Duckbills

Tractics

Extensions or "Variants" not included in the Second Edition†

#4 April 17, 2023.

Installing track extensions on an M4, called grousers or duckbills

Bonus & Penalty Modifiers

Clarifications: Tractics modifiers adjust the *Base* to hit. *Bonuses* (numbers with a plus sign) add to the Base and *Penalties* (numbers with a minus sign) subtract from the base. One must roll the adjusted Base *or less* to hit. Bonuses and penalties are *not die roll* modifiers. *Rolling low numbers is best.*

Penetration Spreadsheet

Tom Trinko uploaded a spreadsheet on the *Tractics Facebook Group* on January 29, 2023 that automatically shows whether a round penetrates or not at various target attitudes. It calculates the effective armor of both the slope and target attitude columns for you. The example is of one gun (75L60 with four shell types) vs. a Pz. Kfw. IV H. *(See spreadsheet snippet at right)*

For those of you who not on Facebook, we are sorry that we could not figure out how to upload the spreadsheet, (file name: *Computing max penetration range release posted R1.xlsm)* perhaps because it is an Excel file with Macros.

HE/HESH vs. Spaced Armor

Clarification: In the National Vehicle Data Categories rules about Armor page 76 (top of the right-hand column) explain how the *plus*, "+", in armor is Spaced Armor:

> Armor: Thickness is shown in millimeters with any degree of "slope" in parenthesis and an added **spaced armor** plate after a plus sign.

The two numbers **should be added together** before comparison of penetration by Armor Piercing rounds.

Addition: When Spaced Armor is hit by HESH **and HE,** page 68's left column Note mentions HESH's inability to penetrate spaced armor, it omits that the same inability to penetrate the second armor **also applies to HE**.

Note: HESH **and HE** penetration blows that much earth or concrete off of any fortification it hits. HESH/**HE** hitting a sandbag, spare tracks, wire, or metal screen, or spaced armor on a vehicle loses its "spalling effect" (HESH) against the vehicle itself! **Likewise, HE can only penetrate the** *initial* **armor plate.**

For other combinations, the user must input the base armor values and the base gun penetration values vs range

The contents of a cell is the range, in inches, at which the firing gun can penetrate the specific part of the target type

If the cell is green then the gun can penetrate that part of the tank at that aspect angle out to the guns maxim[um]

If the cell is red then the gun can't penetrate that part of the tank at that aspect angle at point blank range

Note that while there are tables for all ammunition types the program doesn't check to see if the specified gun

			Fill in max range to penetrate table			
Target	Mk IV H				Maximum range for penetration in "	
Gun	75/L60					
Ammo Type	Normal	Shot view angle	Face on	Near quarter	45 deg Quarter	Far Quarter
	Turret	Face	all	all	136	40
		Mantle	all	128	72	8
		Flank	all	all	all	96
		Rear	all	all	all	all
		Top	all	all	all	all
	Hull	Glacis upper	64	24	none	none
		Glacis lower	64	24	none	none
		Flank	all	all	all	all
		Suspension	all	all	all	all
		Rear	all	all	all	all
		Top	all	all	all	all

†*Free Tractics play aids are linked at* **wargamecampaign.wordpress.com/category/duckbills/**

Here are photos that Tom Trinko posted on Facebook of his eight-foot-square sand table with micro armor. Wow!

Free Goodies

In September 2022, we uploaded Mike Reese's new scenario to the **wargame campaign scenarios** webpage. It is available as both a PDF and MS Word document. Another is coming soon.

All free play aids are linked from the **Tractics/Duckbills** webpage.

General ideas are available at Bill Owen's Wargame Campaign blog including **terrain and naturalist markers**.

The whole Tractics section can be found at **https://wargamecampaign.wordpress.com/category/tractics/**

†*Free Tractics play aids are linked at **wargamecampaign.wordpress.com/category/duckbills/***

Churchills are not LT

Correction: British Churchill tanks are not LT (Large Tank) and just ordinary medium tanks. Thank you to eagle-eyed Stephen Flannigan for catching this.

Where the dead wander

ZOMBIES in TRACTICS

By Mike Reese

Zombies. These are a rough set of rules to incorporate zombies into TRACTICS. Change as needed. They are based on using 28mm figures, 1"=10 meters. They should work with 15-25mm figures and 1"=25m scale as well. The distance zombies are attracted should be kept the same even if using the 1"=25m scale for heavy weapons.

