

Field Engineering Rules by Wayne Rozier

In nearly all eras of warfare the weapon of choice for the smarter soldier has been the entrenching tool – or variant: pick, shovel, axe, etc. Just to name a few – Ancient Greeks (see Thucydided), Romans (Caesar), Han – Ming Chinese, 100 years War, 1776, Napoleonic, ACW, Crimea, WWI and WWII, Korea, Nam, etc. Across the ages the grunt has always known to dig first and shoot later. Warmaster has yet to give us specific engineer troops or engineering rules for our infantry units. This article attempts to correct this and allow generals to command units to dig-in or prepare static defences.

Fullscale fortifications take a long time to fabricate and erect. They were either fashioned at home and transported to the chosen sites, then erected by skilled artisans. Or more often they were built from local stone, timber or earth. This is not a battlefield activity and as such does not qualify as battlefield engineering. The use of mobile forts is excellently covered in the Kislev list and is costed as a unit. It should be recognised that any fortress rules should have a point system associated to it. Currently we have points for prepurchased items - siege towers, rams, mantlets, mangonels, etc. But we don't have a way of producing them on-site or costing the addition of an ability to make items on a battlefield. I've introduced in these experimental rules new kinds of field works some rules governing construction on the battlefield and effects. There is no reason why a game cannot

begin with some of these constructs already in place for one or both sides as long as it fits the scenario.

Carrying or Porting

A unit cannot carry more than one kind of device and a stand can only carry one thing. So, a unit can only be armed with mantlets or stakes or caltrops or a Sow or a Ram or a Tower or lumber, etc. Never a combination.

WAGONS

Wagons can carry up to three items in a mixed load per wagon – players need to agree but three items per wagon looks okay to me. Wagons move as chariots (30cm and can't cross linear obstacles) but can only be issued one command per turn. A wagon can load and move in one turn or unload and then move. Once a wagon moves it cannot load or unload until the next turn. To reflect the universal obstinate nature of wagon drivers, loading or unloading can only occur after a successful move command and as stated is the first thing the wagon unit does before moving.

Wagons driven back by shooting do not drop their loads. They are deployed in units of three wagon stands. They cannot be ordered to charge – they will not pursue or advance into fresh enemy. They must use Initiative to evade and will not load or unload before evading. They count toward enemy Victory points but as they are non-combatants they do not count toward the break point.





Empire Wagons

A wagon unit can be ordered to convert itself into a barricade. This takes one turn as the drivers push their wagons over in their current position and then leg it home. Replace each wagon stand with a barricade section, and award the opponent with 20 Victory points.

Victory Points

Unless stated in the stats for a fortification type, the destruction of a facility only gives Victory points to the enemy if the players have agreed as part of the scenario. I suggest that these are awarded on the basis of the points cost given in the list.

Field Engineering Works BARRICADES

These are rapidly erected obstacles made from whatever material there is to hand. Making barricades requires that there are some loose items readily available. Any infantry or artillery unit can erect a barricade.

The unit must be adjacent to a village or a stockpile of cut wood or loose stone (ie, next to rocky terrain). Upon successfully receiving the 'build barricade' command each stand in the unit erects one 4cm long 1cm deep linear obstacle.

A barricade confers cover on any unit immediately behind it as if it were a hedge or wall. The unit has the status of defended for both mêlée and shooting. Essentially, a wall has been erected. It is less sturdy than a properly built wall or an ancient hedge and as such should have 50% less hits when being targeted by artillery.

Pre-battle a 12cm barricade costs 5 pts. deployed before troops set up.

STAKES

These are nasty pointy sturdy poles of wood about 6' long – deployed by bashing them into the ground, pointing toward the enemy. Generally, each man in a unit carries a stake. So a 10 man deep 50 man wide unit would deploy 500 stakes – 10 deep by 50 paces wide in the time it takes two men to hammer in two stakes (one holding, one hitting). Pretty quick really!

Not usually made on the battlefield – but it's possible. On command each stand in the unit can convert one Lumber token into one Stake token (see palisades for rules on chopping wood). Pre-battle stakes cost 5pts per stake stand. A foot unit can carry one undeployed stake stand per element. Represented as a piece of cocktail stick when being ported and as a 4x2cm stand with sharp points when deployed (cocktail sticks are too massive for Warmaster scale, needles are OK but are hard to fashion – straightened and cut to size brass paper clips are best – they do less damage to the unwary hand – oweee!).

