About this mod

A Better ADVENT is an ambitious overhaul to the enemies and to their behavior. The main features are the introduction of dozens of enemy variants and an extensive overhaul of the AI.

This mod’s goal is not just to add more enemies to the game, but - as the name of the mod implies - "better" enemies that don’t just add numbers, but also gameplay variation. It strives to be the centerpiece of a modlist, setting the baseline for a more challenging and less repetitive gameplay that other mods can further enhance. For that reason, a high priority has been put on not only providing the enemies and the AI, but also on making Better ADVENT compatible to pretty much every other mod out there.

Consider this typical scenario in vanilla XCOM:
You activate an enemy group, and it has the usual Captain and his two Troopers. Been there, done that.
A Better ADVENT changes that. Now instead of a basic captain, you get one of many different captains that all have their own quirks. And the troopers are also randomly chosen from a couple of possible variants.
For example you could meet a Captain wielding a sniper rifle that gives fire support to an armored trooper and a trooper with a pistol... or maybe you encounter a Psi Captain that has his own version of Mindspin. Some captains wield Stun Batons and will use them in melee. Maybe that captain didn’t bring a trooper, but a Lancer with energy shield instead? Unless of course you are dealing with a Beastmaster Captain, he brings something else entirely...

The mod not only introduces new ADVENT grunts, it also provides variants for aliens like Sectoids, Chryssalids, Codices and Mutons. There’s even a firebreathing Berserker.

Pods no longer repeat themselves as much, making encounters different from each other and introducing new and interesting challenges into the game. Some of the new enemies have just a couple gamestats changed, others have different weapon loadouts or even completely new abilities. Coupled with unit specific AI quirks this leads to a less repetitive game.

Some examples for the global AI changes:
The enemy will now value cover much more and - depending on their role - will either keep a healthy distance or try to invade your personal space aggressively.
The engagement limit, an artificial AI shackle that vanilla XCOM employed in every difficulty but Legendary, has been deactivated.
Mimic Beacon force less extreme reactions - they still make the enemies shoot at it, making them waste their turns. But the enemies will keep valuing their cover instead of running blindly into the open.
A new Overwatch logic makes enemies decide if they would rather camp down instead of taking shots that are likely to miss anyways.

Currently, the mod adds more than 50 enemy variations into the game. That’s without including the different tiers for the ADVENT units and Chryssalids, of course. Also in addition to that are more than a dozen elite versions of some of those enemy variants to spice up the endgame.

Fair warning:
This mod makes the game considerably harder, so either play on Veteran or use other mods alongside Better ADVENT to tweak the difficulty to your liking.
Credits and Acknowledgements

My thanks go to these helpful people:

Atheran, for his continuing work on the visuals for this mod. You are doing amazing work, man. Thanks you so much.

CMDBob, for creating the ADVENT weapons from his "Total Advent Armory" mod.

Swinka666, for fixing the Firestarter.

Klavickus, for the russian translation.

Cornelian, for the french translation.

Compatibility

This mod overwrites no classes and changes as little from the original game as possible. Resources that were used for the new enemies, abilities and weapons were either taken from the base game as is or they were created from scratch. Except for their AI, I don’t touch vanilla enemies at all. As a result, Better Advent is compatible to pretty much everything. The only caveat: Usually, other mods that influence characters (New followers, stuff like “Call Reinforcements”) will only work on vanilla units. Anything that could be a source for conflicts is put into optional plugins. The same is true for dependency on any DLCs. A Better ADVENT can be used without any DLC, any dependancies would be put into plugins.

A Better ADVENT and other AI mods

Being a fullblown AI mod itself, A Better ADVENT will not always play nice with other mods that change the AI. While running multiple AI mods will probably not crash your game, it will lead to inconsistencies in enemy behavior. Running other AI mods alongside Better ADVENT is not recommended.

A Better ADVENT and other mods that add new enemies

Running multiple mods that add enemies won’t cause any conflicts as such. However, there could be issues with pod composition. XCOM2 knows two general types of enemies: Leaders and Followers. When a pod is generated, it decides on a leader, then checks the supported followers of that leader to fill up the pod. Followers from one mod can’t be linked to leaders of another (unless you do it manually after installing them), so a pod can only ever have enemies from one of the mods, not a mixed composition.

