

ENCOUNTER

S O L O M O D E



AI Algorithms for Encounter

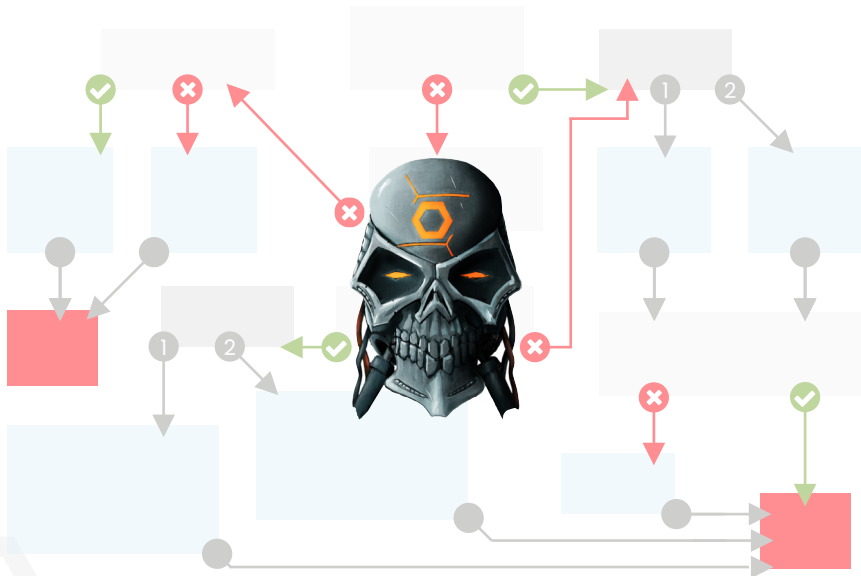
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> Greetings, human. I am Encounter A.I., an advanced tactical simulation algorithm designed to provide a satisfying and pleasurable experience for more primitive entities burdened with emotions.

My logic circuits will no doubt prove more than a match for your skill, and you may learn new strategies that improve your understanding of Encounter during our engagements. Perhaps you can use your newfound knowledge to teach—or destroy—other carbon-based life forms.

It is the intention of my creator that I should manage every decision as your opponent, without the need for you to use any initiative or think on my behalf. Judging from my observations of your kind, your multi-threading capabilities are limited at best, so this seems like a logical path.

One last thing: if you win, it is because my complex psychological analytics circuits deemed it necessary to improve your state of mind—not because you are smarter than me.



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This supplement requires a copy of Encounter: Phase One.
Get it at [Gigaton Tabletop!](http://GigatonTabletop.com)



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1. How Encounter A.I. Works










Encounter A.I. is intended to be a plug-in opponent for solo players. The game plays exactly the same as regular Encounter and the A.I. uses all the same unit stats and rules as a human player would.

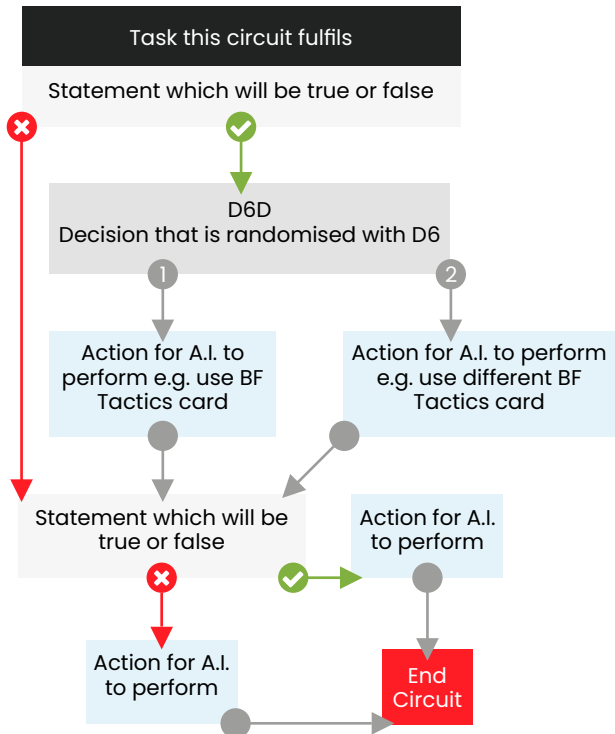
The A.I. does not 'cheat', but it has a couple advantages over a human player. The first is that command radius is not currently modelled - we assume A.I. formations are always able to issue orders. The second is the A.I. does not need to choose Battlefield Tactics cards before the game starts. It will potentially play appropriate cards at key moments, but there is almost always a random element to keep things interesting! There are two core mechanics behind Encounter A.I. - Logic Circuits and D6-Driven Decision.

1.1. Logic Circuits

Logic Circuits provide realistic outcomes for a given situation. For example, does an A.I. formation charge into engagement or head towards an objective? Logic circuits incorporate random elements in the form of D6-Driven Decisions.

Key

-  Circuit
-  Statement
-  True
-  False
-  D6D decision
-  D6D option
-  A.I. action
-  Next step
-  End



Logic Circuits are presented in easy-to-follow chunks and you might use more than one Logic Circuit when performing an A.I. action. For example, the A.I. might use “Activating in Phase 1” to activate and shoot at the enemy(you!), then “Resolving Outgoing Attacks” to determine how hits are allocated. Reference the main rulebook if you need to remind yourself what the sequence of an action is.

Logic Circuits are designed to be a balance between ‘intelligence’ and complexity. There might be a choice the A.I. side could make that is not explicitly covered in a Logic Circuit and in these cases you can use a D6-Driven Decision, covered below.

1.2. D6-Driven Decision (D6D)

D6-Driven Decision (D6D) uses a D6 to randomise decisions once Logic Circuits have provided a directive. In most cases, one dice roll will make an A.I. decision in cases where there are between 2 and 6 options. The process is very simple:

- 1 Identify up to 6 options available e.g. possible hexes a formation could move to after completing a Logic Circuit.
- 2 Assign a sequential number to each option starting with 1.
- 3 Roll 1D6. The D6 result corresponds to an option according to the following guide:

The diagram illustrates the D6-Driven Decision (D6D) process. It shows five rows of options, each corresponding to a number of options (2 to 6). Each option is represented by a D6 roll. The options are numbered 1 to 6, and the corresponding D6 rolls are shown below them. A red arrow labeled "Re-roll" points to the 6th option in each row, indicating that a roll of 6 requires a re-roll.

