

GFF - AI Rules v2.2

General Principles

AI Rules: These rules were created to give players a way to play solo against an AI controlled opponent.

Multiple Choices: Whenever there are different choices that seem to be equally correct, roll a die to randomly determine which one is going to be the chosen one.

Preparation

AI Armies: To ensure that AI armies are balanced, we recommend first creating a set of 3-6 army lists, and randomly determining one of them to be used by the AI and another by the player.

Objectives Set Up: When setting up objectives first divide the area of the table where you are allowed to place objectives into 4 equal squares. When it's the AI's turn to place an objective first roll for a random square, and then place the objective in the center of the square. If that's not possible roll for another random square and move the objective toward it just enough to be in a valid position, whilst keeping in mind the objective set up rules.

AI Deployment: When deploying armies the player must deploy his entire army in a random deployment zone before the AI deploys. Then AI units are randomly divided into 3 groups of equal size (as far as possible). To deploy divide the table into 2 sections along its deployment zone's table edge and number them 1 and 2. For each AI group roll a die to see which section its units deploy in (results of 1-3 = section 1, 4-6 = section 2), and if all 3 groups would be deployed in the same section you must re-roll until they wouldn't be. Then deploy one random unit at a time in its section as close as possible to the nearest objective, and outside of difficult and dangerous terrain (unless the unit has strider or flying).

AI Challenge Bonus: Optionally players may give the AI a bonus for an extra challenge. If at the beginning of a round the AI is holding as many objectives as the player, then all its units get +1 to hit rolls until the end of the round, and if its holding less objectives, then its unit get +1 to defense rolls on top of that.

AI Decision Trees

Unit Types: Before the game begins you need to classify each unit into one of 3 unit types so that things flow smoothly once you actually start playing.

Hybrid Units: Units that have melee weapons which are better than their ranged weapons count as hybrid units.

Shooting Units: Units that have ranged weapons which are better than their melee weapons count as shooting units.

Melee Units: Units that don't have any ranged weapons count as melee units.

Decision Tree - Hybrid

1. Are there any objectives not under the AI's control?

- Yes - Go to step 2
- No - Go to step 5

2. Are there any enemies in the way?

- Yes - Charge enemy if possible, else Advance toward objective and shoot if possible, else Rush toward objective
- No - Go to step 3

3. Is the objective in Rush range but not in Advance range?

- Yes - Rush toward objective
- No - Go to step 4

4. If you Advance will any enemies be in shooting range?

- Yes - Advance toward objective and shoot if possible
- No - Rush toward objective

5. Are any enemies in Charge range?

- Yes - Charge enemy
- No - Go to step 6

6. If you Advance will any enemies be in shooting range?

- Yes - Advance toward enemy and shoot if possible
- No - Rush toward enemy

Decision Tree - Shooting

1. Are there any objectives not under the AI's control?

- Yes - Go to step 2
- No - Go to step 3

2. If you Advance will any enemies be in shooting range?

- Yes - Advance toward objective and shoot if possible
- No - Rush toward objective

3. If you Advance will any enemies be in shooting range?

- Yes - Advance toward enemy and shoot if possible
- No - Rush toward enemy

Decision Tree - Melee

1. Are there any objectives not under the AI's control?

- Yes - Go to step 2
- No - Go to step 3

2. Are there any enemies in the way?

- Yes - Charge enemy if possible, else Rush toward objective
- No - Rush toward objective

3. Are any enemies in Charge range?

- Yes - Charge enemy
- No - Rush toward enemy

Basic Concepts

Activation Order: Before you start, divide the table into 2 different sections along its deployment zone's table edge and number them 1 and 2. When it's the AI's turn to activate, first roll a die to see which section it will activate in (results of 1-3 = section 1, 4-6 = section 2). If no eligible units are in that section move onto the next section. Then roll a die to randomly determine which unit from that section will be activated.

Stunned Units: Stunned AI units are only activated after all non-stunned units in the game have been activated.

Enemies in the way: When the AI units activate, draw a path between them and their objective. Enemy units within 6" of the path count as being in the way (even if they are in the opposite direction).

Controlling Objectives: When making AI decisions, an objective counts as under control if it is already seized, or if it's an objective that the unit is not within 3" of and that has more friendly non-stunned units within 3" than enemies. When they move to seize objectives, they must be placed within the 3" seize range so that they stay as close as possible to what their next objective or target will be.

Advancing: Shooting and Hybrid AI units that use Advance actions to move toward objectives must always do so whilst also trying to stay as far from enemy attack range as possible. If they are not moving toward objectives they should always try to move away from nearby units just enough to still be able to shoot at them from a safe distance.

Shooting: AI units always shoot at the nearest valid target, prioritizing stunned units first, and units that haven't activated yet second. If the nearest target is in cover but there is another valid one in the open, then the AI must prioritize the one that is in the open.

Melee: AI units always charge the nearest valid target, prioritizing stunned units first, and units that haven't activated yet second, and they must always strike back when charged.

Terrain

Cover Terrain: AI units always move into or behind cover terrain, unless it's also difficult terrain and they are moving to an objective. Shooting and Hybrid AI units that are not moving to an objective must stay in cover and shoot, instead of moving away from nearby units.

Difficult Terrain: AI units only ever move into difficult terrain if they are in charge range of a unit inside of it, or if they have a special rule that ignores it. Else they will always move around it.

Dangerous Terrain: AI units only ever move into dangerous terrain if they have a special rule that ignores it. Else they will always move around it.

Special Rules

Army Special Rules: AI units will always use army special rules as soon as they are activated, targeting the nearest valid unit that makes sense.

Ambush: AI units with ambush are always kept in reserve, and must deploy following the AI deployment rules at the start of the second round.

AP: AI units with AP weapons always target valid enemies with the best defensive value first.

Deadly: AI units with deadly weapons always target single-model units with tough first, and units with tough second, prioritizing those with the lowest total remaining tough value.

Flying: AI units with flying always move through difficult and dangerous terrain.

Indirect: AI units with indirect weapons that are in range of enemies always use Hold actions and shoot.

Psychic: AI units always cast spells after moving but before attacking, selecting a random spell by rolling D3+X, where X is their level. If they have no valid target for that spell they must try to cast the next spell on the list, cycling through the list until they have found a valid spell or they can't cast anything. AI units always target the nearest valid unit, following the guidelines for any special rules that may apply (deadly, sniper, etc.).

Scout: AI units with scout are always deployed after all other units, following the AI deployment rules.

Sniper: AI units with sniper weapons always target heroes first, and models with weapon upgrades second.

Strider: AI units with strider always move through difficult terrain.

Special Movement

Pushing: AI units always try to push enemy models if that would move them off a ledge or into dangerous terrain.

Dropping: AI units always try to drop off elevation that is less than 3" tall. If they face elevation that is less than 5" tall roll a die, on a 4+ they will drop off. AI units never try to drop off elevation that is 6" tall or higher.

Leaping: AI units always try to leap off elevation that is less than 3" tall. If they face elevation that is less than 5" tall roll a die, on a 4+ they will leap off. AI units never try to leap off elevation that is 6" tall or higher.

Jumping: AI units always try to jump gaps that are less than 3" wide. If they face a gap that is less than 5" wide roll one die, on a 4+ they will jump. AI units never try to jump across gaps that are 6" wide or larger.