforcement applies starting Turn 25.

RR MOVEMENT FATIGUE LEVEL GAIN

HEXES MOVED	FATIGUE LEVEL GAIN
1 to 13	1
14 to 26	2
27 to 40	3

MOVEMENT SUMMARY

DETERMINING A UNIT'S MOVEMENT ALLOWANCE IN A MARCH ACTION			DETERMINING A MOVEMENT ALLOWANCE IN AN ACTIVATE LEADER ACTION				
USA		Infantry or Artillery Unit	1D6	USA		1D6+1 (In <i>SH</i> , <i>AGA</i> or <i>OTR</i> , 1D6 minimum 2)	
		Cavalry Unit or Mounted Infantry	2D6			Cavalry Division Leader	2D6+1
CSA		Infantry or Artillery Unit	1D6+1 (In <i>OTR</i> & <i>AGA</i> , 1D6 minimum 2)	CSA		Cavalry Corps Leader	2D6+2
		Cavalry Unit	2D6+1			Grand Division Leader (BTC only)	1D6+1 (In Nov. 15 to 17, 1862, 1D6+2)
FORCE MARCH							
<ol style="list-style-type: none"> Only an organized unit may force march. Flip the unit's Strength marker to its disorganized side. In infantry force march, roll 1 die and subtract 1. In cavalry force march, roll 2 dice and subtract 1 from sum. Result is number of MP added to unit's Movement Allowance. Minimum MP bonus for infantry is 2. Minimum MP bonus for cavalry is 4. If the unmodified roll in Step 2 is 6 (for infantry), the active unit's Manpower Value is reduced by 2 if its current Manpower Value is 6 or more; otherwise, its Manpower Value is reduced by 1. If unmodified roll is from 2 to 5 (for infantry) or 8 or more (for cavalry), unit's Manpower reduced by 1. If unmodified roll is 1 (for infantry) or 7 or less (for cavalry), unit's Manpower is unaffected. 							
CSA		Infantry Leader	1D6+2 (In <i>OTR</i> & <i>AGA</i> , 1D6+1)	CSA		Cavalry Division Leader	2D6+2
		Cavalry Corps Leader	2D6+3				

EXTENDED MARCH TABLE

STATUS OF MARCHING UNIT'S STRENGTH MARKER...				
MODIFIED DIE ROLL	ORGANIZED ANY MANPOWER VALUE	DISORGANIZED MANPOWER ≤ 5	DISORGANIZED MANPOWER 6 TO 9	DISORGANIZED MANPOWER ≥ 10
≤5	NE	NE	NE	NE
6	D	1	1	1
7	D	1	1	2
≥8	D	1	2	3
MODIFIERS (CUMULATIVE)				
+1 If march by unit on its normal side increases its Fatigue Level from 3 to 4.				
+1 If march by unit on its exhausted side increases its Fatigue Level from 2 to 3.				
+3 If march by unit on its exhausted side increases its Fatigue Level from 3 to 4.				
+1 If march by Wagon Train. For Union Wagons, this modifier is in addition to +1 modifier for "Other Union Units"; see below)				
UNION ARMY MODIFIERS				
+0 Late & Early War Cavalry: If march is made by any Union cavalry unit (<i>HSN</i> , <i>AIO</i> , <i>BAC</i> , <i>RWH</i> , <i>AGA</i> , <i>TOM</i> , <i>TPC</i>) or by a Union cavalry unit belonging to the Army of Potomac (<i>RTG</i> , <i>LLO</i> , <i>GTC</i>).				
+2 Garrison Units (infantry, artillery, & cavalry): If march is made by a Union unit not belonging to the Army of the Potomac (<i>SJW</i> , <i>HCR</i> , <i>RTG</i>) or by a Union unit which is not a "Regular Army" unit (<i>RWH</i>).				
+1 Other Union Units: All Union units (including wagon trains) not covered by the two cases above.				
GAME-SPECIFIC MODIFIERS				
+1 If a "Heat" event is in effect. (For all games with Heat events)				
+1 If, in Advanced Game, the unit is "out of supply". (For all games with supply rules)				
+1 All units in 1861 scenarios (<i>AGA</i> only)				
-3 In 1861 scenarios, if the marching unit is a cavalry unit (<i>AGA</i> only)				
-3 If the unit is executing a Retreat March (only <i>AGA</i> scenarios 2, 5, 6, & 7)				
RESULTS				
NE:	No Effect.			
D:	Disorganized. Unit's Strength marker is flipped to its disorganized side.			
1/2/3:	Unit's Manpower Value reduced by indicated number. Replace Strength marker with new Disorganized marker reflecting its reduced Manpower value.			
WHEN TO CONSULT THE EXTENDED MARCH TABLE				
• If a unit on its normal side reaches Fatigue Level 3 or 4 (Exception: see Strategic Movement rules)				
• If a unit on its exhausted side reaches Fatigue Level 2, 3 or 4 (Exception: see Strategic Movement rules)				

MP COSTS TO ENTER FRIENDLY-OCCUPIED HEX

An active infantry, artillery, or wagon train unit must pay an MP penalty to enter a hex already occupied by 1 or more friendly infantry and/or artillery units with a combined Combat Value of 3 or more, or a hex occupied by a wagon train(s). The MP penalty depends on the major terrain in the hex entered. MP penalties to enter a friendly-occupied hex are not cumulative: the highest MP penalty in city, clear, rough, loess, rolling, and hill hexes is +2; the highest MP penalty in woods, swamp, and mountain hexes is +4. Cavalry units do not pay such MP penalties and do not trigger them if a friendly infantry, artillery, or wagon train unit enters their hex.

COMBINED COMBAT VALUE IN HEX	TERRAIN IN HEX...	
	CITY, CLEAR, ROUGH, ROLLING, HILL	WOODS, LOESS, SWAMP, MOUNTAIN
Less than 3	NE	NE
3 to 11	+1 MP	+3 MP
More than 11	+2 MP	+4 MP
Wagon Train(s)	+2 MP	+4 MP

STRATEGIC MOVEMENT ALLOWANCE TABLE

Strategic Movement is only used in Advanced scenarios in *OTR*, *BAC*, *GTC*, & *AIO*. However, for *OTR* players must use the table in the *OTR* Advanced Rules.

CONFEDERATE UNITS

FATIGUE LEVELS EXPENDED	INF/ART MOVEMENT ALLOWANCE	CAVALRY MOVEMENT ALLOWANCE	WAGON TRAIN MOVEMENT ALLOWANCE
2	14 (12)	24 (20)	12 (10)
3	21 (18)	36 (30)	18 (15)
4	28 (24)	48 (40)	24 (20)

UNION UNITS

FATIGUE LEVELS EXPENDED	INF/ART MOVEMENT ALLOWANCE	CAVALRY MOVEMENT ALLOWANCE	WAGON TRAIN MOVEMENT ALLOWANCE
2	12 (10)	22 (18)	10 (8)
3	18 (15)	33 (27)	15 (12)
4	24 (20)	44 (36)	20 (16)

Note: Parenthesized numbers are Movement Allowances if the player is suffering from "command paralysis" (see 2.0).

COMMAND RADIUS SUMMARY

- Command radius is a path of 3 or fewer hexes between a leader's hex and a subordinate unit's hex. *Exception:* in 1861 scenarios (*AGA*), the command radius is 2 hexes
- Terrain is irrelevant when tracing command radius.
- A command radius may not enter an enemy-occupied hex or an enemy ZOC (unless that ZOC is occupied by a friendly unit).

(Red outline defines Leader's Command Radius)