Stakes are allowed for most infantry troops but not Goblins, Bretonnian Peasants, Skinks, Trolls, Ogres, Skeletons, Wood Elves or troops that do not suffer drive backs from shooting. These are deemed too weak, stupid, moral, or aggressive to use stakes. If Warmaster ever introduces pike armed troops then I suggest these too are not allowed to carry stakes. In fact pike armed troops can't carry anything else except their pikes.

On a successful 'deploy' command a unit in line formation carrying stakes retires 2cm and places a line of stake stands in the vacated gap. On a successful command 'remove' a unit adjacent to and behind the



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Archers deploy behind some stakes

the stakes removes stake stands, shouldering or discarding the stakes, and occupies the gap created. Neither of these manoeuvres can be executed when in contact with the enemy or can result in contact with the enemy, nor can they be done on Initiative. An order must be given troops carrying slung stakes can be given multiple commands in a turn (eg, - remove stakes, move, deploy stakes). Of course, the -1 Command modifier for each successive order applies. Troops in mêlée carrying stakes drop them, moreover if they charge, are pushed back, pursue, advance or move from where the stakes were dropped, for whatever reason, then the undeployed stakes are lost.

Effect of deployed stakes. Chariots and Wagons, Artillery and Siege towers cannot cross stakes, they should treat them as impassable terrain. The Empire Steam tank and Sows are unaffected by stakes – in fact they destroy any stand of stakes that they move across. Flyers can land in stakes but will suffer shooting attacks as normal – they will also suffer when they move out of the stakes.

Once deployed a stand of stakes has a front and back edge along its long sides. Troops at the back count as defended and gain a non-open advantage to chargers. Cavalry, infantry and monster stands that cross stakes from any side except the back suffer a normal shooting attack (roll drive back but don't move the troops; on a 6 the unit is confused).

If during a mêlée troops pursue across stakes not from the back then they suffer the same shooting attack, if troops are pushed back across the stakes (from front to back) then they too suffer shooting from the stakes. Remember, each troop stand suffers a shooting attack for each stake stand they partially or wholly move across.

Troops behind the stakes do not count as in cover when being shot at but count as defended and so roll one less Driveback dice. Once stakes are deployed they remain in place until a 'Remove' order or they are destroyed by artillery.

Stakes cannot be deployed in dense terrain, on rocky ground, roads, bridges, marshes, swamps, rivers. They can be deployed on open ground, hills, etc.

CALTROPS

These are nasty spiky balls that can be thrown out or deployed in front of troops. They cannot be made on the battlefield, cannot be retrieved and can only be used by non-missile armed infantry.

They may be used once – on command 'Deploy' or when charged. On use deploy a 4x2cm stand of caltrops for each stand in the unit adjacent to each deploying stand in any alignment. All stands must deploy or non deploy.

Every whole or partial stand of caltrops crossed or partially crossed by any infantry, cavalry, chariot or monster stand causes a



Infantry behind a log barricade

shooting attack on that stand. They do not affect flyers or machines and do not discriminate between friend or foe.

Troops adjacent to caltrops at the start of their turn can be ordered to clear the caltrops (this is not retrieval). Whilst caltrops were re-used around forts and fixed defences in battlefield terms not all could be recovered and in fortress terms they would go back into the baggage train.

Troops carrying caltrops are indicated by placing small spiky things on or behind each stand. There is no movement or command limitation placed on troops carrying these devices. Moreover troops do not discard them on excessive drivebacks, nor are troops required to drop them in order to engage the enemy.

PLASHING

This is the weaving of branches into a wooden wall around or near a wood. Really it's a Wood Elf trick but is also available to Kislev Axemen, Bretonnian Peasants, Goblins and Skinks. Bigger greenskins wouldn't demean themselves! Normally this is made on the spot and not transported to a battlefield – however armies could buy these as battlefield emplacements or camp walls before deployment.

Plashing cannot be bought deployed and those wishing to make it must be within 12cm of a wood or forest or dense brush. Not orchards, as there is not enough loose wood about.

A unit within or touching a wood or similar terrain (see above) can be given a command to 'make plashing' (only one stand needs to be touching the wood). It takes the following successful orders:

1. Gather Wood – Place one twig (hint – Use

real twigs) behind each stand in the unit – Wood Elves skip this phase on move straight to Turn 2.