To improve the compatibility between Better ADVENT and the enemy mods of other authors, there’s a plugin called “All The Enemies!” for download in my Workshop that adds the units to each other’s follower lists and creates a more consistent base for spawnvalues.

Plugins for A Better ADVENT

Some features are not part of the main mod, but have been uploaded as separate plugins. This has been done either to keep the main mod compatible with everything or because those particular features are not generally wanted. These plugins can be downloaded from DerBK’s Workshop on Steam. The following plugins exist:

ABA: Better Pods improves pod composition and gives a bonus to enemy squad size that scales with forcelevel. Other main features are the introduction of ABA specific enemies into predefined encounters, replacement of vanilla Chryssalids, increased civilian count on Retaliation missions, and a restriction of rulers from the Alien Hunters DLC so they can’t appear on Council missions or Avenger Defense.

ABA: All The Enemies! Improves the compatibility between Better ADVENT and the enemy mods from other authors.
ADVENT Captains

Captains and Troopers make up the bulk of the early and mid game. They got the most variants from this mod for that reason. The Captain is supposed to be the most impactful unit in its pod and set the basic tone for the encounter.

Battle Commander

The Battle Commander has two points of armor. This rather simple adjustment makes him especially relevant during the early game when ballistic weapons will leave only minimal damage.

Sniper

The Sniper carries a sniper rifle and uses it from the back of the battlefield to fire high powered shots at XCOM. He also has higher sight and detection ranges, making him the perfect lookout for soldiers hiding in concealment. His AI makes him keep distance and stay in cover. To make up for all of that, he’s physically frail and can be taken out by a well placed shot.

Beastmaster

Instead of Troopers, the Beastmaster captain leads a squad of rabid Chryssalids into battle.

Riot Control

Riot Control captains carry a Flashbang grenade. With it, he can potentially disable a whole XCOM-team for several turns.

Adept

The adept learned a few tricks from the aliens. He uses a unique Mindspin variant that gets additional effects depending on how far you are you’re your campaign when you encounter the Adept.

Heavy Tactics

Equipped with a minigun and the ability to shred armor, the Heavy Tactics captain can dish out a lot of damage.

Warden

The Warden uses not only his assault rifle, but also a Stun Baton that he can use in melee to damage and disable XCOM soldiers. He is always followed by a squad of Stunlancers.

Kommissar

The Kommissar uses a heavy pistol alongside his assault rifle. With the Return Fire ability, he will punish commanders that keep firing low effect shots his way.

General

The General doesn’t just surround himself with Troopers. Instead, he supervises a squad of lower tier Captains.
ADVENT Troopers

If Captains set the general tone for an encounter, then Troopers are there to provide the nuances to this challenge. Individually, their variants offer much less of an impact than the Captains do, but since there’s usually multiple troopers in a pod, the little advantages pile up fast.

Variant troopers wear one of 6 different armor patterns: there’s armor suits with grey parts and armors with dark red parts. For each of those two, 3 variations exist. Troopers with a defensive or utility role have increasing amounts of grey on their armor. Troopers that focus on offense wear red.

Heavy
Has two points of armor. To make up for it, he has less life and is slower than other troopers.

Sentinel
Sentinels have both Covering Fire and Guardian. They move more defensively and are more likely to use Overwatch than other Troopers.

Soldier
Has a point of armor that often lets him survive an additional shot or even make XCOM use a grenade.

Breaker
Breakers are anti-armor units that pierce and shred armor.

Gunslinger
Gunslingers use a light pistol. They have the abilities Lightning Hands and Faceoff, both of which they use to shoot a lot of rounds whenever they can.

Demolitionist
The Demolitionist is the grenade expert. He has a better grenade than standard troopers and uses it more aggressively.

Striker
Strikers use shotguns for a massive damage potential. Their increased mobility makes them efficient flankers, a fact they are very much aware of.

Wrecker
Wreckers have a weapon that is capable of dealing a lot of damage to environmental objects like walls, cars and whatever else may be used as cover by XCOM operatives. They also pierce through armor.

Revenant
Revenants look just like normal Troopers, but their genetic makeup has been tampered with. After death, they reanimate as Psi Puppets.
**Other ADVENT Forces**

Besides Troopers and Captains, ADVENT also has some special purpose units at its disposal. A Better ADVENT adds a few additional variants for them as well.

