

6 MM V.1.1

1.0. GENERALITIES

1.1. All unit bases are 45mm X 45mm. The board is divided into a grid of 50mm squares. 1 unit per square is the maximum permitted. Units and/or terrain are deemed features that occupy all of that square. If in doubt (e.g. rivers) is half or more of the square is covered, it is deemed to all be covered, and vice versa.

1.2. Every calculation round all fractions of a half or more up; all others down.

1.3. 'Diagonal Rule': half squares along a diagonal line DO NOT count as within range. With all other diagonals, any moves or ranges along a diagonal beyond *one square* deduct one. Each – moving adjacent along a diagonal is one square, moving two squares along a diagonal means a maximum move of one square, three squares two squares, and so on.

2.0. UNIT TYPES

2.1. 'Permitted' types of unit are:-

INFANTRY (INF). Close order 'heavy infantry' troops who fight shoulder to shoulder in ranks, mainly with contact weapons. There are two sub-types. INF/A are armoured; INF/U are unarmoured.

WARBANDS (WBD). Loose order tribal and irregular style warriors, usually with a fierce charge.

PIKES (PKE). Close order troops who fight shoulder to shoulder in ranks with long pike weapons, and usually some armour protection. For convenience include here war elephants.

ARCHERS (ARC). Close order troops who fight shoulder to shoulder in ranks with bows, longbows, or crossbows.

MUSKETS (MSK). Close order troops who fight shoulder to shoulder in ranks solely with volley-style firearms.

SKIRMISHERS (SKI). Open order troops who fight as a swarm, with an assortment of missile weapons and/or firearms, and/or with contact weapons, and who were able using cover. There are three sub-types. SKI/F are on foot; SKI/M are mounted; SKI/S are 'heavy' infantry support weapons like HMG and mortars that carry a heavier 'punch'.

CAVALRY (CAV). Close or loose order troops who fight mounted. There are two sub-types. CAV/A are armoured/'heavy' horse; CAV/U are unarmoured looser troops; including camelry.

ARTILLERY (ART). Heavy gun weapons and machines; and their transport. Include here anti-aircraft artillery

TANKS (TNK). Armoured fighting and/or transport vehicles.

AIRCRAFT (AIR). Strike or rotary wing aircraft used in a battlefield context.

Ok, we know what you're going to say. 'What about MSK with their own skirmishers?' 'What about mechanised infantry?' All these issues will be factored in and explained later. Class chariots as CAV or SKI/M as most appropriate.

You will need duplicate stands in some cases. E.G. SKI transported by half-tracks will need a TNK stand when moving, and a SKI/F or SKI/S stand for when dismounted; a close order MSK 2 X SKI/F stands if able to deploy into open order (and so forth).

'Generals' are classed as being one of the above type of unit. E.G. Alexander The Great would therefore be a CVA/A; Napoleon a SKI/M.

2.1. Unit Strength Points

2.1.1. Units are allocated a number of 'strength points' based upon a combination of their numbers, morale, training, motivation, cohesion and a whole host of other factors (see, I told you we'd mention the built-in skirmishers). Each unit is reckoned to be about a battalion / regiment / battery size; or a company of tanks of flight or aircraft. Let's keep it nebulous, Ok?

Here's how you calculate:-

INF; PKE; MSK. Base strength 6.

WBD; ARC; CAV. Base strength 5.

ART; SKI; AIR. Base strength 4. (see also 8.3 for AIR)

TNK. Base strength 5 (lightly armoured); 6 (medium armoured); 7 (heavy); 8 (super heavy)

If troop quality rated 'Poor' – Deduct 2

If troop quality rated 'Good' – Add 2

If troop quality rated 'Elite' – Add 3

If SKI/F or SKI/S post c.1906 – Add 2 (for superior and variety of c.20th rapid-fire weapons)

If unit is a 'General' – Add 1

If PKE unit that is an Elephant – Deduct 1

For agreed historical characteristics that improve performance above the norm (e.g. MSK with skirmishers; the recognised and agreed superior training or morale of historical prototypes) a further 1 point may be added. Equally, in cases of historically recorded weak performance, a further point can be deducted.

In all cases there is a 'cap' to a unit's strength points to a maximum points value of 15, and a minimum points value of 4.

2.1.2. Obviously using a 'points' system enables balanced forces to be picked –

a) If doing this add the additional 'hit points' of ART and TNK from their factors to their 'cost' (see 5.2.). E.G. A 'medium' TNK unit with a 75mm gun would cost $6 + 3$ points = 9 points to field.

b) Where 'duplicates' are used, take an average cost – e.g. a SKI/F @ 4 points in a TNK @ 5 points = 4.5 points cost.

c) 'Soft' motor vehicle transport for ART or foot costs 1 point extra. These can be 'dedicated', or allocated as required.

