

Ty Bomba's New Millennium Checkers

General Introduction

These two-player strategy games have been thoroughly play tested, and they work well to provide balanced and challenging contests using rules easy to learn but impossible to master. Play of *New Millennium Checkers* will reward those who get into them with all the enjoyment, intellectual stimulation and emotional satisfaction that come from good gaming. I ask only that you share these games with those of your friends you believe would also enjoy the experience.

— Ty Bomba, San Luis Obispo, 2005

Playing Pieces & Playing Board

If you don't have easy access to multiple sets of Checkers, you can make workable playing pieces using substitutes, such as Poker chips, coins, toy blocks, etc.

All the *New Millennium Checkers* games can be played using a regular Checker or Chess board, multiple sets of Checkers (two to four sets, depending on the game), and these rules. Note too, unlike regular Checkers, whether a square on the board is dark or light has no bearing on the play of any of these *New Millennium* games. So, if you somehow don't have a Checker board handy, you can simply make up an eight by eight grid of squares on a piece of paper.

The numbers in each of the blocks in the board shown below are for reference, when detailed examples are used, in the game rules that follow this section. (You don't need the numbers to appear on your actual playing board, unless you're going to play by mail or by e-mail.)

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

Rules for Game I Boom & Zoom

Needed To Play

Boom & Zoom requires a total of 48 Checkers to play; 24 all of one color and another 24 all of a second color.

Setting Up

Both players should take all 24 Checkers of one color or the other, pile them into eight stacks, each stack three Checkers high, and then set those stacks on the playing board according to the following instructions. That is, one player should put one of each of his stacks of Checkers in squares "1" through "8," while the other player puts one of each of his eight stacks of Checkers in squares "57" through "64."

Towers

Each stack of Checkers is referred to as a "tower" when playing *Boom & Zoom*.

Player Order

The youngest of the two players moves first in the first match played between them. When playing a multi-match series between the same two opponents, the player who lost the previous match goes first in the next match.

Boom OR Zoom

The movement of a tower in *Boom & Zoom* is called "zooming"; firing a tower at an enemy tower is called "booming" (hence the game's name). Players take turns, alternately zooming or booming with one of their towers during each of their own turns. No "passing" of turns is allowed. In each of his turns a player must choose to boom or zoom with one of his towers – never more and never less. There is no artificial limit on the number of turns that may make up a single match.

Booming

If a player decides he wants to use up one of his turns by having one of his towers fire at an enemy tower, he does so in the following way. He should point to the tower he is firing and then to the enemy tower that is its target. Targeted enemy towers must be in range of the firing tower, and the line-of-fire between the firing tower and targeted tower may not be blocked by the presence of one or more other towers (friendly or enemy) that might be located between them.

The range of a firing tower is determined by the number of Checkers making it up at the instant of firing. That is, a firing tower containing three Checkers could fire at an enemy tower located at a range of one, two or three squares from it. A firing tower containing two Checkers could fire at an enemy tower located at a range of one or two squares from it. A firing tower containing one Checker could only fire at an enemy tower located in a square immediately adjacent to it.

In the diagram below, a three-Checker-high tower in the center square could fire at any one of the enemy towers (shown as "ET") around it.

ET			ET			ET	
	ET		ET		ET		
		ET	ET	ET			
ET	ET	ET	Firing Tower 3 Checkers High	ET	ET	ET	
		ET	ET	ET			
	ET		ET	0	ET		
ET			ET			ET	

Note that lines of fire must always be determined by using the pattern of rows, columns and diagonals created by the squares of the playing board. For example, in the situation above, an enemy tower could not be shot at if it were located in the box marked 0, because no straight line of boxes can be drawn between that location and the box containing the firing tower.

A firing tower need not fire out to its maximum range; it may fire at an enemy tower located out to, or within, its maximum range.

No tower may fire through a tower, friendly or enemy, in order to hit some enemy tower beyond the blocking tower. And that's true no matter what the relative heights of the towers involved. Intervening towers block lines of fire no matter what heights are involved among the firing tower, the targeted tower, and the blocking tower.

You may never fire any of your towers at any of your other towers. You may only fire your towers at enemy towers.