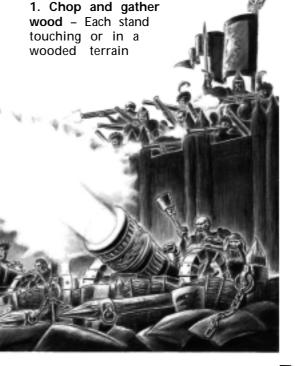
- **2. Fashion Plashing** Place face down wooden walls (one per stand).
- 3. Emplace Erect one stand per stand of infantry fashioning the wall. This can be up to 12cm away from the wood and is adjacent to at least one stand of the deploying unit Note each stand of the unit does not have to be adjacent to the deployed plashing.

Plashings make a linear obstacle and give a cover benefit and a defended status to the troops behind them. If the plashing is around the wood then troops in the wood and behind the plashing now count as fortified against mêlée and non-artillery missiles.

PALISADES

These are really strong wooden walls usually erected behind a ditch and stakes. Often requires prefabrication – 20 pts per deployed (includes ditch) or 10 pts per undeployed stand. Fabrication on the battlefield is possible but difficult. Can only be made by infantry. Cannot be done by Goblins (too weak), Skeletons (not skilled) or Trolls (too stupid).

This requires a number of successful orders:



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feature rolls a D6 and on a 4+ wood is chopped. Place a match with the unit (note this is not the same as gathering loose branches for plashing).

- 2. Move Wood Units can carry one pile of wood (match) per stand. Wood can be moved and stock piled in a location where it can then be fashioned into a palisade. A unit carrying wood can only be issued a single command that turn. Wagons or baggage units can also transport wood and other things I suggest six items per stand.
- 3. Build Palisade Infantry units can 'attack' the wood with their basic attacks requiring a 4+ to make a stand of unerected palisade (yeah, I know it looks a bit quick but it isn't really).
- **4. Erect** An infantry unit can erect a palisade section (or dismantle an erected section if that's the order). No dice required, just a successful command.

A stand of infantry can carry one section of dismantled palisade and only move 15cm per turn whilst carrying the palisade. Only one command may be issued per turn The unit cannot fight and act as porters – the palisade will be dropped if engaged in combat. If driven back from shooting the unit will drop the palisade section. Discarded palisades can be recovered by moving on to them or destroyed if the enemy moves onto them.

Erected palisades counts as hard cover and fortified against shooting attacks (+6 to hit -2 Drive back dice). In mêlée they confer defended status and soft cover to the defenders (+5 to hit, not in open). If, however, the palisade section is placed at the top of a mound made by a ditch or on a hill then troops behind the palisade and uphill to enemy count as fortified in mêlée.

Really paranoid generals deploy stakes on the ditches and/or caltrops in front of any gates. For troops to enter/ leave a palisaded fort at least one non-ditched opening or barricade must be included in the configuration.

TRENCHES, DITCHES AND OTHER EARTHWORKS

Bastions and Redoubts: We're not talking about deep networks of trench systems as in WWI but buttressed redoubts and protective cover made from earth, wood, etc.

Ditches: Each infantry unit ordered to dig can fashion a 4cm length of ditch on a 4+. Roll one dice per stand. Each ditch section is placed under the unit. A single ditch is a 4x4cm stand, with a 4x2cm depression with 1cm to 2cm of mound at the front and back of the stand. A ditch confers uphill advantage to those behind it (on the uphill section) and negates the charging enemy the 'in the open' bonus. Ditches are not linear obstacles to chariots, however they are obstacles to covered rams, sows, siege towers, steam tanks and other machines. A unit in a ditch does not have a defended bonus in mêlée or cover from shooting – moreover they are still classified as in the open (downhill from any enemy chargers).

Ditches cannot be dug in soft sand, bog, marsh, wood, villages, rocky ground, ruins, rivers, etc. Only on open ground or hills. In following turns a ditch can be converted to a trench or redoubt.

Trench: Each infantry unit ordered to dig a trench may convert a ditch into a trench on the roll of a 4+ (one roll per stand). Each stand in a ditch can replace it with a trench stand. This confers fortified status against shooting for troops in the trench but a worse than open status in mêlée. There is no



charge bonus against troops in a trench but they are hit on a +3 rather than a +4. Trenches are linear obstacles. I regard the trench as an optional rule – used in sieges to get close to the enemy without being shot at. But not sure about its use in Warmaster.

Redoubts: A ditch can be converted to a redoubt on the roll of a +5 (in the same manner as making a trench). This makes a 4cm long mound or

wall of braced earth to the front of the ditch. Troops count as defended and in cover to both shooting and mêlée across this mound – other mounds behind and to the side can also be added on further rolls. To dig ditches and make earth defences takes a command and troops doing this cannot be given any other commands in that turn. Artillery can occupy ditches and redoubts.