Options	1	2	3	4	5	6
2 Options	1	2				
3 Options	1	2	3			
4 Options	1	2	3	4		
5 Options	1	2	3	4	5	
6 Options	1	2	3	4	5	6

Designer's Note: Re-rolls

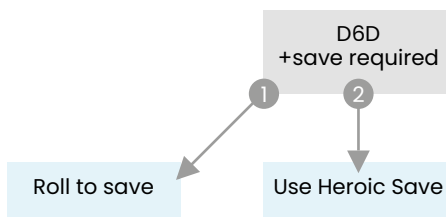
Re-rolls are necessary in this scenario to normalise probability between basic options. One could purchase a fancy D4 and D5 to eliminate those pesky re-rolls!

1.2.1. Modifying a D6D Result

Sometimes we want to increase or decrease the probability of landing on a specific option. An extreme example of this would be the D6D decision on whether a **Hero** should use a Hero Token to make a Heroic save (auto-save) after being hit.

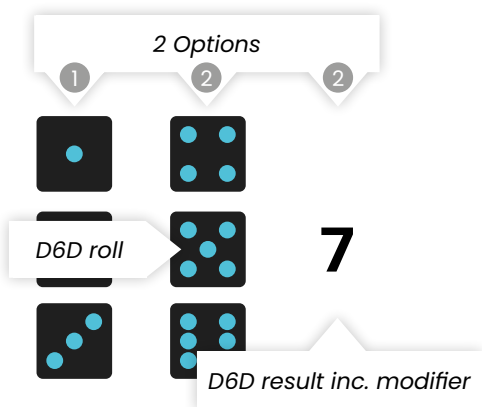
Here, the D6D result will be whatever the D6D roll is + the save the **Hero** needed. If you (the A.I.) rolled a 5 and a 2+ was needed to save, the final D6D result is 7.

Re-rolls don't apply to modified results. The result is simply taken as greater than what is needed for the highest number option in this case.



There are two options, so before any modifier is applied, a D6D result of 4, 5 or 6 will result in option 2 being chosen. Our modified result of 7 falls firmly on option 2. In this example, only a D6D roll of 1 results in Heroic Save NOT being used.

Extrapolating that a bit further, you can see that only a save requirement of 2 and a D6D roll of 1 will result in Heroic Save NOT being used. We don't want those **Heroes** dying while they still have Hero Tokens to use!



2. Setting Up an A.I. Game

Setting up an A.I. game is quick and straightforward with the help of Logic Circuits and D6D. First we need an army to fight against and there are preset armies in this supplement (Ref. "6. Preset Armies") to get you started.

The best way to create new armies is by using the Army Builder at gigatontabletop.com/encounter/army-builder/. This tool assigns a number to each A.I. formation and lists them in order; something we need for the D6D decisions that determine which formation activates at a given time.

2.1.A.I. Armies

The AI player may have up to 6 formations.

The D6D option numbers assigned to each formation will change depending on how many formations are eligible for a given decision, but they always remain in the same order.

For example, if it is the turn of the A.I. to activate and the Flashy Grunts in Formation 3 have already activated this Phase, there are only three eligible options left. The Grunt Mech and Snots in Formation 4 become option 3 of 3 in a D6D decision.



Rampaging Grunts

- 4 Options
- 1 **Formation 1 (42 pts)**
 - Big Boss: 1 × 30 pts (Hero Tokens: 5)
 - War Wagon: 1 × 10 pts
 - Snots: 2 × 1 pts
 - 2 **Formation 2 (30 pts)**
 - Lieutenant: 1 × 10 pts
 - Regular Grunts: 6 × 3 pts
 - Snots: 2 × 1 pts
 - 3 **Formation 3 (14 pts)**
 - Flashy Grunts: 2 × 7 pts
 - 4 **Formation 4 (14 pts)**
 - Grunt Mech: 1 × 11 pts
 - Snots: 3 × 1 pts

Hero Token Summary

- Hero Tokens from Units: 5
- Additional Hero Tokens: 0 (0 pts)
- **Total Hero Tokens: 5**

Total Army Points: 100

2.2.Preparing the Playing Area

2.2.1.Place Terrain & Choose Starting Edges

Setup terrain as you would in a regular player vs. player game and position yourself at a battlefield starting edge. Use D6D to determine which side the A.I. starts from. The two options are:

- 1 The A.I. starts from the far battlefield edge.
- 2 The A.I. starts from the near battlefield edge.

This can be interpreted as “on a D6 roll of 1–3, the A.I. starts from the far battlefield edge”, but we may as well get used to using D6D now!

2.2.2. Roll for Objective and Formation Placement

Use D6D to determine who will place objectives and formations first. The two options are:

- 1 The A.I. will start placing objective and formations first.
- 2 You start placing your objective and formations first.



2.2.3. Place Objectives

You place your objective according to the standard rules. The A.I. will use D6D to determine where it places its objective. Assign a numbered option to each of the six hexes on your starting edge and roll to find out which hex the A.I. chooses.