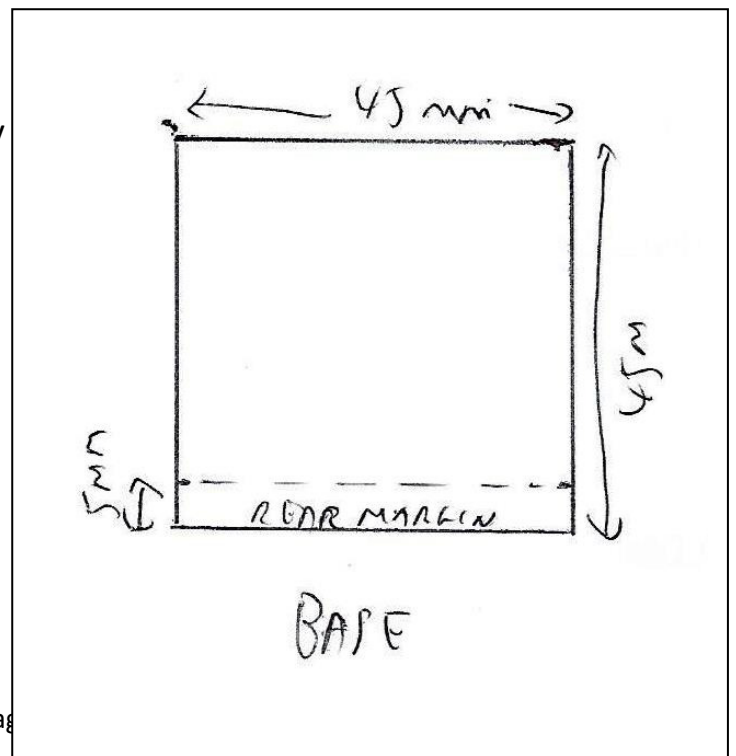
d) SKI/S costs 1 point extra, as these are more effective.

e) ART without transport cost 2 points less.

2.1.3. Paperwork and models.

Draw up a roster for your army. Each unit can be labelled like this, optionally with distinctive detailing on its 'rear margin', and records kept of paper of changes in strength.

E.G. '1st Battalion, The Borsetshire Regiment. MSK'. As the game progresses and the Borsetshire's strength reduces, notes are kept on paper. If the battle is part of a series, a campaign, then the paper record can be modified to show reinforcement and/or attrition.



2.1.4. Units may need to be non-standardised for play, and this is perfectly acceptable. The aim of the rules is flexibility. E.G. A Tiger tank is a slow speed, heavy TNK. A Sherman Firefly is a medium speed TNK – but because of its superior 17pdr/76.2mm gun is deemed to fire as if a heavier 88mm calibre gun at armoured targets. A Persian ‘Immortal’ unit could be deemed to function each turn as either an INF/U or ARC, to choice. Likewise, a Viking WBD forming ‘Shieldwall’ could instead function as INF/U. In the Renaissance period a CAV/A ‘knight’ unit could switch to SKI/M if acting for a turn as a ‘Reiter’. A Napoleonic Dragoon unit could function as a CAV/U; or dismount as a SKI/F. In a c.19th colonial setting our 1 X MSK lads from the Borsetshires could move out to open order to become 2 X SKI/F.

3.0. SEQUENCE OF PLAY

3.1. The sequence is modified I-go U-go. Each round of two turns roll first a D6 for initiative. The highest side has ‘initiative’ and takes a turn first, then their opponents. Each side then takes a turn, before the sequence begins again:-

Each turn each side:-

- 1) Check command distances are fulfilled
- 2) Moves its units
 - a) compulsory routs
 - b) compulsory move of units back into command distance
 - c) conducts other moves
- 3) Shoots its units
- 4) Close Combat attacks with its units
- 5) Any other business (including morale results and rallies) is concluded

3.2. Set out terrain. This should confirm to the time and place where the game is set.

3.3. Decide who sets up their army first, and where. We recommend now more than 4 squares in from a board edge. In all cases leave 1 x square around the perimeter of the board free of all units.

3.3.1. A convenient way of doing this is to dice for ‘background initiative’. The winner can place first, *or* allow an opponent to do so.