**Shieldbearer**
Shieldbearers fulfill their intended purpose really well already, so their variants focus on different loadouts and abilities that come with it.

- **Breacher**
  Uses a Shotgun and is more aggressive than standard Shieldbearers.

- **Guardian**
  Uses a Sniper Rifle and defensive tactics.

- **Tech Commando**
  This Shieldbearer uses a Gremlin Drone. He can provide Aid Protocol to his allies or use the Drone to detonate an explosive that an XCOM soldier is carrying.

**Stunlancers**
Lancers appear in high numbers throughout the campaign. Their default AI is very predictable and downright suicidal. The variants offer various approaches at fixing one or both of those issues.

- **Assault**
  Assault Lancers carry a shotgun and will use it against flanked targets or when he can’t reach anyone with his Stunlance.

- **Shieldlancer**
  The unholy hybrid of a Shieldbearer and a Stunlancer. He will use Energy Shield, then try to taze you with his baton.

**Trauma Lancer**
Uses a tazer pistol. This pistol does less damage than the baton, but can be used at range and from cover to incapacitate targets.

**MECs**

- **AutoDoc**
  The AutoDoc is a combat MEC that comes with a Gremlin Drone that can provide Medical Protocol to wounded allies.

- **Hazard MEC**
  This MEC comes equipped with special payloads in its micro missiles that give it the ability to coat whole areas in acid, thus blocking that terrain for everyone who doesn’t want to get burned by it.

- **Anti-Riot MEC**
  Anti Riot MECs are equipped with Smoke Grenades that they will use to protect allies while they themselves pursue the enemy aggressively. The Mark 2 version of the Anti Riot MEC also comes with two charges of a Cluster Flashbang that can disorient enemies in a wide area.
**Sectoids**

In vanilla XCOM, Sectoids are often not as relevant as they should be. Their AI makes them use abilities even when better options are available. The variants introduced by Better ADVENT use a much improved AI alongside their new set of abilities.

**Negator**

Negator Sectoids are a counter to XCOM Psi Operatives. They use the Solace aura that clears all debilitating effects from confusion to mind control from allies in range.

**Soldier**

The Sectoid Soldiers have only limited Psi capabilities, but make up for it with aggressive combat behavior. They don't share the vulnerability to melee that other Sectoids have.

**Mindbender**

While physically frail, the Sectoid Mindbender has terrifying Psi capabilities. Instead of Mindspin, they use an actual Mind Control. In addition to that, any Psi Zombies he raises don't die with him.

**Captain**

The Captain is a combat oriented type of Sectoid. He has a point of armor and is always accompanied by a group of Sectoid Soldiers. Expect a lot of plasma fire when a Captain is around.

**Puppeteer**

Puppeteers are specialized in turning the dead into combat assets. They are encountered in the company of special Psi Zombies, so-called "Puppets". The Puppeteer can raise these Puppets – and any fallen Advent forces – at a rate of two per turn. Additionally, when the Puppeteer dies, his minions won't die with him.
**Codices**

Codices are a very cool and unique midgame unit that sadly loses a lot of its bite after a short while. Due to their innate defensive abilities (dodge and cloning) they will often not run to cover on reveal and will instead go straight for their powers.

*Intrusion Countermeasure*

The Intrusion Countermeasure (or Codex "ICE") is a unit designed to hunt down and kill their target. They will use Teleport ruthlessly to almost guarantee flanking shots every turn until they are finally taken down.

*Bomber*

The Codex Bomber has the standard suite of Codex abilities, but it has a very specific quirk: On scampering, when the unit is first revealed, it will try to use the Psi Bomb immediately and as as best as it can. This behavior can have a devastating effect on any soldiers that stumble into a Bomber pod without preparation.

*Codex Splitter*

Splitters do not have followers, they roam completely on their own. Instead of relying on other units for support, they start rapidly chain-splitting into multiples as soon as they are engaged. On top of that, each copy regenerates 2 points of health every turn, so they will be able to keep going on splitting.

*ADVENT Codex*

These Codices take the place of Captains in ADVENT groups. They mark targets for the ADVENT soldiers with Holotargeting, but can’t use Psi Bomb. ADVENT pods with a Codex can drop in via reinforcements, when they do, they will use a Psigate instead of a dropship.