When the player whose turn it is announces he will fire one of his towers at an in-range and unblocked enemy tower, his opponent should acknowledge that by removing the top Checker from that targeted tower. Simply remove and set aside such Checkers, putting them into a separate "dead pile" off to the side. They are out of play for the rest of the match.

Both players should take care the piles of Checkers removed by being boomed aren't mixed with those deliberately zoomed off the board (see below).

Zooming

Instead of firing one of your towers, you may choose to use up your turn by moving (zooming) one of your towers. Towers move in much the same way they shoot. That is, in the firing diagram above, a tower containing three Checkers might move into any one of the boxes marked "ET."

No tower may move into or through a box that already contains another tower, friendly or enemy.

Just as they trace their lines-of-fire using the columns, rows and diagonals created by the pattern of squares on the board, so too must towers trace their moves in that same way. For instance, again referring to the diagram above, there is no way the tower in the center could move to the **0** box in a single turn's move.

A moving tower need not be moved the full possible extent before stopping. For example, a three-Checker tower might move just two squares and stop there, or just one square and stop there. Conversely, no tower may ever be moved farther than the number of squares corresponding to its Checker height in a single move. For example, there is no way a two-Checker tower could move three squares in a single move.

Moving Off The Board

Both players are allowed to move their towers off the board, but only through the opposite side from which they started when first set up. Moving off the board is done exactly like a normal on-board move. Count the final move off as using up one square of movement capacity. That is, just reaching the last row of squares isn't sufficient to topple you off the board edge; you must have sufficient movement capacity in a moving tower to actually move off the board. No Checker, once zoomed off the board, may in any way be brought back into play during that same match.

To clarify, the player who began by setting up his towers in squares "1" through "8" may only move his Checkers off the board through squares "57" through "64." And, of course, that means the player who began by setting up his towers in squares "57" through "64" may only move his Checkers off the board through squares "1" through "8."

Each move off the board may be made in any direction, as long as it is in a straight line with the on-board portion of the move that brought the departing piece into the last row. That is, for example, a three-Checker-high tower in square 22 could move off the board by going into square 15, then into square 8, and then diagonally off the board.

Winning

Play continues as described above until a moment is reached when only the tower(s) of one player remain(s) on the board. No matter what combination of booming and zooming led to only one player's tower(s) remaining on the board, play stops instantly as soon as that condition is reached. Once play has stopped, both players should count the number of their own individual Checkers they managed to move off the opposite side of the board.

Unstack all towers before counting, and then count each individual Checker. The player who moved off the greatest number of his own side's individual Checkers wins the game. If both players moved off exactly the same number of Checkers, that match is a draw.

Note that Checkers removed from the board during play by booming in no way help determine which player has won a match. Count only Checkers successfully moved off the board.

Notes on Boom & Zoom

At first this game is all about combat, as you try to gain an advantage by reducing and eliminating the opposing towers. Then, suddenly, it becomes all about maneuver as you try to race your last piece off the board to gain the winning points before your opponent does so. Figuring out exactly when that 'tipping point' between the two strategies takes place in each match is the key to winning.

Rules for Game II **Dragons Teeth** **(Alternative Title: Toofy Teefs)**

Needed To Play

Dragons Teeth requires a total of 96 Checkers to play; 48 all of one color, and another 48 all of some other color.

Setting Up

Both players should take eight of his own Checkers and place them, one each and not stacked with any other Checkers, in the squares marked "S" in the diagram of the playing board shown below. Then both players should place eight stacks of two Checkers in each of the squares marked "M," followed by putting eight stacks of three Checkers in the squares marked "L." ("S" stands for "small"; "M" stands for "medium," and "L" stands for "Large.")

L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M

S	S	S	S	S	S	S	S
S	S	S	S	S	S	S	S
M	M	M	M	M	M	M	M
L	L	L	L	L	L	L	L

Player Order

The youngest of the two players moves first in the first match played between them. When playing a multi-match series between the same two people, the player who lost the previous match goes first in the next match.

Teeth

Each individual Checker or stack of Checkers is referred to as a “tooth” when playing “Dragons Teeth.” Note the teeth in the game may not be recombined into different heights once play has begun. That is, a large tooth (three-high stack of Checkers) will go through the entire game, until the end of play or its elimination from play prior to the game’s end, as a large tooth. A three-Checker-high tooth can’t, for example, in any way be ‘broken down’ during play to form one small and one medium tooth. And that same restriction also applies to all the medium and small teeth in the game.