3.4. The game ends when one side quits the field, or concedes.

4.0. MOVEMENT

4.1. '3C'

4.1.1. Command, control and communication ('3C') is factored out in these rules as an issue of 'movement'.

4.1.2. Without a dedicated 'General' unit attached no unit may move more than two squares from another that can trace a continuous line to their commanding, or junior, 'General' unit (i.e. one square in between). For armies with access to radio communications this distance is extended to four squares (i.e. three squares in between). Those out of command must move to establish a new line of communication.

4.2. Move Distances

4.2.1. Maximum move distances for units are:-

INF, ARC, PKE, MSK, ART using animal transport	2 squares
WBD	2 squares (3 if charging)
Slow speed TNK, Foot SKI	3 squares
Medium speed TNK, Mounted SKI, CAV; ART and Foot using 'soft' motor transport	4 squares (5 if unarmoured CV/A charging).
Fast Speed TNK	6 squares.
Rotary AIR	2 to 10 squares
Fixed-wing AIR	8 to 24 squares

Animal mounted foot troops may move at a rate of 4 squares, but they must deduct a squares distance to dismount and fight. Mechanised foot move at the speed of their given transport, but they must likewise deduct to dismount to fight (for rules governing infantry combat vehicles see below, 5.1.e.) Likewise artillery must deduct a square to limber and/or unlimber.

Changing the facing of a unit counts as being a square's movement. To move and shoot also deducts a square's movement.

4.2.2. Terrain Restrictions

Terrain squares also affect ground movement:-

HILLS: Steep slopes deduct 1 square for movement up them.

WOODS: Each square traversed costs double (e.g. counts as two squares), except SKI who simply deduct one square from their total move *and* ART and TNK who can only move a maximum of 1 square through.

BUILT-UP AREAS (BUA): Maximum move through of 1 square for all units.

Marsh: Deduct one square from total, and are impassable to ART, TNK and motor transport.

RIVERS: Crossable only at recognised bridges or fords, except for SKI not using motor transport, who can cross at double distance cost (i.e. a river 1 square wide counts as 2 to cross). Some water features may be deemed totally impassable.

ROADS: Add 1 square to move if moving entirely along – double this if TNK or using motor transport.

4.2.3. Other Movement Rules

Units can move and shoot, and can move and attack in close combat (see 6.0.).

Interpenetration. Only SKI can move through other units, and vice versa. Other units can 'swap' adjacent squares at the cost of two squares movement.

Charges:

a) Units making a charge must move straight, turning at the very start of the move, no more than one facing for the usual deduction.

b) Diagonal rule. A charge along a diagonal *must end in* a flat square edge facing, or it cannot be made

c) PKE, TNK, SKI/S, ARC and ART cannot charge or be charged.

d) No unit can count as making a charge to the front of ART, PKE or SKI/S; but may move into close combat with them at no charge bonus.

e) There is no bonus is given for a charge move down a road (see also 6.1.).

5.0. SHOOTING

5.1. Arcs And Ranges

Only ARC, MSK, ART, SKI, TNK can shoot at a single target within 45° of their facing. AIR shoot at a single target directly to their front, or that they pass over.

- a) ARC with bows, SKI/F, SKI/M and MSK can shoot 1 square; ARC with longbows MSK and SKI/F with rifles can shoot 2 squares. SKI/S can shoot 3 squares.
- b) ART can shoot 2 squares if torsion type; 3 squares if muzzle-loading gunpowder type; 4 squares if muzzle-loading riflebore type; 5 squares if breechloading riflebore type to 79mm in calibre; 6 squares if breechloading riflebore type to 80mm to 130mm in calibre; 7 squares if breechloading riflebore type above 130mm in calibre (rocket artillery counts as the best fit gun equivalent).
- c) TNK shoot as per comparable ART, only minus two squares in range (e.g. an 88mm gunned Tiger tank unit shoots 4 squares).
- d) Infantry Combat vehicle TNKs, whose SKI remain mounted, can shoot as if SKI/S.
- e) AIR. These 'drop bombs' on a target below or strafe whilst flying over; rocket-armed can shoot up to 2 squares during or at the end of their move.

5.2. Firing Procedure

5.2.1. Roll a D6 dice to obtain the number of 'hit points' inflicted. These are then deducted from the target. A negative total indicated no hits have been scored on a unit.