*Codex Nullifier*

The Nullifier uses Stasis to lock down the highest ranked soldier in sight. Like other Codex variants, they use this ability on reveal.

*Muton*

The Muton is a basic alien grunt. The Advent troopers fill most of the niches that can be filled by such a unit, limiting the number of variants that make sense for Mutons.

*Muton Pyro*

Pyros use incendiary Dragon Rounds that inflict Burning on any targets hit. To make up for this fairly powerful effect, they have no grenade and do not have the melee counterattack ability.

*Muton Infector*

Infectors load their rifles with poisonous Viper rounds. Like the Pyro, they have no grenades or melee counterattacks.

*Berserkers*

Berserkers appear only in Terror missions and in low numbers. That means that it’s not necessary to introduce many new variants for them. Any variants should bring something completely new to the table, as vanilla Berserkers are fairly bland and boring despite their impressive looks.

*Firestarter*

The Berserker Firestarter can breathe fire in a wide but short cone in front of him. This will torch the affected ground, leaving any survivors surrounded by fires.
Chryssalids

A Better ADVENT adds Chryssalids back into regular missions. They come in a variety of tiers and versions. A Chryssalid pod always has one leader unit that comes with a couple of generic melee bugs.

The standard run-of-the-mill Chryssalids come in 4 tiers:

**Crawler**
The smallest Chryssalids aren’t poisonous, have only little life, do puny damage and have no armor. They have a lot of mobility, but that shouldn’t stop even rookie XCOM soldiers from squishing them.

**Drone**
Drones are still a bit weaker than the vanilla Chryssalid. They are poisonous and have one point of armor. They have moderate health and damage.

**Hunter**
Hunters are slightly stronger than the vanilla Chryssalid. Like Drones, they are poisonous. Two points of armor, a good amount of health and respectable damage make them a credible threat.

**Hunterkiller**
Hunterkillers are the endgame variant of the common Chryssalid. They have 3 points of armor. Health and damage are improved even further. Obviously they are poisonous.

The leader Chryssalids, in order of rank and appearance, are:

**Spitter**
The Chryssalid Spitter has the ability to spit a poison projectile at an enemy. It’s a single target attack that does little damage, but will apply poison to the target. A Spitter can both spit and attack in one turn.

**Bleeder**
The Bleeder constantly leaves acid pools wherever he passes, blocking terrain and destroying the surroundings.

**King**
Only the toughest Chryssalids are fit to be potential mates for the Queen. These “Kings” are heavily armored and can dish out a lot of damage.

**Queen**
Every Chryssalid nest has a Queen. They are big, tough and constantly spawn additional members for the nest. They can spawn all 4 types of basic melee Chryssalid, at a rate of up to 2 per turn if they don’t move. Which enemy they spawn is decided randomly. Chryssalid Queens have the ability “Will of the Swarm” which will make them immediately spawn a new Chryssalid whenever they are hurt.
Archon

The Archon is another case of an enemy that has a unique set of abilities and is already non-trivial in vanilla XCOM2. Archon variants pick one aspect of their ability set and improve on it. Their high defense makes them ideal units for ability use on reveal because they don’t need to run for cover.

Torcher

Archon Torchers will use Blazing Pinions immediately on reveal if they can find a good spot for it. For that reason, engaging a pod with a Torcher at a bad time can be very dangerous. To compensate, Torchers can’t critical hit and are also unable to dodge.

Executioner

These are the melee version of the Archon, unable to use Blazing Pinions or plasma shots. They are very tanky thanks to a higher dodge chance and regenerating 2 life per turn. On top of that, they have a special version of the Archon staff that drains the life out of enemies and gives it to the Archon.

Sentinel

Like the Sentinel Trooper, the Archon Sentinel is a unit focused around Overwatch abilities. It uses Guardian and Covering Fire, which form a deadly combination with its high defense. In addition, they immediately enter Overwatch on reveal.

Andromedon

With their unique appearance and abilities, these are already a force to be reckoned with. The Andromedon variants offer further unique twists.

Prometheus Suit

This is a firebased unit that can torch whole areas and cover them in flames. Their fire attack doesn’t cause any impact damage, but it will generously spread the burning status among XCOM soldiers.