Moving

Players alternate by taking turns moving any one of their individual teeth. The movement of one tooth, no matter how many Checkers make it up, constitutes a player's turn, after which the turn passes to the other player, etc. Neither player may pass a turn; each must always make a move.

It's possible for a moving tooth to eliminate an enemy tooth by moving into that enemy tooth’s square at the end of its move (see below).

All teeth, no matter their height, move the same way. That is, a tooth may be moved in any direction in a straight column, row or diagonal of squares. In the diagram below, all the possible moves of the tooth (T) near the center of the board are shown as "O" blocks. Note, for example, it would be impossible for tooth "T" to move to the box marked X in one move.

Note, too, that how far a given tooth can move during a single turn has nothing to do with it’s Checker-height. That is, any tooth, no matter its own Checker-height, may always move as far as possible given its starting location on the board and its relationship to other teeth arrayed around it.

o			o			o	
	o		o		o		
		o	o	o	x		
o	o	o	T	o	o	o	o
		o	o	o			
	o		o		o		
o			o			o	
			o				o

No tooth of any height may ever be moved into or through (or over or under) a square that at that moment contains another friendly tooth of any height. There may never be more than one friendly tooth in the same square at the same time. Friendly teeth always block the movement of other friendly teeth into and through their squares.

Eliminating Enemy Teeth

In general, it's possible for you to move a tooth into a square presently occupied by an enemy tooth, and by so doing instantly remove from play that enemy tooth. Every tooth eliminated is permanently removed from the board and may not reenter play during that match.

Moving into a square occupied by an enemy tooth ends the move of the friendly tooth carrying out that elimination. You may never move one of your teeth into and/or through a square containing an enemy tooth all in one move. Eliminating an enemy tooth always ends your move for that turn in the square where that elimination has just taken place.

Combat Strengths

All small teeth have a “combat strength” of one. All medium teeth have a “combat strength” of two. All large teeth have a “combat strength” of three. Three is the highest (best and strongest) combat strength; one is the lowest (worst and weakest) combat strength, and two exists at the level between those two extremes.

Those combat strengths are used to flesh out the general rule given above about eliminating enemy teeth. That is, a moving tooth may only be used to eliminate an enemy tooth if that moving tooth has a combat strength at least equal to that

of the enemy tooth being moved against. For example, a medium tooth (combat strength two) could, without any trouble, move into a square occupied by an enemy small tooth (combat strength one) or medium tooth (combat strength two) and eliminate them.

In general, no moving tooth may carry out the elimination of an enemy tooth that has a greater combat strength than that of the moving tooth. For example, a friendly small tooth could not carry out the elimination of an enemy medium or large tooth. In such cases, you would simply have to end the movement of your small tooth in one of the squares you moved it into prior to entering the one occupied by the overly strong enemy tooth.

Combat Assists

"Combat Assistance" is a technique by which a moving tooth can carry out the elimination of an enemy tooth that has a combat strength than its own. That is, a moving tooth can carry out the elimination of a stronger enemy tooth if enough extra (and friendly) combat strength points are already located in a square (or squares) immediately adjacent to the targeted enemy tooth sufficient to increase the level of involved friendly combat strength points to the same amount (or more) than the targeted enemy tooth. (That reads more complex than it is.) Look at the diagram below.

			L(3)				
				M(2)			
			S(1)				

In the diagram above, it's the red player's turn and he'd like to move his small tooth (S, with a combat strength of one) straight into the square occupied by the large enemy tooth (L, with a combat strength of three). Normally that wouldn't be possible, because the large enemy tooth's combat strength is greater than that of the small friendly tooth. Also note, however, another red tooth, this one of medium size (M, with a combat strength of two), is already located in a square next to that of the large enemy tooth. The presence of that friendly medium tooth

automatically gives a "combat assist" to the small moving tooth, in effect temporarily combining their two combat strengths into one strength of three. That combined combat strength equals the combat strength of the large enemy tooth, thereby allowing its elimination.

That same combat assist could take place if, for example, instead of the single medium tooth assisting, the red player had two other small teeth located in boxes immediately adjacent to the large enemy pyramid (1+1+1=3).