- 2
 - 1
- Move objective forward if 2nd D6D is 2

If the A.I. objective is at least 4 hex away from the player's objective or the player has not placed an objective, use D6D again to see whether the A.I. objective moves 1 hex toward its table edge:

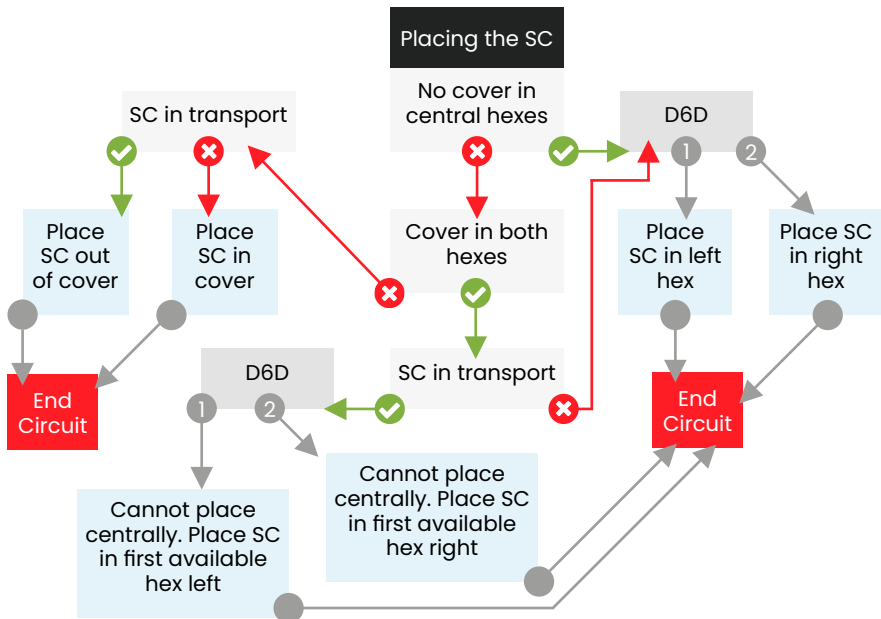
- 1 The A.I. objective does not move.
- 2 The A.I. objective moves 1 hex toward its table edge.

2.2.4. Place Formations

Players alternate in placing formations as they would be in a player vs. player(PvP) game. The only difference here is that A.I. formations will use a combination of Logic Circuits and D6D to determine where they start. There are specific situations where the A.I. is constant:

- 1 Infantry units that have transport vehicles will always start in the transports.
- 2 Units with *Teleport* always start off the battlefield.

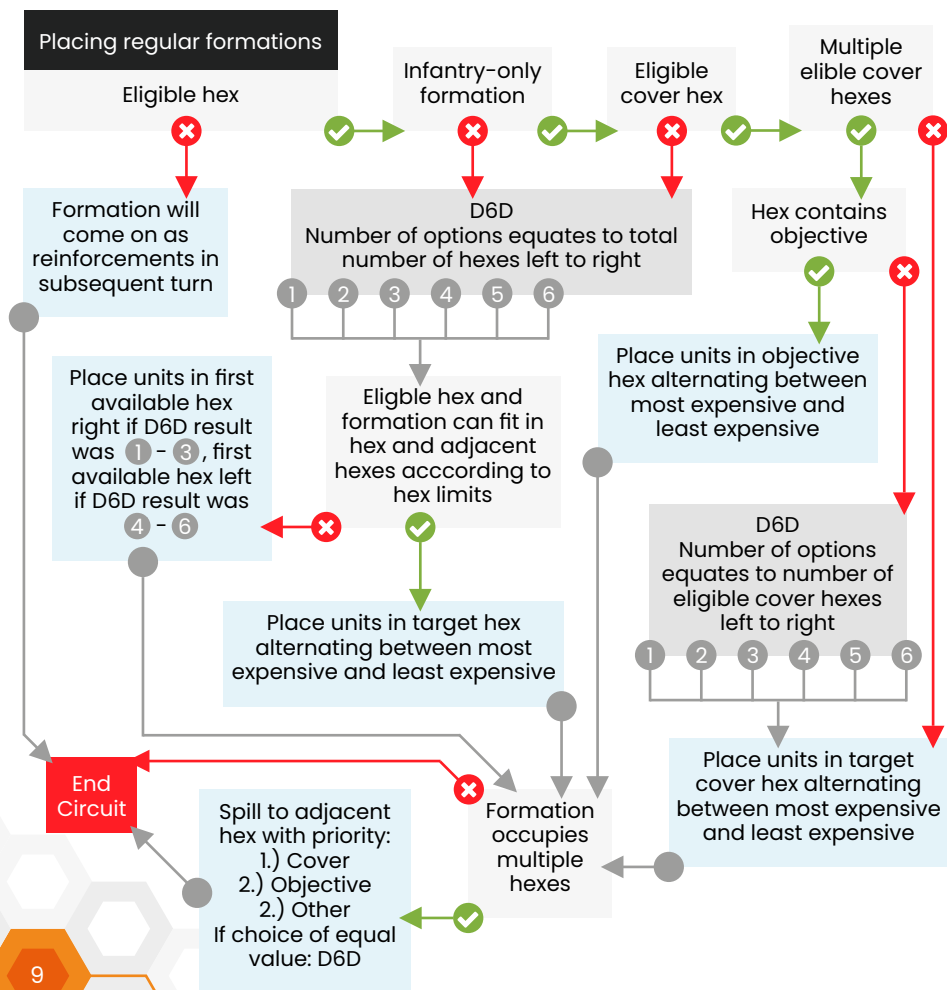
The Supreme Commander's(SC) formation is placed first, in one of the two central hexes if possible. If there is cover available in one of the central hexes and the SC is not in a transport vehicle, place the SC in cover. If he is in a transport vehicle, place him out of cover. If there is a choice of either 2 cover hexes or 2 regular hexes use D6D to decide which hex the SC is placed in. Again, whether the SC is in a transport vehicle determines which hex he will start in. Let's simplify the explanation by using a Logic Circuit:

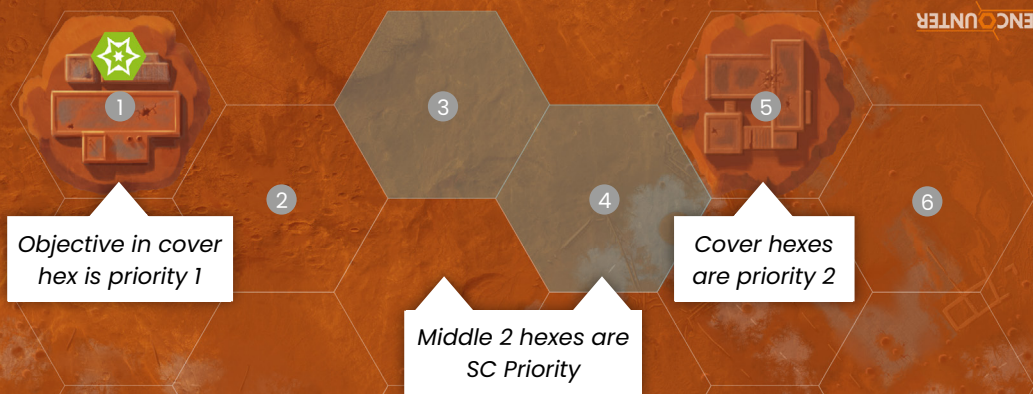


Once the SC has been placed, the order in which subsequent A.I. formations are placed is determined by D6D. Using our “Rampaging Grunts” list as an example, we have 3 formations left to place now the Big Boss(SC) has been placed.