Viper

Vipers have a diverse set of abilities. They are in a good spot in terms of design and balancing – the only variants needed are a few that highlight some of those abilities.

Wyvern

Wyverns are a variant that focuses on spreading area damage with their spit weapon. Unlike vanilla Vipers, Wyverns spit globs of fiery napalm that causes the target area to burn for several rounds. They are able to do this every other turn. The fire spit does no damage on impact, but sets everyone on fire. Wyverns don’t have the tongue grab ability that regular Vipers have.

Boa

Boas are heavy melee units that start appearing late in the campaign. They use their tongue and their Bind ability whenever they are able, even on reveal. They have a large amount of health and decent armor. They will only lose their grip on whoever they are binding after being dealt a considerable amount of damage. Their damage on Bind and per turn is increased, but they can’t dodge and are unlikely to use cover.
Gatekeeper
Gatekeepers are dangerous endgame units whose high powerlevel doesn’t need further improvement. Vanilla Gatekeepers switch between opened and closed state and use different skills in each state. The two variants each specialize in one of those states.

Gatecaller
The Gatecaller spends most of its time with an open shell. This gives it quick access to the Mass Reanimation ability, enabling it even to cast it on reveal. When no good targets for reanimation are around, Gatecallers will often use their tentacles in melee to drain the life out of soldiers.

Doomsphere
The Doomsphere lacks any psi abilities and instead acts as a heavy weapons platform. Relying on its heavy armor, it will try to flank enemies and evaporate them with its heavy laser.

Spotters
Spotters are enemies that roam on their own and call for backup on reveal. A successful ambush can stop the distress call from ever happening, but if they survive it, the damage will be done. There are several possible reinforcement pods. Most of these pods will arrive on the next alien turn, but some of them may arrive instantly or only two or even three turns in. The longer it takes, the more powerful that incoming pod is going to be. Spotters have better stats than their vanilla unit, slightly higher sight and detection radii and also some defense/dodge to make up for not running into cover on reveal.

Sectoid Spotter
These appear between forcelevels 6 and 10. They can only request weak reinforcement pods from the alien base. Example pods: A Puppeteer with 2 Puppets. 4 Chryssalid Crawlers. A single Berserker.

Viper Spotter
As the next step up, Viper Spotters appear between FL 11 and 16. They can call for more advanced reinforcements. Example pods: 2 Wyverns and a Viper. A Sectoid Negator, Mindbender and Soldier. A Muton Pyro with a Berserker and vanilla Muton.

Muton Spotter
Muton Spotters are the final tier of spotters and call down the scariest pods. Example pods: 8 Chryssalid Crawlers. 2 Firestarters and a Berserker. An Archon Sentinel, Executioner and Torcher.
Prime Units
Prime Units are endgame versions of enemies, designed to spice up the endgame. They are considerably more dangerous than their vanilla counterparts.

Sectoid Primes
These are more powerful versions of the Sectoid Negator, Captain, Commander, Puppeteer and Soldier. They have more life, armor, defense and an improved weapon. They also got Advent Troopers of all sorts removed from their follower lists, so they will have more impressive other units in tow.

Muton Primes
Muton Primes are simply bigger and badder versions of the Muton. Equipped with a Beam Cannon and better armor, they are a serious threat. Muton Primes are always followed by a firing squad of regular Mutons.

Berserker Primes
Berserker Primes have a unique ability called Berserker Rush. This ability gives them an immediate bonus action whenever they are hurt. This extra action isn’t restricted in any way, they can dash, punch or use a special action like Firebreath. Yes, there are Firestarter Primes.

ADVENT Prime Captains
In the late endgame, ADVENT will send its best captains to lead the charge against the XCOM operatives. ADVENT Prime versions exist for of every Captain variant introduced by Better ADVENT. In addition to having slightly more health and offense, Prime Captains receive the following bonuses when compared to the Elite version:

- Prime Battle Commander
He got a significant extra boost in armor and defense, making him both harder to hit and harder to damage.

- Prime Sniper
Now has a heavy revolver sidearm. He will use Lightning Hands to try and sneak a few points of free damage in.

- Prime Beastmaster
He is followed by a group of Chryssalid Hunterkillers. No further upgrades are needed, those Chryssalids are already tough as nails.