Bastions: A redoubt can be converted into a bastion by the addition of chopped wood (see palisades) or quarried stone. Just issue the order and each infantry stand of the unit can convert one section of redoubt to bastion by the consumption of one Lumber token (a match!). They must be in possession or adjacent to a wood stock pile. A bastion gives fortified status to the troops within it.

Pre-battle costs for ditches, trenches, redoubts and bastions can be found at the end of this article

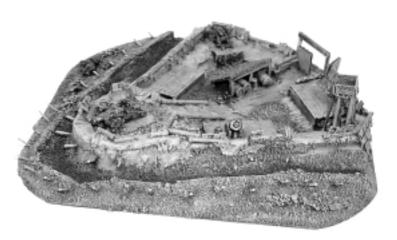
TUNNELS?

I like the idea of engineering tunnels – to go under walls but it is a very hard thing to do without maps. Any ideas?

FALAISE BUNDLES

Ways of filling ditches, trenches and moats so wheeled stuff can cross and any defended status is negated.

Infantry adjacent to or within woods can gather wood and make bundles for filling trenches. It takes one successful command to do so. Each stand can carry enough bundles (put a match next to the stand) to fill one section of ditch, trench or dry moat. Carrying bundles is awkward, only one



Empire Redoubt/Bastion

command is allowed per turn but full movement is allowed. Bundles must be dropped if the unit is engaged in combat and will be lost if the unit moves from its position during the mêlée. If the unit charges any enemy they are automatically discarded and lost when the charge is declared. A unit carrying bundles cannot carry anything else – ie, stakes, wood, etc.

Filling a ditch or trench occurs during the Shooting phase of a turn and the unit must be adjacent to the trench – moreover the trench or ditch cannot be occupied, as that would cause a mêlée. Each stand removes its load of bundles and rolls a D6. On a 4+ a 40mm section is filled (fill the ditch) otherwise the bundles fail to fill the ditch section. Trenches require a 5+ to fill and dry moats require a 6+.

Only infantry can make and deploy bundles. Bundles for a whole unit (one per stand) no matter how many stands, costs 5 points if pre-purchased.

OPEN PITS

Nasty anti-cavalry and chariot obstacles: Easy to do and easy for the enemy to spot and avoid. Pits cannot be dug in soft sand, bog, marsh, wood, villages, rocky ground, ruins, rivers, etc. They can only be dug in open ground or hills – useful to protect you from troops higher up the hill.

Any infantry with an armour save of 5+ or worse may dig pits. Issue a command, out comes the entrenching tool and they start digging! Each stand rolls to hit on a 3+. Place a Pit marker in the troop stand's position and move the troop stand away – of

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course this will possibly unform the unit for a turn. Troops digging pits need to be commanded to do so each turn and can only be given one command per turn. Infantry behind pits negate the 'charging in the open' bonus when being charged. They do not count as being in a defended position.

Pre-dug pits costs 5 pts and must be placed before troop deployment.

TRAPS

These are harder to make than pits and harder for the enemy to spot. Only light infantry (no save) or specialist troops (insurgents or engineers) can do this. Such troops include Dwarf Rangers, Elf Shadow Warriors ('not in the list gov!') and when looking at other troops you reckon on Night Goblins for sure (nasty things), Kislev Axemen (occupational), **Empire** skirmishers, Peasants for sure, Skeleton Bowmen I allow, I'll also add in Harpies for Chaos, and Skinks (nasty poison darts) for the Lizardmen. We'll have to wait to see the Dark Elf, Wood Elf, and Skaven lists but they should all have a unit type that can do this. Essentially, only the High Elves are without Trap makers in their army list – perhaps artillerymen should be considered for this duty. What do you all think?

As with pits, making traps requires an order but this can be done on any terrain type – including sand and bogs. Declare how many stands will attempt to make them (Goblins and Skinks must use all in the unit). Each stand rolls a D6 one at a time. On a 6 they place a covered pit or other Trap marker and move the successful troop stand away. Any 1s rolled causes any adjacent traps to spring and hit the deploying unit – see below.

Troops behind traps negate the 'charging in the open' modifier only if they are infantry and the enemy actually springs some of the traps. Each trap stand touched by each enemy stand or crossed by any unit (friend or foe) is sprung on a 4+ (remove the trap as soon as it is sprung). The trap does three normal hits to any unit except machines. Continue rolling to spring the traps until all enemy have tested or all the traps have been sprung. Any troops suffering hits from a trap (including setters that spring their own traps) roll for, but do not suffer, drivebacks – due to the heinous nature of the traps they become confused on a 4+.