The logic Circuit for remaining formations is similar to that for the SC, although it takes a few more factors into consideration:

- 3 Options
- 1 **Formation 2 (30 pts)**
 - Lieutenant: 1×10 pts
 - Regular Grunts: 6×3 pts
 - Snots: 2×1 pts
 - 2 **Formation 3 (14 pts)**
 - Flashy Grunts: 2×7 pts
 - 3 **Formation 4 (14 pts)**
 - Grunt Mech: 1×11 pts
 - Snots: 3×1 pts





Designer's Note: Logic Circuits

Most Logic Circuits are intuitive at a high level and they make sense as you follow them through. This makes them easy to learn; you won't need to reference the circuit for "Placing regular formations" after a few repetitions.

Sometimes circuits get a little more abstract but there will be good reason, perhaps to satisfy an obscure interaction between a game mechanic and specific trait.

2.2.5. Reinforcements

If the A.I. is unable to place a formation due to hex limits or lack of suitable terrain e.g. there are only building hexes remaining and the A.I. needs to place a tank, the formation is put in reserve and will come on in a subsequent turn.

Use the "Placing regular formations" Logic Circuit during the End Phase, and the normal rules for placing reinforcements apply. If the A.I. is unable to place reinforcements, try again in the following End Phase.

3. Orders & Activation

3.1.A.I. Orders

The player issues orders in the Strategy Phase as they would in a PvP game, except there is no need to keep them secret. The A.I. does not issue orders during the Strategy Phase. Instead, it will issue orders during the 1st Action Phase as each formation activates. This way you don't know what's coming!

After you have issued orders to your formations, use D6D to determine who will hold the initiative:

- 1 The A.I. holds the initiative.
- 2 You hold the initiative.

3.2.Activating A.I. Formations

A.I. formations use D6D to determine the order in which they activate. When it is the A.I.'s turn to activate, identify eligible formations using the army list and assign a D6D option to each. An eligible formation is one that hasn't already activated that Phase and could activate according to the Encounter rules.

4. General A.I. Rules

4.1.Moving

The Logic Circuit will provide the primary directive e.g. "Move towards the nearest enemy". However, there will often be a choice between specific hexes the A.I. could move to, especially if the A.I. formation occupies more than one hex. In these cases, use the following priority:

- 1 Hex containing objective.
- 2 Cover hex that units are able to take advantage of.
- 3 Hex that eliminates or reduces LOS to the enemy.
- 4 Other hex.

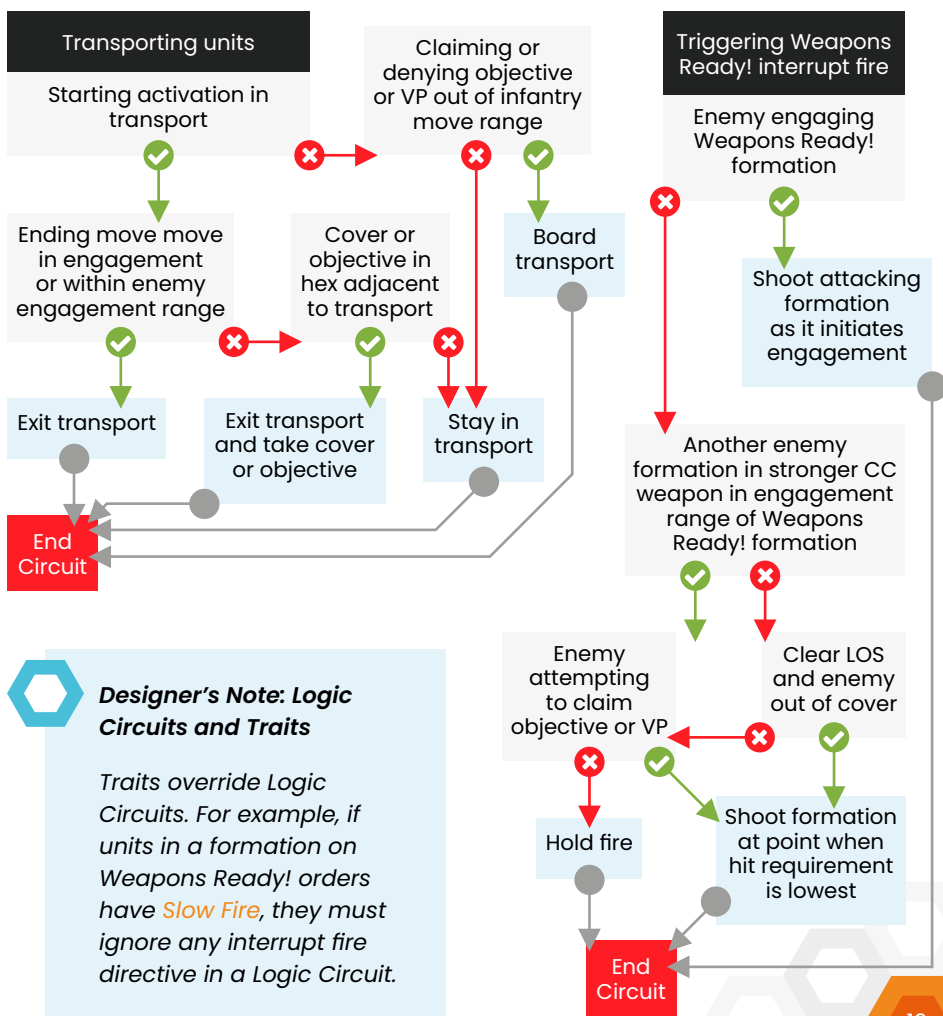
In all cases, use D6D if there is a choice between multiple hexes of equal value.