Types of Zombies. These can be cataloged as slow or fast moving. Zombies are basically undead without the direction of a necromancer. Zombies move towards movement and noises. Quiet noise like running or walking when within 6", louder noises like releasing a bolt to load a firearm, close a refrigerator or car door, talking within 12"; and loud noises like a car crash, firing a firearm, an explosion within 36". Movement includes animals, humans, vehicles, helicopters, other zombies. It is possible a sheet or swing blowing in the wind would attract zombies. Zombie command distance is 2". Where more than one zombie are all in command distance of each other the zombies are a horde of zombies. Zombies in sight of each other will always move to form a horde. Zombie hordes move together using one die roll for the speed of the horde. Only roll for a single zombie to determine its speed when it is alone. Zombies go through closed doors, etc. only if they are stimulated by prey on the other side.

If there is a stimulus – noise, movement – zombies will move towards the greatest stimulus affecting them with movement #1, noise #2. They will go around obstacles if the obstacle allows them to. For example when they hear a diesel engine they will move toward it but if there is a building in the way they will be stopped only if the building is square to them or they are in a cul-de-sac. If the building is at an angle they will follow the angle until they can move towards the sound. If blocked by the building they will try to break into windows and doors to keep moving forward. Can they get through? Change the chance depending on the circumstances. Determine what chance a human would have, modify it for what a zombie can do compared to a human, and roll a d20 using the percentage you produce. Then, as the zombies pile up, determine if numbers make a difference? For something like the wall of a house numbers won't help, but if a glass window or door is there then the more zombies the better chance their weight and attempts to break down the wall will break the window. Even more may break down the door. For a wall how many zombies are needed to pile up at the base of the wall before some zombies climbing up the wall can get over it?

STARTING OUT WITH ZOMBIES.

Does an infestation start at the beginning of the game; or has the infection already started days ago? The scenario will determine how many zombies are on the table and where they are. Slow zombies with slow infection rates may be easily taken out. At least in the beginning. Fast zombies with fast infection rates can balloon in population. Keep in mind that slow zombies can also have fast infection rates.

How many zombies?

You don't need more than a hundred figures or so. Several companies pro-

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vide zombie models* − in numbers about 30 per box. Several games on zombies come with figures. Here purchasing only the figures is possible by contacting the company. Just check scales of the models versus the scale of your figures.

Using a marker or cards placed in buildings and on terrain before a game allows for surprise. Clearing out a village in Romania? A surprisingly quiet village. No one on the streets. No lights. No movement. Checking the first building you find it barricaded. The one next to it isn't and one of your teams moves in. There is a card under the building. A five of diamonds. Five zombies. And the game begins. Your team is in hand to hand combat with five zombies.

Your team, breaking into the barricaded building finds a three of hearts. Three scared villagers holed up because their neighbors have turned cannibals. What will the next building hold? What happened to your troops in the first building?

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*Availability. Some sources are: **verify the scale before purchase!** LAST NIGHT ON EARTH (22 28mm figures); PROJECT Z THE ZOMBIE MINIATURES GAME (23 zombies, 10 survivors, 6 biker gangers (add hints 28mm but check further); Mantic Games MGKWU33-1 Zombie Horde Miniatures, 39 zombies (28mm I think − no scale given); Etsy (3d printed); Ebay (1800 results Zombies); Studio Miniatures; Reaper Miniatures; Brigademiniatures; and a lot more on line.

†*Free Tractics play aids are linked at* **wargamecampaign.wordpress.com/category/duckbills/**

How these rules are used is up to the GM.

SMART zombies. Some zombies infected by biological agents retain some brain function. This may also include zombies created by magic while directed by their creator. These are usually slow zombies. The difference is that they may retain the ability to use weapons or even operate machinery, like vehicles. Their problem is they still feel the overwhelming need for brains or human flesh and blood. Almost a vampire but without the magical abilities of true vampires. No turning into a bat but the smart zombie may still know how to use a rifle or a sword or at the lower end a club. This type of zombie is rare but you never know when or if one or more will show up. (for those zombie models welding a weapon) How effective they still are with weapons is up to the scenario designer.

ANIMAL or other non-human zombies. There really is no good reason animal brains and flesh won't attract a zombie nor animals turning into zombies. Again, it depends on the scenario designer. Animal zombies are limited to carnivores and omnivores. This means your pet dog or cat or a bear bitten in the woods could become zombies. Slow zombie animals would move as a slow human but fast ones could move even quicker than they normally could. I would suggest 4d6 or 1D20 movement for something like a zombie dog or fox or wolf. In attack they should get a bonus in melee the same or slightly better (added +1) if a dangerous animal. Zombie sheep? Na.