It doesn't matter how the assisting tooth or teeth came to be in their locations adjacent to an enemy tooth that's to be eliminated. They might have been moved into position earlier, as part of a deliberate attempt to build up combat strength there in order to allow for the later elimination. Or it may have been that the other player, when moving his large tooth, carelessly ended its move in the square next to the red medium tooth, not seeing the trap into which he'd placed his own piece.

Note that it wouldn't be possible for the red player to eliminate the large enemy tooth by keeping his small red tooth in place and moving on the large enemy tooth with his medium red pyramid. That's because the small red tooth isn't immediately adjacent to the enemy tooth; therefore it can't assist the medium tooth. The combat strengths in such situations must all be adjacent in one or more squares, at the same instant, to make assisted eliminations possible.

Winning

A match of *Dragons' Teeth* is won by the first player who succeeds in moving six or more combat strength points of his teeth — small and/or medium and/or large, in any combination — off the opposite end of the board from which they started. A tooth may move off the board through any of the squares on the board edge opposite their starting side and in any direction, including diagonally. And, yes, it's possible, provided the opposing player is careless enough to leave open an entire column of squares, for you to move one of your teeth completely across and off the board all in one move. No draws are possible.

Notes on Dragons Teeth

This game, of the four presented here, is resolved most like classic warfare of the pre-gunpowder era. That is, the player does best who sets up a front line and then maintains its integrity against penetration by the other player's pieces while at the same time breaking through the opposition's front line.

Rules for Game III

Embed

Pieces & Set Up

Embed (short for "Embedded") is a two-player game in which each player has pieces totaling 23 "Drones" and one "Boss," which begin play set up as shown

below (D=Drone; B=Boss). Note that your own side's Boss actually begins play embedded in the front row of the other side's Drones, and vice versa.

D	D	D	D	D	D	D	D
D	D	D	D	D	D	D	D
D	D	D	B	D	D	D	D
D	D	D	D	B	D	D	D
D	D	D	D	D	D	D	D
D	D	D	D	D	D	D	D

To create Drones, simply use a single Checker for each one. To create a Boss, stack together in the same square three Checkers of the same color as your Drones. Note there is no changing of status between Drones and Bosses during play; a piece that begins play as a Drone remains a Drone; a piece that begins as a Boss remains a Boss.

Winning Via Home Row Entry

The game can be won by the first player who moves his Boss piece into the "home row" of the other player. In the diagram above, the red side's home row would consist of squares "57" through "64"; the black side's home row would consist of squares "1" through "8." Therefore the player using the black pieces would win by being first to move his Boss into any one of the squares "57" through "64," while the player using the red pieces would win by being first to move his Boss into any one of the squares "1" through "8." No draws are possible.

Winning By Fully Embedding the Opposing Boss

The game may also be won by the player who first "fully embeds" his opponent's Boss. A Boss is fully embedded the instant all eight of the squares around it are simultaneously occupied by opposing pieces, Drones and/or Boss. For example, a Boss in square "10" would be fully embedded if opposing pieces simultaneously occupied squares "1," "2," "3," "9," "11," "17," "18" and "19."

If a Boss is in one of the left or right board-edge squares ("9," "17," "25," "33," "41" and "49" along the left board edge, and "16," "24," "32," "40," "48" and "56" along the right board edge), he is considered fully embedded there if he's surrounded on five sides. That is, for example, a Boss in square "25" would be fully embedded if opposing pieces simultaneously occupied squares "17," "18," "26," "34" and "33."

Taking Turns

Player's alternate taking turns by making one Drone or their Boss move, after which the other player takes a turn. There is no limit on the number of turns that may make up a single match. Play continues, one turn at a time, until one player wins. No "passing" of turns is allowed.

To determine who will take the first turn in a match, allow the younger player to go first if it's the first match being played between the same two opponents. In matches after the first between the same two people, the person who lost the previous match goes first in the new one.

Moving

All pieces, Drones and Bosses alike, move exactly like a Queen in Chess. That is, a Drone or Boss may be moved from its present square on the board to another square that is one, two, three or more squares away from its location, always following a straight or diagonal line of squares. In the diagram below, the Drone or Boss (D/B) could move to any of the squares marked "X".