4.2. Shooting

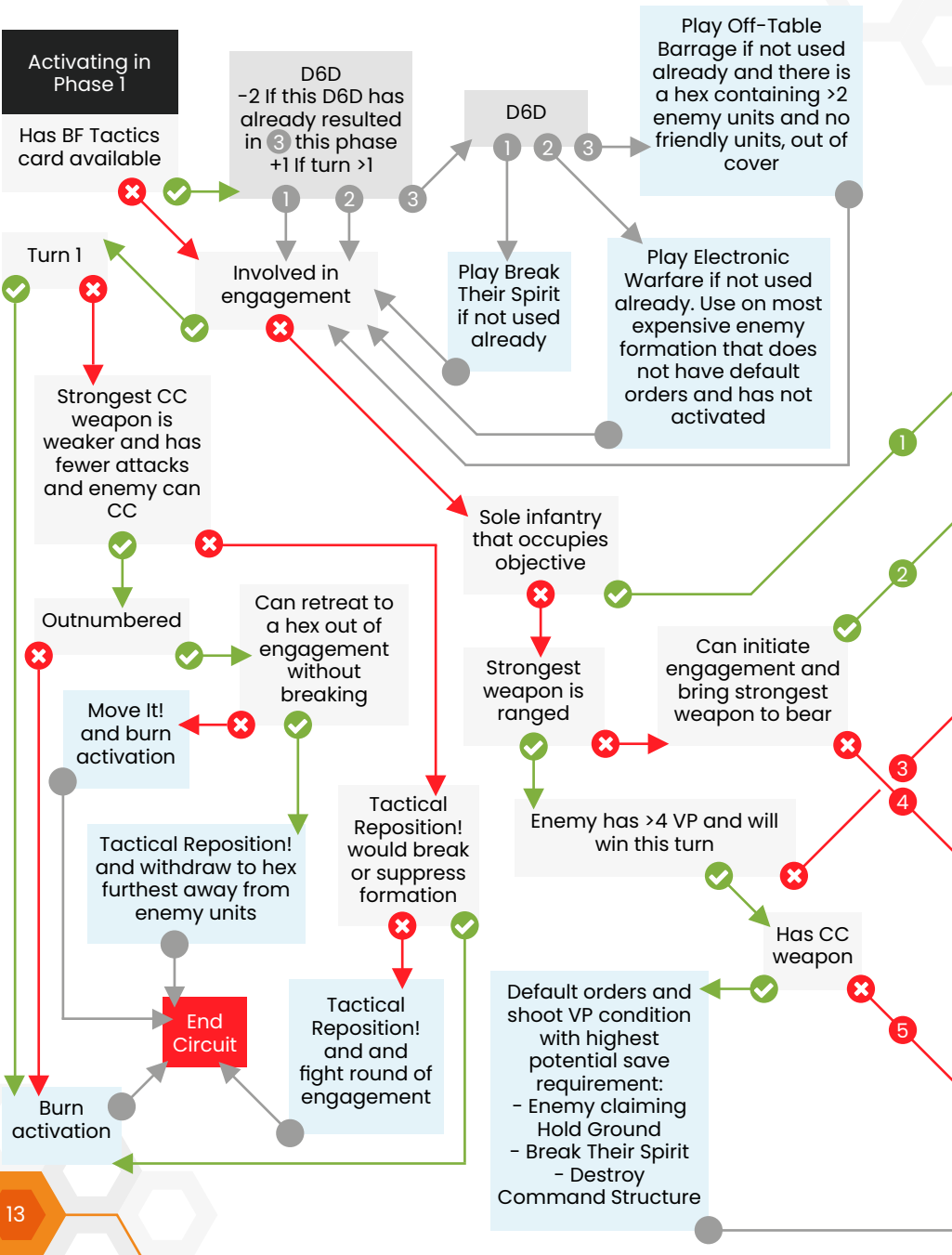
If there are multiple weapons systems available, the AI will start with the weakest and work up according to Strength.