- Prime Riot Control
Uses an upgraded rifle and has greatly increased mobility.

- Prime Adept
Has the ability to teleport and uses it offensively for almost guaranteed flanking shots.

- Prime Heavy Tactics
Has an upgraded grenade. Also does huge amounts of environmental damage both with his grenade and with his cannon, destroying most cover (including cars) immediately and with one shot.

- Prime Warden
The Prime Warden carries a Taser Pistol instead of a Stun Baton. Like Trauma Lancers, he can use them to damage and incapacitate targets from range. Unlike Trauma Lancers, his Taser does full damage.

- Prime Kommissar
Instead of using his pistol only for Return Fire, he also uses Faceoff. He has a heavy-duty revolver instead of the tiny peashooter that Gunslinger use, so this can deal quite a lot of damage.

- Prime General
Uses an upgraded rifle and is followed by Tier 3 captains.
Global AI parameter changes

These changes are to global parameters of the vanilla AI, not unit specific ones.

**DownThrottleUnitCount**
The vanilla patrolling AI starts to steer unrevealed pods away from the XCOM team if it has a certain minimum number of engaged already. This number has been increased from 4 to 20, therefore almost eliminating this unnecessary AI shackle.

**MaxEngagedEnemies**
Depending on the difficulty, vanilla XCOM applies a limiter to the number of engaged enemies. Only on Legendary, this shackle was removed. A Better ADVENT removes it for all difficulties.

**FallbackChance, UnitInFallbackRangeMeters**
When a unit is alone in his pod, it will search within a certain range for another pod to flee to. If he stays or flees is left to a random roll against a percentage. The range in which a unit looks for a potential new pod has been increased from 5 to 8, the chance to flee from 50% to 70%.

**DefaultIdealRange**
The default distance that aliens try to keep if they don’t have other things to consider (like weapon ranges or unit specific values). This value has been slightly increased from 10 to 12.

**Curr_Tile_Linger_Penalty**
When deciding where to move, XCOM decides how “valuable” every tile in range is, then uses the best. To promote alien movement, it penalizes the current tile it stands on, by a whooping -25%. This penalty has been lowered to -10%, so aliens actually stay in place if they found a good one.

**Calc_Mid/High_Cover_Factor**
When deciding on how valuable tiles are, cover applies a factor to this weight. These factors have all been increased considerably. The old factors were 1.0 for mid cover (yes, really) and 1.1 for full cover. Leaders had a special treatment that made them value full cover at a factor of 2.5. Or in other words, other than pod leaders, enemies basically do not care much about cover in vanilla XCOM. A Better ADVENT changes these values to 1.5 for mid cover, 2.5 for high cover and 3.0 for pod leaders and high cover.

**Surprised_Scamper_Path**
There are two values that set a minimum and a maximum of tiles that enemies run when taking their free move on reveal (scampering). These have been changed slightly to give more options to the aliens. Old scamper length was 2-6 tiles, new one is 0-7. By making the minimum 0, an alien that is already in cover when revealed doesn’t even have to move.

**MoveWeightProfiles**
There are several Profiles that set up how an alien decides how valuable tiles are for movement. Factors are things like cover, distance to enemies, flanking shots possible, allies in line of sight and a couple others. These have been tweaked, again mostly with regards to cover, but also in a few other areas where the value looked a bit off.

**MoveWeightProfile: MimicBeacon**
One of those profiles takes over whenever there’s a Mimic Beacon in sight. Before, this profile took no regard at all for the aliens safety, which is just unrealistic. It has been changed so that aliens still go for the Mimic Beacon with their actions, but keep on using cover, staying apart from each other and don’t run into flanks.
**Improvements to Overwatch**

These changes aren’t global, but they are not unit specific either. They have been integrated into all behavior trees introduced by A Better ADVENT where applicable. Only after the alien that is about to shoot made sure that none of the Priority Shots is available and that no Overwatch Override is happening, it will run into the vanilla routines for targeting and overwatching.

