MANNED DEFENSES - Sturdy but unspammable edition.

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INTRODUCTION

This document aims to describe a possible, future rework for AI defenses of Foxhole, making them much stronger in the static defense role and borderline impossible to use for harassment.
The idea is based around making the defenses themselves immune to small arms fire, but making the AI soldiers manning them actually possible to suppress and kill. In addition defenses scale in effectiveness with distance from allied strategical points.
To make this work, turret crew has to be made vulnerable in one way or another, unless their only weakness being direct shelling and gas is desirable. My suggested rework of AI manned big guns will be linked HERE.

BENEFITS

As of now, foxholes, bunkers and anti-tank turrets are a one-time investment that can then go on to operate independently until destroyed - usually with little effort. This is perfectly fine in the pre-alpha, low player count state of the game, but could be refined more.
Current mechanics also make static defenses way too easy to exploit in behind-the-lines operations. A single truck of materials can cover a massive swath of terrain in foxholes, with a few bunkers in critical points, in no time and unseen. This kind of a massed firepower is devastating to supply lines and freshly spawned players, requiring the use of mortars or artillery, because the sheer volume of fire can destroy vehicles with ease.
The effort to effect ratio makes this badly imbalanced. Now, this is a hyperbolized scenario - usually you see singular foxholes placed stealthily on crossroads and inside foliage. Again, this is *automated guerilla warfare*, something I believe shouldn’t take place.

OPERATION

When a defensive structure is built it starts out unmanned, with the flag near the bottom of the mast. Then, it searches for the nearest town hall or outpost, and links to it. The distance (in a straight line, ignoring terrain, to not overcomplicate) determines how fast the structure can be manned.
Once this is link is established and factors (see below) are taken into account, the timer begins counting down, with the flag riding up the mast serving as visual indication. If an enemy comes into very close range during the “request soldier” stage, it is halted. Only after the flag reaches the top of the mast, the defenders are placed in and begin normal operation.

Defenders remain in fixed positions inside the building but will duck if sprayed with automatic fire (making them impossible to shoot, but preventing them from shooting back). A single shot is enough to kill a defender, although this is truly challenging to land in case of the foxhole and bunker due to the tiny target, and chance-based with garrisons, where the window boards have a random chance to save defenders even if their silhouette is hit accurately.
Nearby explosions will force defenders into the “suppressed” state, with bunkers having increased resistance to this effect. Direct hits that fail to demolish the structure will still kill the defender (and a number of defenders dictated by logic and distance in the garrison’s case).

Every time a defender is killed, the timer starts anew. The enemy can close in during this time to prevent reinforcements from arriving, or enter the building. This first begins undoing the current resupply process (lowering the flag), then “converts” the building, using the same distance + factors calculation, + a moderate penalty. A capture is only successful if the flag reaches the very top of the pole. Otherwise, it first lowers, then the building returns to original faction and begins requesting a defender again.
In case of a building with several defenders, every “reinforcement cycle” replaces every dead defender, even if the cycle was triggered by the death of one.

BONUS SUPPLIES

Defensive structures now have their inventories which accept only items that the defenders can use. These include:

Removeable:
Machine guns: different kinds of machine guns ([link](https://docs.google.com/document/d/1KUHn_mIRkOD-gKmyTCnI5LN5XwD9MfAE6my6YtESoCc/edit?usp=sharing)), allowing players to upgrade a foxhole/garrison to LMG/MMG, and a bunker to HMG. These weapons, however, consume actual ammunition, which is drained from the connected town hall or outpost. A lock or limit can be put on ammo the linked buildings can use up, to prevent players draining critical supplies without communicating.
Gas masks: nuff said.
Radio: buildings reports engagements to Tactical Command buildings (LINK WILL BE HERE).
Hammer: slight boost to repair rate, allows the building to use materials in it’s inventory.

Non-removable consumables, once you put these in, they’re bound to the building forever:
First aid kit: gives a defender a chance to survive being shot. A FAK is “used up” after a number of successful saves.
Trauma kit: gives every defender two “health points”. Every defender to which this buff is applied uses up the trauma kit’s “mileage”.
Soldier supplies: boost to the reinforcement time. Each unit has a number of uses.
Basic materials: a VERY, EXCRUCIATINGLY slow self-repair if hammer-equipped. If a player attempts to repair a building with bmats in it’s inventory, they are consumed instead of the player’s.

FACTORS

Town hall: 100% reinforcement rate.
Outpost: 85% reinforcement rate.
Soldier supplies: +30% rr.
Alive defenders present (garrison, AT turret): +10% rr
Nearby major (map-marked) road: +5% rr
Tactical command built in the town hall/outpost: +5%
Nearby watchtower: +3% rr

Faction owns half or more towns: no effect.
Faction owns a quarter of towns: +15% rr.
Faction owns one town: +30% rr.