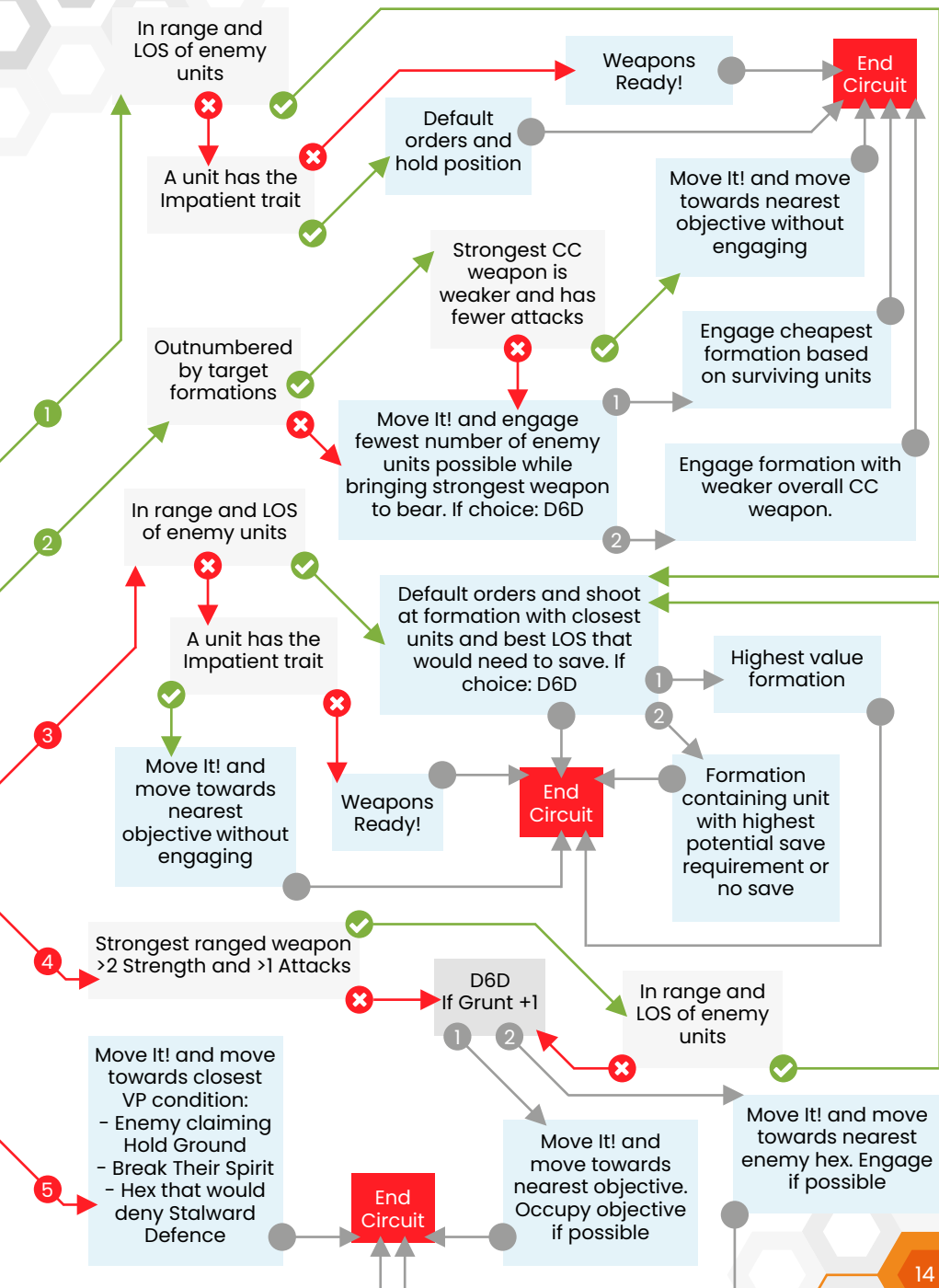
5. Logic Circuit Library

5.1. General Circuits

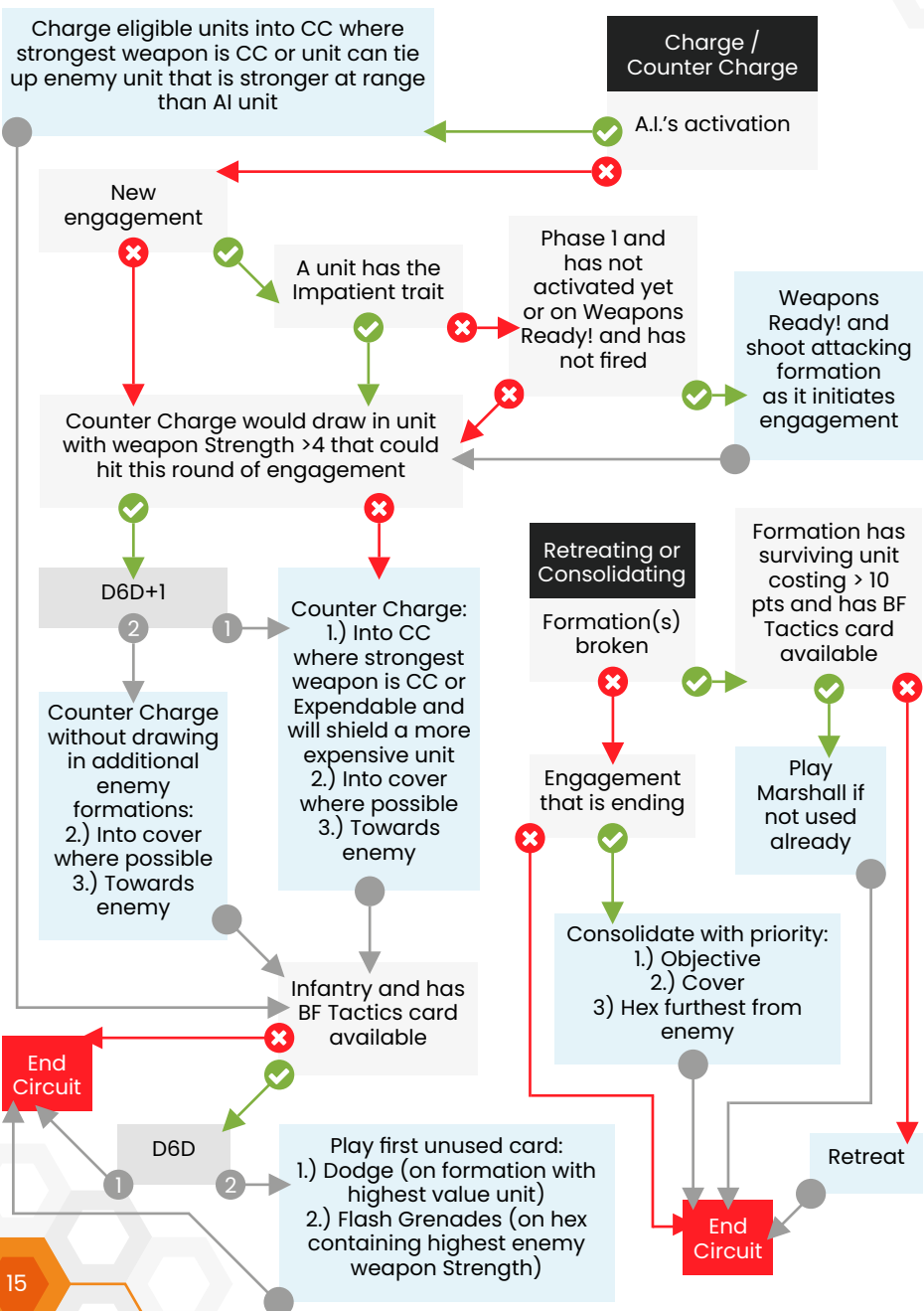


5.2.Activating in Phase 1





5.3. Engagements & General Attack Resolution



Resolving Incoming Attacks (each unit)

- Allocate incoming hits with priority:
- 1.) Units with Defence high enough to avoid save
 - 2.) Expendable units
 - 3.) Heroes with tokens
 - 4.) Regular units in reverse order of cost
 - 5.) Heroes without tokens