Flyers that do not land on traps or land next to a trap are immune to their effect.

Machines can trigger traps but do not suffer the hit. So get that Steam Tank on mine clearing detail.

Traps cost 15 pts per stand and must be placed before deployment.

Optional rule: For each trap made place three stands – two are dummies and one is real. Mark on the underside which is which. Dummies are removed when sprung and no injury result from them. If playing this optional rule then each set (two dummies, one real trap), costs 20 pts.

Signals Troops

Normally a signals unit is required to establish order relay and Command points. In Warmaster game terms this infrastructure is manifested as a General, Hero or other figure with a command rating. Yet it is small enough not to be targeted. In reality many ancient armies possessed a much larger signalling and command infrastructure that went beyond an officer's immediate entourage.



Signals troops are purchased before the battle. They are represented as a single stand unit. If a signals stand is within 20cm of a commander issuing an order then the Command distance is considered as 20cm less than the actual distance, measured from the commander to the target unit. The effect is to give a +20cm command range and reduce the distance penalty by -20cm. The disadvantage is that the signals unit can be targeted and it needs to be given orders to move – orders to a signals unit always receives a +1 bonus (max is always 10).

Signal units are a stand of the cheapest

infantry or cavalry unit available to the army and have their stats. All armies can buy signals – this can be represented as drummers, runners, riders, flag wavers, bell ringers and other musicians, scrying Wizards, etc.

Signal towers, stations, etc

Signals troops can be given orders to erect signal posts. A signals unit can erect one post per turn. Roll a D6. On a 3+ the post is created. If they are erecting posts they cannot be given any other commands nor can they assist officers in giving orders – they are too preoccupied with erecting the station. A signal station affords +1 to a single command per turn to any unit within 60cm of the post. Signal stations must be 20cm apart for this benefit - a signal station within 20cm of another one cannot award a +1 benefit if the other station has already used this facility this turn. Once erected a signal station cannot be moved, however any unit adjacent to the station can be ordered to dismantle it by mêlée. It is destroyed if it loses a mêlée or takes three shooting hits in one turn – it does not suffer drivebacks. It is never included as a unit in a complex mêlée. It is a staffed building or post that can be destroyed.

Lost posts do not count toward break points and an erected post does not increase the army break point. However, lost posts do count toward Victory points. All armies can have signal towers, way stations, banners, beacons, magical totems, etc.

Engineers

Whilst I have not included rules for specialised engineers it is possible for generals to add these to their order of battle for certain scenarios. I recommend that you base them on a basic troop type and then move their stats about. Reducing armour looks sensible, as they have to perform heavy duty work. You can't dig in full plate and shield!

Now give them a+1 on all the Digging and Building rolls covered in these rules. I'd allow 1 unit per 1,000pts (or should that be +1 per 2,000pts?).

This article introduces a whole set of new engineering skills and features – players should agree on which rules are in or out of their games and maybe work up some specific scenarios to use these rules in.

ENGINEERS & ENGINEERING WORKS									
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Wagons	Wagon	1	3	6+	-	3	20	-/1	-
Signals	As chea	pest u	nit in ar	my (cav	or inf)*	1	*x2	-/1	_
Engineers	As chea	apest ir	nf unit in	army, -	1 Armou	ır* 1	*x2	-/1	_
Barricade	Fieldwork	0	3	0	_	12cm	5	_/_	_
Plashing	Fieldwork	0	3	5+	_	4cm	5	_/_	_
Stakes	Fieldwork	1	3	4+	_	4x2cm	5	-/-	_
Palisade	Fieldwork	0	6	5+	_	12cm	20/10	_/_	_
Ditch	Fieldwork	0	0	0	_	12cm	10	-/-	_
Redoubt	Fieldwork	0	8	4+	_	4cm	20	-/-	_
Bastion	Fieldwork	0	10	4+	_	4cm	40	_/_	_
Caltrops	Fieldwork	1	_	_	_	4x2cm	10	-/6	_
falaise	Fieldwork	0	0	0	_	3	5	_/_	_
Pit	Fieldwork	0	0	0	_	3	5	-/-	_
Traps	Fieldwork	0	0	0	_	3	15	-/-	_
Signals post	Fieldwork	0	3	4+	-	1	20	-/1	-