Add:-

½ for the units current strength (e.g. if unit strength is 6 add 3)

Deduct 2 if target is SKI

Deduct 2 if firer is SKI

Add 2 if firer SKI/F or MSK armed with breechloading rifles (or superior) small arms

Add 3 if firer SKI/S

Add 1 if firer muzzle-loading gunpowder type ART

Add 2 if firer muzzle-loading riflebore type ART

Add 3 if firer breechloading riflebore type ART to 79mm in calibre

Add 4 if firer breechloading riflebore type ART 80mm to 130mm in calibre

Add 5 if firer breechloading riflebore type ART above 130mm in calibre

Deduct 2 if target lightly armoured TNK (e.g. scout cars, APC), or if INF/A and shot at by non-gunpowder weapons

Deduct 3 if target medium armoured TNK (e.g. Sherman tank)

Deduct 4 if target heavy armoured TNK (e.g. Tiger tank)

Deduct 5 if target super heavy armoured TNK (e.g. Challenger tank)

Add 2 if firing on stand's flank

Add 3 if firing on stand's rear

Next, divide this result by half for indirect fire (we include here unguided AIR bombs).

Next, being in 'cover' (woods and BUA) again *halves* the total number of hit points inflicted.

Next, the defending player rolls 1 X D6 to negate this number of hits suffered as harmless.

N.B. TNK shoot here as per comparable ART, only minus one point (e.g. an 88mm gunned Tiger tank unit shoots as if having a 75mm gun). AIR 'bombs' count as if a '1 shot' 130mm calibre artillery, strafing AIR as if MSK with rifles. Air-to-ground rockets count as per comparable artillery.

6.0. CLOSE COMBAT

6.1. Only ground troops can conduct close combat. Units inflict casualties on their own turn only. Units fight to the front only, and a unit contacted on more than one flank may suffer several attacks. Units may turn to face on subsequent turns, unless already frontally pinned in a combat

TNK and PKE cannot 'charge' (see 4.2.3.). A charge is defined as a declared move into a square in an attempt to capture it and force the opponent unit out, and/or to destroy it (see also 4.2.3.). Once close combat has begun further charges may not be declared – so a charge move confers bonus *only on the first turn of contact*.

6.2. Close Combat Factors

Roll a D6 dice per unit to inflict hits, and add the following:-

½ for the units current strength (e.g. if unit strength is 6 add 3) UNLESS when attacker is AFV or motorised when only ¼ current strength is added.

ADD 2 If attacker is INF/A; INF/U; MSK with bayonets; and/or mounted attacking Foot or ART

ADD 1 If foot unit attacking TNK, SKI/S, or PKE 'elephant' stand – DOUBLE this is attacking them in woods or BUA

- ADD 1 If attacker is charging WBD and/or if attacker is a 'General'
- ADD 1 If attacker SKI/F post 1915
- ADD 2 If attacker is PKE, or attacker has charged into close combat
- DEDUCT 1 If defender is CAV/A and is being attacked by non-firearms.
- DEDUCT 2 If attacker is SKI
- DEDUCT 2 If defender is INF/A and is being attacked by non-firearms.

- a) Defenders of terrain (including hill crests) *halve* hits suffered.
- b) Attacking the flank of rear of unit doubles the hits inflicted – double again if attacking the flank or rear of a PKE unit.
- c) The defending player rolls 1 X D6 to negate this number of hits suffered as harmless.

'Infantry Squares' can be formed c.1700 plus By MSK units. These may not move or shoot but count as if PKE if attacked from any angle (i.e. cannot be charged).

6.3. Close Combat Results

- a) the attacked units takes strength point losses accordingly.
- b) If the unit suffers hits *less than half* of its current points immediately prior to the combat, it remains in place, is reduced in strength, and combat continues.
- b) If it suffers hits *more than half* of its current points immediately prior to the combat, it is reduced in strength, *and it recoils one square away from its primary attacker* (the one to its front). If it cannot do this it is eliminated. The primary attacker may then move forward to occupy the vacated square
- c) Units with no points left are eliminated.

7.0. MORALE

7.1. Units are eliminated when all their hit points are lost. If they are reduced below half strength the unit will move to flee the table for one standard move distance – and may be rallied on a roll of 5 or 6.

7.2. If an army loses 10% of its units the player rolls a D6. On a 1 it will retreat from the board. If it loses 20% of its units it will retreat on a 1 or 2. 30% - on a 1 to 3 (and so forth). It is possible both sides may retreat from an engagement.

8.0. OTHER RULES

8.1. Entrenchments and other purpose built fortifications count as 'double cover'. If used they cost 2 points per square covered.

8.2. Off board heavy artillery (above 100m in calibre) can fire ten squares onto the map. If used they cost as per on table artillery. Deduct 3 from their shooting to account for their decidedly indirect fire.