Zombie Tractics

What is the cause of the zombie pandemic? And what attracts zombies?

Cause of Zombie Infliction		Attractions for a Zombie	
Slow	Magical, Biological, Chemical creation	Attracted by noise, sight of normal person, other moving zombies, moving objects.	Moves slowly toward the stimulus and joins to form horde
Fast	Biological (virus)	As a Slow Zombie	Moves as fast as possible toward the stimulus. Forms horde.

This chart provides for zombie movement. You can run from slow zombies but the fast ones not so much. Scenario designer, modify as you wish.

Zombie Move	Cross Country Move 6"	Cross Country Move 10"	Notes
Slow	1D6"	2D6"	Normal modifiers for terrain
Fast	1D6+2"	3D6"	Ditto

Fast zombies may have a bonus to their movement in difficult terrain types

How do you fight zombies? All zombies advance to eat but some only want a bite whereas others want a meal. Biting only zombies attack and then move on. Really hungry zombies share.

Making Zombies	
Zombie Attacks	**Melee Combat**
Chemical & Magic Zombies don't spread their infliction & attack to eat brains or live flesh, including animal flesh.	These zombies all attack the nearest edible figure in sight with up to four feeding on the victim. If more than four zombies the rest attack the next figure.
Fast	Same as above

The first zombie to reach a victim attacks. Any other zombie whose movement allows it to reach a victim also attacks the first victim. After the first zombie is moved into contact with a figure move all of the rest of the zombies. Those that reach the 1st victim also attack that victim. The zombies which can't reach the victim move to close with any other figures and will only advance to attack unbitten figures. During melee roll 1D20 for each zombie in melee and for each hit roll to see if the bites infect the victim using a +3 modifier with Classic/modified Melee rules and +5 for Classic Optional melee. Survivors withdraw instead of surrendering. Figures hit (bit) by zombies roll at the end of turn if slow zombie for all the effect of all the bites or if a fast zombie bite becomes a zombie.

How is an infection spread. If a biological (virus or bacteria) infection the disease may spread. At the end of the turn bitten figures roll to determine if infection turns them into zombies.

Infection	
Biological Zombies	**Fast Zombies**
Zombies spread their infliction by bite. For slow zombies it takes a roll of 1 on a D20 for the victim to turn into a zombie. The danger lasts for 72 hours (18 die rolls). Roll for every bite (hit) at the end every turn. Bitten Figure is KO if bitten two or more times in melee but can still turn zombie within 18 turns. If a judge mark figure with a die for number of bites and roll 6 times (use an app) to see if he turns (and when). If more than 6 rolls needed game likely to be over.	Infect a victim immediately and the bitten victim turns zombie at the end of the game turn bitten. Replace the figure with a zombie figure when it turns. Unless a "smart" zombie it drops any weapons it is holding.

Remember, every bite may cause infection so roll for each bite on a figure every turn. |

How does one kill a zombie? You know but your figures don't so until you kill your first zombie "He went down when I hit him in the head!" the chance to kill them is less. You can also wound them but only by taking out limbs so that make for wounded zombies crawling towards you.

Killing a Zombie			
New zombies move to join other zombies closest to them, but attacks humans that are closer. Dead humans that turn zombies within 18 turns "rise from the dead" wherever they are.	A hit in hand-to-hand combat kills the zombie.

If hit directly by a 20mm or larger projectile the zombie is a dead zombie. Flame from napalm, flamethrowers, gasoline, fires requires a "is it dead" die roll. | If hit by small arms or from shell-grenade-bomb fragments roll a D20 to see if "it is dead". On a 1 or less to 5 the zombie is dead; on a 6-10 the zombie is wounded; on a 11-20 the zombie is OK.

Bonus +5 by figures after they successfully kill a zombie or see a zombie killed by other than melee. | Wounded zombies move at crawl speed. A zombie on its fifth wound is treated as dead (no limbs can't move). Wounding a zombie is destroying or removing a limb. |

That is it. Comments and suggestions welcome. Judge recommended.

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Consolidated Errata

Now that we have multiple Duckbills (DB) issues, we are consolidating *errata* from all so you have just one document to refer to. *Two starred items were corrected in all editions.*

For convenience we list Variants' *titles* but not their text.

DB#1
Q. Where are the **German 88mm guns**?
A. They are classed as 90; see the discussion on pages 19-20.