		X			X		
X		X		X			
	X	X	X				
X	X	D/B	X	X	X	X	X
	X	X	X				
X		X		X			
		X			X		
		X				X	

When making a move, the general rule is a piece may be moved as long or as short a linear distance as the player owning it wants it to go, in any single direction, from just one square to across the entire length of the board. Note, however, the following important restrictions on that general rule:

- 1) Neither Boss may move into the square containing the opposing Boss.
- 2) Neither Boss may move into a square containing a Drone, no matter to which side that Drone belongs.
- 3) No Drone may move into a square containing a Boss, no matter to which side that Boss belongs.

Drone On Drone Captures

If you move one of your Drones into a square containing a Drone of the other side, your Drone must stop moving for that turn in that square. The opposing moved-on Drone is thereby instantly and permanently removed from play. Note that Drone on Drone is the only kind of 'capture move' in the game: Bosses can't capture Bosses or Drones, and Drones can't capture Bosses. Note, too, Drones are not allowed to perform capture moves against Drones of their own side.

No Skipping

No moving Drone or Boss may ever 'skip over' or 'move over' any square(s) as it moves, no matter if that square is empty or occupied by another piece.

Notes

The unusual thing about *Embed*, when compared to pretty much every other strategy game out there, comes from the fact there's no preliminary fight for the

center (or flanks). The action immediately moves to the opposite board edges and stays there.

Rules for Game IV **M.A.D. (Mutually Assured Destruction)**

Needed To Play

M.A.D. requires a total of 64 Checkers to play; 32 all of one color, and another 32 all of some other color.

Setting Up

Both players should take all 32 Checkers of one color or the other, pile them into eight stacks, each stack four Checkers high, and then set those stacks on the playing board according to the following instructions. That is, one player should put one of each of his stacks of Checkers in squares "9" through "16," while the other player puts one of each of his eight stacks of Checkers in squares "49" through "56."

Player Order

The youngest of the two players moves first in the first match played between them. When playing a multi-match series, the player who lost the previous match goes first in the next match.

Winning

The player who first moves one or more of his Checkers into any one square of the "home row" of his opponent is the winner of the game. If you initially set up your Checkers in squares "9" through "16," the home row for which you're aiming consists of squares "57" through "64." If you initially set up your Checkers in squares "49" through "56," the home row for which you're aiming consists of squares "1" through "8."

Drawn games are possible if both players loose all their Checkers before either succeeds in breaking into his opponent's home row.

Taking Turns

Player's alternate taking turns by making a "simple move" or a "lunge," after which the other player similarly takes a turn. There is no limit on the number of turns that may make up a single match. Play continues, one turn at a time, until one player wins. No "passing" of turns is allowed.

To determine who will take the first turn in a match, allow the younger player to go first if it's the first match being played between the same two opponents. In matches after the first between the same two people, the person who lost the previous match goes first in the new one.

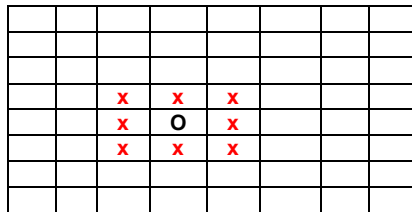
Simple Moves & Attritional Combat

A simple move involves moving one, some, or all of your Checkers from any one square into any one immediately adjacent square in any direction. Note, though, that multiple destination squares aren't allowed; see below.

If the square being moved into is occupied by one or more opposing Checkers, your move results in attritional combat.

If the square being moved into is occupied by one or more Checkers of your own side, you can't create a stack containing more than four checkers.

In the diagram below, a single Checker, or stack of up to four Checkers, starting in square "O," could potentially make a simple move into any of the eight squares marked "X."



If the square chosen to be moved into is entirely empty of the Checkers of both sides, the Checker or stack of Checkers making that move simply moves into the square and that player's turn is over. Let's say, however, the square chosen to be moved into already contains a stack of friendly Checkers that's three-high. In that case, the moving player couldn't move any more than one of his Checkers from square "O" into the new square, because friendly Checkers may never be stacked more than four high when playing this game. The excess Checkers in square "O" would simply be left in that square for that turn. They couldn't, as part of the same move, be moved off into any other "X" square or squares.

That same principle is used to resolve how many Checkers may move into a friendly occupied square no matter the exact numbers involved: no stack of friendly Checkers may ever be created that's more than four high (four is OK; five is right out).