8.3. AIR make one pass over the board and can fire once, before leaving to refuel and re-arm, returning only upon a roll of a D6 of 6 after a minimum of five turns. Their 'warload' in bombs and rockets will need to be set and agreed before play.

Typically we suggest:-

Piston-engined fighter	1 X SKI/F (1 point extra)
Piston-engined fighter/bomber	1 X SKI/F + 1 X bomb or rockets (2 points extra)
Larger bomber	2 X bombs (3 points extra)
Jet-engined fighter/bomber	1 X SKI/F + 2 X bombs or rockets (4 points extra)
Attack helicopters	1 X SKI/F + 2 X rockets (5 point extra)

Unarmed aircraft cost no additional points to field.

8.4. Chemical weapons. These can be fired by off-board artillery (see 8.2.), or dropped by AIR. Any unit hits loses an extra D6-2 strength points, so may not be especially affected.

8.5. Paradrops and air landings. These are represented by slips of paper 12 square, if not landed from transport AIR such as helicopters. They are dropped from a height 2' above the table, and where they land is where the unit they represent lands. They take 1 X D6 – 3 hits in landing. Those out of the '3C' range (see 4.1.) must move into it as soon as possible – and may not shoot until back in control range. Landing and/or take off costs 10 squares distance.

8.6. Visibility is unlimited in the open. Terrain and units cannot be seen through (except for SK). Terrain cannot be seen into more than 1 square.

APPENDIX

Some sample matched 'fifteen unit' armies:-

Seutonius' Romans

7 X INF/A (Legionaries) value 8; 3 X WBD (Auxiliaries) value 7; 1 X ARC (Auxiliaries) value 5; 2 X CAV/U value 5; 1 X CAV/U value 6 (General); 1 X ART value 3 (scorpion bolt shooters). TOTAL: 101 points

Boudicca's Britons

10 X WBD value 5; 2 X CAV/U value 5; 1 X CAV/U value 6 (General on chariot); 2 X CAV/U (chariots) value 5; 4 X SKI/F; 2 X SKI/M. TOTAL: 100 points

Two 'ancient' armies. Clearly this is more than 15 units for the Britons, but it reflects their poorer quality of troops.

Napoleon's French

6 X MSK (Line Infantry) value 7; 2 X MSK (Guard Infantry) value 10; 2 X CAV/U value 7; 1 X CAV/A (cuirassiers) value 7; 1 X CAV/U (General) value 8; 2 X ART value 4 (smoothbore cannon); 1 X SKI/M (Light cavalry) value 6. TOTAL: 105 points

Wellington's 'British'

6 X MSK (Line Infantry) value 8; 1 X MSK (Allied Line Infantry) value 6; 1 X MSK (Guard Infantry) value 10; 1 X SKI/F (95th rifles) value 8; 1 X CAV/U value 5; 1 X CAV/A (Scots Greys heavies) value 6; 1 X CAV/U (General) value 8; 2 X ART value 4 (smoothbore cannon); 1 X SKI/M (Light cavalry) value 6. TOTAL: 104 points

Two roughly comparable 'horse and musket' armies.

Rommel's 'Afika Corps' Germans

5 X SKI/F (Infantry) @ 8 pts in TNK (lightly armoured half-track transports) @ 5 pts = value 6.5; 1 X SKI/S (Infantry) @ 9 pts in TNK (lightly armoured half-track transports) @ 5 pts = value 6.5; 5 X TNK (medium Pz 4) value 9 pts; 1 X SKI/F (Infantry General) @ 9 pts in TNK (lightly armoured half-track transports) @ 5 pts = value 7; 1 X AIR (Stuka dive bomber) value 6 points; 2 X ART (88mm guns with soft transport) value 11. Total 120 points

Monty's 'Desert Rats' British

5 X SKI/F (Infantry) @ 8 pts in TNK (lightly armoured half-track transports) @ 5 pts = value 6.5; 1 X SKI/S (Infantry) @ 9 pts in TNK (lightly armoured half-track transports) @ 5 pts = value 6.5; 5 X TNK (medium Shermans) value 9 pts; 1 X SKI/F (Infantry General) @ 9 pts (in soft motor transport) + 1 pt = value 10; 1 X AIR (Hurricane fighter bomber) value 6 points; 2 X ART (25pdr guns with soft transport) value 11. Total 120 points

Two roughly comparable 'mechanised' armies.

SCI-FI & FANTASY

These rules are amenable to sci-fi and fantasy battles by a few simple adaptations; care being taken to not make 'magic' or 'tech' over-powerful.