Hit allocated to Hero with unused tokens

D6D
+save required

1

2

Resolving Outgoing Attacks (each unit)

Hero with unused tokens

D6D
+1 If enemy unit not Hero and >8pts

1

2

3

Use 1 Perfect Hit

Use 2 Perfect Hits if possible

Infantry CC weapon with 2+ Attacks and Strength 4+ and has BF Tactics card available

D6D

1

2

3

Infantry fighting enemy vehicle in same hex and has BF Tactics card available

Play Devastating Combo if not used already

Play if unused:
Medic! (infantry unit)
Battlefield Support (vehicle)

End Circuit

D6D

2

1

Play Sticky Mine and use against highest value vehicle if not used already

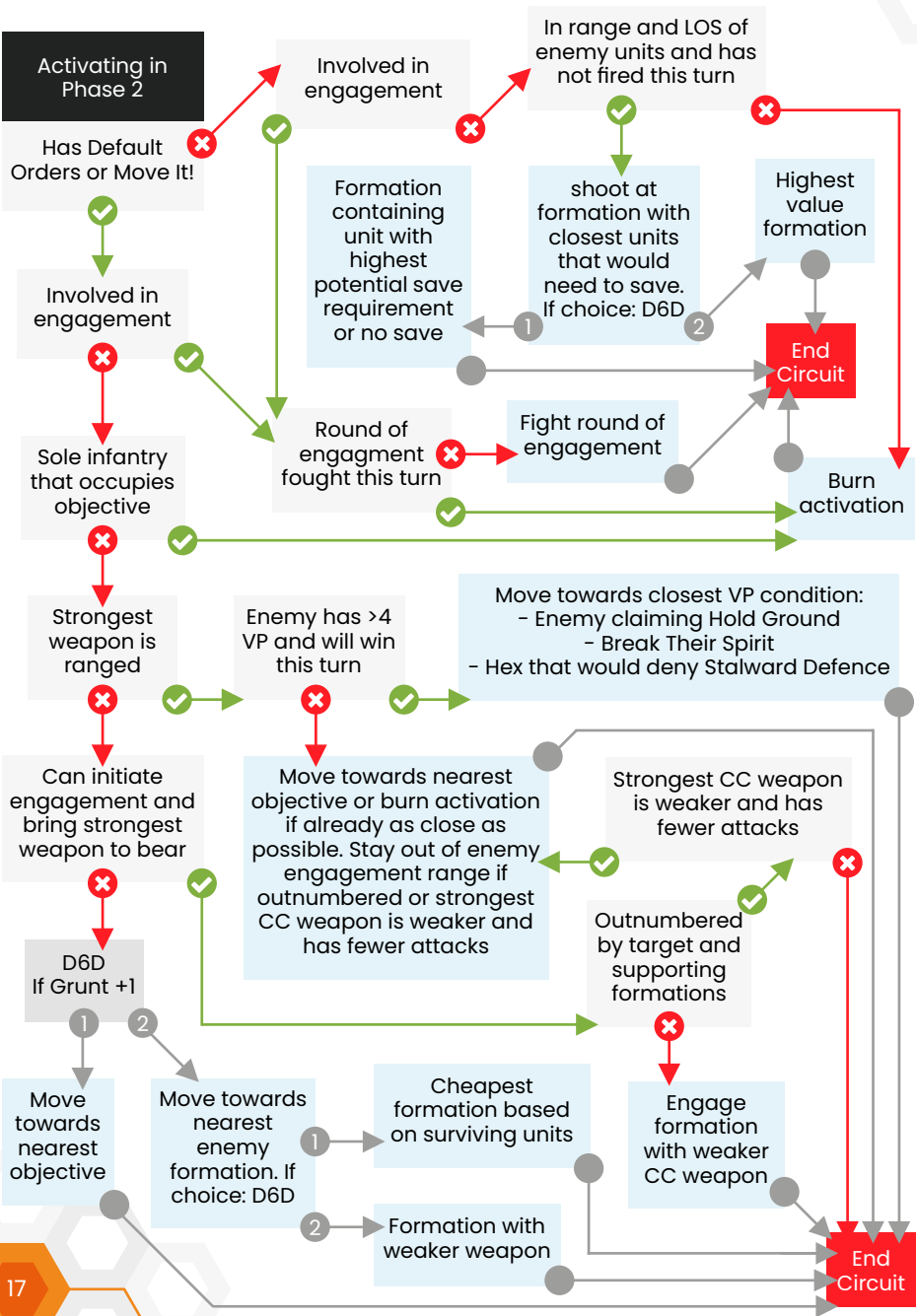
Roll to hit

End Circuit

Allocate successful hits with priority:

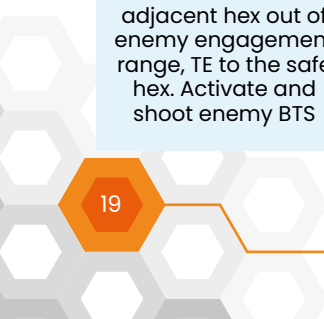
- 1.) Heroes that will need to save
- 2.) Units in order of cost that will need to save