*Pull-Out #11 (also on page 66) has a "3" on the 45° Slope Angle when it should be "4" like the 45° Qtr in the next column.

*The 2nd Runner on the Platoon HQ table (page 11) is blank. The same data applies as for the 1st Runner.

Examples of Play, page 160, Turn Sequence Phase 1: delete the asterisk (*) at the end of the 3rd sentence.

The modern weapon, Am, LAW, on the Infantry Weapons chart should be American LAW.

Clarification: **Out of Command**, pg. 27 'd' 2nd bullet
It may not be clear here but a squad always has to have an order change rolled for if the order is issued by the Squad Leader. BUT, if the Platoon Leader or Plt Sgt or higher ranking leader is within 2" of the Squad leader and issues a new order to the squad then you don't have to roll to change the order.

Clarification: **Orders**, lower right, pg. 28:
If the tanks were being run by a separate player—a "tanker" then I would not be doing his tank order arrows. He would.

Duckbills #1 Variants: Initiative, Flukes, Ammo Loads, Quick Reactions, Radio Net & Squad/Team Fire.

DB#2
Typo: Page 98 2nd column. "***Pinned**: goes prone. Fires with a -4 penalty for one in your next phase."

Q. When you have an element behind a High Hedge-row **what angle in degrees can he spot out**. I would think 45 degrees total (22.5 each side).
A. Elements in or behind concealing terrain which they have moved up to, or into, observe and fire out of that terrain with the same limitations as if in a building. 45 degrees while behind the terrain, 30 degrees if positioned in it, or 180 degrees if leaning out of the terrain in order to shoot. This would apply to hedge-rows including Norman Hedgerows, bushes, or thick shrubbery. See page 45 second column. An **improved position** in or behind such terrain will allow all observation angles to be doubled. An improved position means that the unit has spent enough time to cut lanes of observation and fire in the terrain. This takes the same time as digging a 2-man foxhole. Seven turns. This does not include the time to dig in. See page 116.

Q. **Early US Bazooka** is 75mm Pen., though later variants should be 100mm, and 125mm respectively.
A. 2.36" Bazooka. 75mm North Africa and Sicily. 100mm after August 1943. (December 1943 for Pacific)

Q. On page 170 of the **Infantry Combat examples**—3rd paragraph—MG34 casualties—it lists 2 casualties at first (which is correct), but then mentions 3 casualties in the next sentence (which is wrong).
A. Correct. Should be 2 men were hit.

Q. Also, the number of **dice for determining who gets hit** of the five targets should be 1D5, or 1D6, ignoring the number 6 result and re-rolling, not the 2D6 mentioned in the play example.
A. Next sentence has to be changed to read: "A 1-3 would be the closest man, 4-5 the next closest." The example rolls 1D6 for each of the two casualties. He is spreading the hits among all five men, I am spreading the hits between the two closest men to the MG.

Duckbills #2 Variants: Soviet Smoke, Auto-Search, Solo Play.

DB#3
Informational correction that does not affect the game process. The **Petard Mortar** is now 230mm not 290mm.

Q. If I say that if my tank moves 4.1 inches, out of it's 26 inch movement allowance, and then **stops to fire** I have to apply a movement penalty? Is that the case for the 2nd and subsequent firing in the same turn?
A. Per Page 55, **either** movement penalties can be avoided by any turreted vehicles which move no more than half their allowed distance over the prevailing terrain and rate of fire is halved, fractions rounded up. **Or**… If you wanted to fire all three rounds you move your, say, 26" and fire three times. This fire would be where you started your move, after you moved 13", and the third time after you

moved the full 26". All three shots would be penalized as *Firing While Moving.* Note: Automatic weapon such as a 20mm Flak 38 fires bursts where the rules treat it as shots—i.e. RoF 4 is 4 bursts for an auto weapon such as on a 222 armored car, but 4 shots from a French 25mm AT gun. So for a fully automatic fire weapon the RoF of 4 could be all fired once at the same time rather than every 1/4th of the target's move using opportunity fire. We didn't specify which weapons were automatic—although restrict them to anti-aircraft weapons 40mm or smaller, which are the AA Machine Guns 12.7-15mm and the 20-40mm AA.

Duckbills #3 Variants: Team Fire.

DB#4 Bonus & Penalty Modifiers Clarifications:

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Churchill size *Correction:* British Churchill tanks are **not LT (Large Tank)** and are just ordinary medium tanks.

Duckbills #4 Variants: Penetration Spreadsheet, Zombies.