*Overwatch Override*

The Overwatch Override is a completely new routine that checks if a unit is better off going into Overwatch instead of taking crappy shots. It also provides a random chance to Overwatch even on decent shots to keep the enemy guessing. Finally, it will make an enemy that is fully alerted, but currently not seeing any targets, consider going into Overwatch and letting the targets come to him. It works by checking the highest available hit chance and making a random roll against a percentage. This percentage is further influenced by the number of teammates that are already on Overwatch. If the roll is successful, the alien goes into Overwatch. The exact values are:

- **Highest Chance to Hit < 10%** → Chance to Overwatch = 90%/75%/50%
- **Highest Chance to Hit < 25%** → Chance to Overwatch = 75%/60%/40%
- **Highest Chance to Hit < 50%** → Chance to Overwatch = 30%/20%/10%
- **Highest Chance to Hit < 75%** → Chance to Overwatch = 10%/5%/1%
- **No targets in sight** → Chance to Overwatch = 75%/75%/75%

(The first value is for no other overwatching teammates, the second for one other overwatcher, the third for every one after that)

*Overwatch VIP and Evac*

Vanilla AI has fairly high chances to Overwatch when a VIP is near or when an Evac zone is in sight. These chances have been lowered.

**Improvements to Targeting**

*Priority Shots*

Five types of potential shots now take priority over the vanilla targeting routine. They are:

- **Flanked Shots.** If a unit has a target flanked, he should take that shot. No considering about other targets, no raising of Zombies, just pop that guy that’s standing in the open. This also has a higher priority than the Overwatch Override.
- **Kill Shots.** If a unit could potentially kill someone, that’s worth trying. Making XCOM lose a soldier is worth more than wounding 5 of them.
- **Sure Shots.** Aliens have a fairly lousy chance to hit, so whenever they get a clean one, they better take it. Everything with a hit chance > 80% is considered a “Sure Shot” in this context.
- **Shots on Suppressors.**
- **Shots on Overwatchers.**

*Panic fix*

Enemies in vanilla XCOM don’t target panicked units unless there’s nothing else to shoot – even when that target is being flanked. This behavior has been removed, shooting at panicked units is absolutely something that enemies should do.
New AI decision trees

The behavior of units in combat is governed by decision trees. Almost all enemies have gotten new AI trees, including the vanilla units. The following AI trees stay unmodified: Gatekeeper, Faceless, Psi Zombie, Andromedan Shell and Vanilla Chryssalid. The Gatekeeper AI is good and doesn’t really need changing. The other units are simple melee fighters that don’t have anything interesting going on.

All others have at least the Targeting and Overwatch improvements worked into their AI trees. Some also had a few of their priorities concerning ability use switched around to make a bit more sense. Many of the AI trees also got a movement profile that better fits their role in combat. This movement profile takes priority over any jobs assigned to a unit.

A Better ADVENT assigns new AI trees to the following 15 unit types: Trooper, Captain, Stun Lancer, Shieldbearer, MEC, Avatar, Turret, Andromedon, Archon, Berserker, Codex, Muton, Sectoid, Viper, Sectopod.

Examples for specific changes:
- Moved “Mark Target” priority down a bit. Advent Captains do no longer waste flank shots or sure shots by spending their turn with marking.
- Stunlancers are no longer pure melee units. They will use their guns to take any opportunity shots they come across. They will also sometimes randomly decide to use their gun instead of the stun baton.
- Turrets will no longer waste their second action. Most often, they will choose Overwatch if they don’t find a particularly good shot to take.
- Codices are more defensive, they will use their Teleport to keep distance and stay in cover, taking shots from there.
- Sectoids have a lesser probability to use Psi Reanimation and won’t use it at all if they have someone flanked.
- Shieldbearers no longer use their shield when they are already shielded due to another Shieldbearer on the field.

Improvements to ability use

Most enemies use their abilities on cooldown whenever they can. Their decision tree sets up a very binary list of priorities and the first thing that can be used will be. A Better ADVENT links some abilities to other triggers, modifying these priorities if certain conditions are met. These changes aren’t global, they are customized per unit.

When an alien has only bad shots available, it will consider other options more strongly than it would otherwise.

Examples for specific changes:
- Sectoids that have only bad shots available will go for Mindspin, hoping to panic someone out of their full cover into a more vulnerable spot
- Demolitionist Troopers and Mutons use their grenades more aggressively. If they don’t have a good shot on anyone, they will use their grenade on single targets as well, hoping to destroy their cover.
- Mutons may also use Suppress in that situation instead.