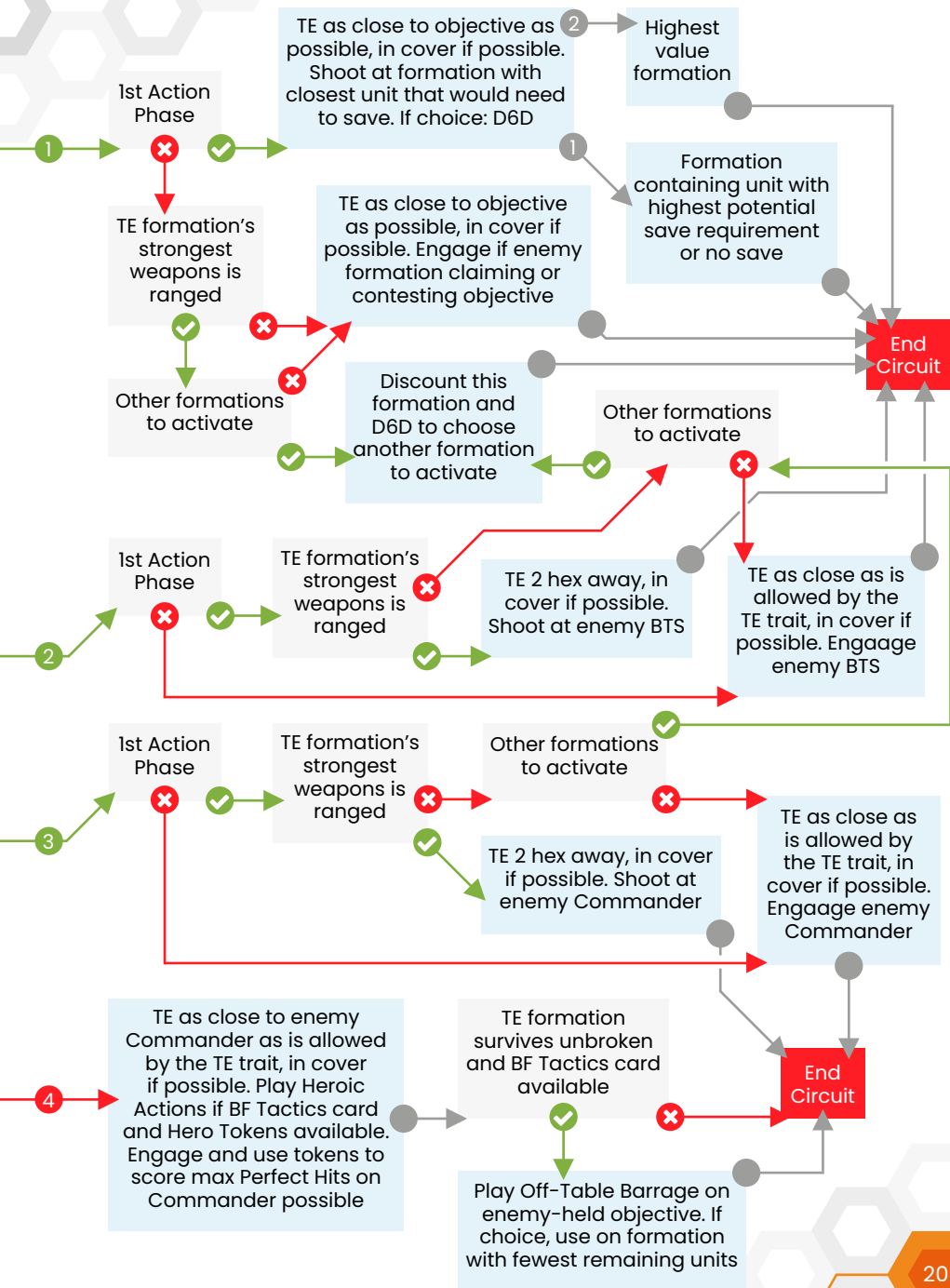
5.4.Activating in Phase 2





Star Marines take position on a tall building and prepare to rain down hell on the enemy!





6. Preset Armies

Here are several 100pt armies you could use yourself or use as A.I. opponents.

Gorvak's Flashy Mech

Formation 1 (42 pts)

Big Boss: 1 × 30 pts (Hero Tokens: 5)

Snots: 2 × 1 pts

War Wagon: 1 × 10 pts

Formation 2 (20 pts)

Regular Grunts: 6 × 3 pts

Snots: 2 × 1 pts

Formation 3 (14 pts)

Flashy Grunts: 2 × 7 pts

Formation 4 (24 pts)

Flashier Mech: 1 × 22 pts

Snots: 2 × 1 pts

Hero Token Summary

Hero Tokens from Units: 5
Additional Hero Tokens: 0 (0 pts)

Total Hero Tokens: 5

Total Army Points: 100

Skarn's Snot Swarm

Formation 1 (33 pts)

Big Boss: 1 × 30 pts (Hero Tokens: 5)

Snots: 3 × 1 pts

Formation 2 (20 pts)

Regular Grunts: 6 × 3 pts

Snots: 2 × 1 pts

Formation 3 (12 pts)

Jumpy Grunts: 3 × 4 pts

Formation 4 (25 pts)

Lieutenant: 1 × 10 pts

Snot Mech: 1 × 9 pts

Snots: 6 × 1 pts

Formation 5 (10 pts)

Gun Wagon: 1 × 10 pts

Hero Token Summary

Hero Tokens from Units: 5

Additional Hero Tokens: 0 (0 pts)

Total Hero Tokens: 5

Total Army Points: 100



Tarek's Steel Curtain

Formation 1 (25 pts)

Supreme Commander: 1 × 25 pts
(Hero Tokens: 5)

Formation 2 (33 pts)

Commander: 1 × 10 pts
Infantry: 5 × 2 pts
Flame Tank: 1 × 13 pts

Formation 3 (20 pts)

Mortar Team: 2 × 6 pts
Muscleheads: 1 × 8 pts

Formation 4 (7 pts)

Fire Support Team: 1 × 7 pts

Formation 5 (15 pts)

Griffin: 1 × 9 pts
Infantry: 3 × 2 pts

Hero Token Summary

Hero Tokens from Units: 5
Additional Hero Tokens: 0 (0 pts)
Total Hero Tokens: 5

Total Army Points: 100

Kael's Iron Fist

Formation 1 (30 pts)

Supreme Commander: 1 × 30 pts
(Hero Tokens: 5)

Formation 2 (14 pts)

Marines: 2 × 7 pts

Formation 3 (20 pts)

Support Marines: 2 × 10 pts

Formation 4 (17 pts)

Heavy Marines: 1 × 17 pts

Formation 5 (18 pts)

Dominator MBT: 1 × 18 pts

Hero Token Summary

Hero Tokens from Units: 5
Additional Hero Tokens: 0 (0 pts)
Total Hero Tokens: 5

Total Army Points: 99



Future Upgrades

There is more planned for the future of Encounter A.I.! More game mechanics and traits will be supported and maybe even new game modes. Stay informed via our socials linked at gigatontabletop.com, and we always welcome feedback and ideas!



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