Similarly, just because a player has the stacking space to move all his Checkers from one square into another, that doesn't mean he has to choose to do so. Using the same situation from above as an example, a player making a simple move from a square containing four (or three, etc.) of his Checkers might choose to move just one and leave the others stationary for that turn, or move two and leave the others in place for that turn, etc.

In cases where a simple move is made into a square occupied by one or more Checkers of the opposing side, the result is always attritional combat. That is, if you move into an enemy occupied square with, say, one of your Checkers, that

moving Checker of yours is thereby eliminated along with one opposing Checker from the square into which you moved. If you move in with two of Checkers, they are both eliminated along with two of the opposing Checkers in that square, and the same goes for moving in with three or four of your Checkers.

Combat is always perfectly and symmetrically attritional, no matter if the force of attacking Checkers is smaller, larger, or the same size as the force of opposing Checkers being engaged. If, for example, you moved into a stack of two opposing Checkers with a stack of three of your Checkers, those two opposing Checkers would be eliminated along with two your moving Checkers, leaving you with just one Checker actually moved into the new square. If you move a stack of your Checkers equal to the stack of opposing Checkers in a square, all involved Checkers from both sides would be eliminated, leaving the targeted square empty of both sides' Checkers at the end of your move.

A piece once eliminated in combat is out of play for the rest of the game, and should be set off to the side for the remainder of that match.

Note that when moving to engage opposing Checkers, the friendly Checker stacking limit of four doesn't pertain between the Checkers of the two sides in the battle square. That is, the stacking limit of the two sides' Checkers is calculated without reference to the other side's Checkers in that same square.

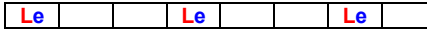
Lunges

A "lunge" move is a way to cover a lot of ground quickly, but at the cost of incurring relative disorganization within your forces.

When making a lunge, one or more of your Checkers from the square of Checkers making the move must always remain behind, in that original square, forming the "base element" of the lunge. The other one, two or three checkers in the square then make the lunge, one checker per square, starting in an immediately adjacent square and moving out in a straight line (diagonal is OK) from there. Not all available checkers need be used; partial lunges are OK and base elements may consist of more than one Checker left behind.

No friendly checkers may be in occupation of any squares of a lunge at the start of that lunge move. Such friendly checkers would serve as complete blocks to a lunge move made into them. Similarly, no enemy checkers may occupy any squares of the lunge except for the last square of that lunge and, in such cases, attritional combat takes place in that last lung square.

Le			Le			Le	
	L		L		L		
		L	L	L	L		
Le	L	L	4	L	L	Le	
		L	L	L			
	L		L		L		



In the diagram above, a stack of Checkers four-high, starting in square “4,” could potentially lunge along any of the eight straight pathways shown as “L.” In each case, one or more Checkers would be left behind, throughout that entire lunge move in square “4,” and then one Checker would be placed in each square of the chosen “L” path (forming a ‘string’ of lunged Checkers). It isn’t allowed to lunge along more than one “L” pathway during a single lunge move.

Also note that a friendly Checker starting the turn in any of the “L” pathways in the diagram would be sufficient to block all lunging into and through that square that turn. Lunges may never be made into or through any square that already has one or more friendly Checkers in it.

Similarly, if one or more opposing Checkers occupied any of the “L” pathway squares other than the ones marked “e,” their presence would serve to block a lunge beyond that position. And if you lunged with a Checker (never more than one) into such an enemy occupied square, your lunging Checker and one of the occupying enemy Checkers would thereby be eliminated in attritional combat, possibly leaving that square entirely empty at the end of that move.

As with simple moves, a player making a lunge need not lunge to the full distance available to him. That is, if you had a stack of four Checkers, you could choose to lunge with just two of them, leaving in place a base element of two Checkers in the original square. Note there’s therefore no functional difference between a lunge of one hex and simple move made by one Checker.

Notes on M.A.D.

The unique characteristic of *M.A.D.* comes from the fact combat losses are always perfectly and inescapably symmetric. There is no way to gain an advantage through combat alone. Combat is only effective in giving you an advantage over the opposition when it is combined with adroit maneuver. In every engagement, both sides always suffer the same amount of damage. The only good reason for combat is to gain position.

End of File