

WFO

ENEMY UNKNOWN

COMMAND EARTH'S FORCES AGAINST THE ALIEN TERROR



**Guidelines for using
HoTT to recreate this
1994 computer game.**

X-COM: UFO, Enemy Unknown...for HoTT!

This 1994 computer game is an old favourite of mine, which can still be played today when using DosBox. There have been many later variants since this first came out, but I like the original for its game play and depth, although the graphics are admittedly poor compared to the more modern up-to-date versions. So here are some guidelines for using HoTT 2.1 to recreate this old classic game on the wargames table. ☺

...by Stevie, November 2021.

(For those of you that are unaware of this computer game, see <https://www.ufopaedia.org/index.php/X-COM>. Although in no way connected to the British 1970 "UFO" TV series, the plot and setting is remarkably similar)

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Introduction

The purpose of these guidelines is not to turn HoTT 2.1 into the computer game, but in fact the opposite. The aim is to shoehorn UFO Enemy Unknown to fit into HoTT. Doing things this way avoids having to make loads of new rules to cover such things as destroying terrain, night battles, healing wounds with Medi-kits, having buildings and UFO's with multiple floors, and much more besides that exists in the computer game.

There are only two optional rules that have been added; these are Zombies hatching into new Chryssalids, and turning to flee down a table side-edge (I also suggest using the DBA shooting rule whereby the target edge only needs to be ½ a BW, otherwise HoTT can have some weird situations that disallows shooting at rather obvious targets). But other than that all the normal HoTT 2.1 rules still apply, although who places the terrain and who deploys and moves first is different.

However, Built Up Areas, the interiors of UFO's, Urban Cities and Underground Bases *will* require extra rules with new terrain and placement, so these optional complexities have been set aside in the appendix.

I would also encouraged players to use the alternative "100 paces equals 1 base width" movement system. This makes the game quicker, it requires less awkward fiddly micro-measuring, and is easier to use than the arbitrary concept of 'paces' (which then have to be mentally converted into something more useful such as inches or centimetres). In short, it makes a much better game...but it will require the fleeing down a table side-edge optional rule in order to prevent troops from leaving the table and becoming lost far too easily.

Those that are using MedievalThomas' excellent D3H2 variation, which combines HoTT and DBA together, will already be doing this, and I strongly urge other players to also adopt base width movement as well.



ALIEN FORCES

FLOATERS

- 1 x Floater Plasma Pistol Command Squad (Aerial Hero General @ 6 AP)
- 4 to 8 x Floater Plasma Pistol Aerial Squads (Flyers @ 2 AP each)
- Up to 1 x Floater non-flying Stun-Launcher Squad (Shooter @ 2 AP)
- Up to 3 x Reaper Biting Terror Units (Beasts @ 2 AP each)
- Up to 1 x Floater non-flying low ranking Plasma Pistol Squad (Horde @ 1 AP)
- Up to 1 x Floater non-flying Ambusher (Lurker @ 1 AP)
- (Enemy: Early X-COM with ballistic weapons wearing uniforms)



SECTOIDS

- 1 x Sectoid Plasma or Blaster Command Squad (Magician General @ 4 AP)
- 5 to 9 x Sectoid Plasma Rifle Squads (Shooters @ 2 AP each)
- Up to 1 x Sectoid Stun-Launcher Squad (Shooter @ 2 AP)
- Up to 2 x Cyberdisc Aerial Terror Units (Airboats @ 3 AP each)
- Up to 1 x Sectoid low ranking Plasma Pistol Squad (Horde @ 1 AP)
- Up to 1 x Sectoid Ambusher (Lurker @ 1 AP)
- (Enemy: Early X-COM with ballistic weapons wearing uniforms, and Later X-COM with laser weapons wearing personal armour)



SLAKEMEN

- 1 x Snakeman Heavy Plasma Command Squad (Spear General @ 2 AP)
- 4 to 10 x Snakeman Heavy Plasma Squads (Spears @ 2 AP each)
- Up to 1 x Snakeman Stun-Launcher Squad (Shooter @ 2 AP)
- Up to 3 x Chryssalid Parasitic Terror Units (Mounted Heroes @ 4 AP each)
- Up to 1 x Snakeman Base or Huge UFO Blaster Squad (Magician @ 4 AP)
- Up to 2 x Snakeman low ranking Plasma Rifle Squads (Hordes @ 1 AP each)
- (Enemy: Later X-COM with laser weapons wearing personal armour, and Advanced X-COM with plasma weapons wearing power suits)



MUTONS

- 1 x Muton Heavy Plasma Command Squad (Blade General @ 2 AP)
- 5 to 10 x Muton Heavy Plasma Squads (Blades @ 2 AP each)
- Up to 1 x Muton Stun-Launcher Squad (Shooter @ 2 AP)
- Up to 3 x Celatid Acid Spitting Terror Units (Artillery @ 3 AP each)
- Up to 1 x Muton Base or Huge UFO Blaster Squad (Magician @ 4 AP)
- Up to 1 x Muton low ranking Plasma Rifle Squad (Horde @ 1 AP)
- Up to 1 x Silacoid high temperature incendiary Ambusher (Lurker @ 1 AP)
- (Enemy: Advanced X-COM with plasma weapons wearing power suits)

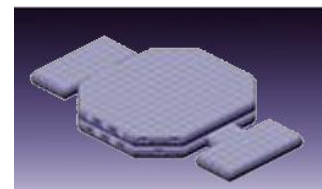


ETHEREALS

- 1 x Ethereal Plasma/Blaster Command Squad (Magician General @ 4 AP)
- 1 or 2 x Ethereal Heavy Plasma Squads (Magicians @ 4 AP each)
- Up to 1 x Sectopod Robotic Terror Unit (Behemoth @ 4 AP)
- 4 to 7 x Muton Heavy Plasma Squads (Blades @ 2 AP each)
- Up to 1 x Muton Stun-Launcher Squad (Shooter @ 2 AP)
- Up to 1 x Muton low ranking Plasma Rifle Squad (Horde @ 1 AP)
- Up to 1 x Silacoid high temperature incendiary Ambusher (Lurker @ 1 AP)
- (Enemy: Advanced X-COM with plasma weapons wearing power suits)



ALIEN STRONGHOLD: A landed or intercepted and shot down UFO, or the primary command centre in a secret underground Alien Base. *(The UFO could be heavily damaged in the rear, with the side facing your opponent showing whether it is still intact or has crash landed)*



X-COM FORCES

EARLY X-COM FORCE

1 x Early Rifle Command Squad (Shooter General @ 2 AP)
6 to 8 x Rifle Squads in uniforms (Shooters @ 2 AP each)
Up to 2 x Heavy Weapon Support Squads (Spears @ 2 AP each)
Up to 2 x Rocket-Launcher Squads (Artillery @ 3 AP each)
Up to 2 x Cannon Unmanned Auto-Tanks (Riders @ 2 AP each)
Up to 1 x Rookie Squad (Horde @ 1 AP)
(Enemies: Alien Floaters and Sectoids)



LATER X-COM FORCE

1 x Later Laser Command Squad (Blade General @ 2 AP)
3 to 5 x Laser Squads in Personal Armour (Blades @ 2 AP each)
Up to 3 x Sniper Laser Support Squads (Shooters @ 2 AP each)
Up to 2 x Heavy Weapon Support Squads (Spears @ 2 AP each)
Up to 2 x Rocket or Stun-Launcher Squads (Artillery @ 3 AP each)
Up to 1 x Mind Probe Psionic Defence Squad (Cleric @ 3 AP)
Up to 2 x Laser Unmanned Auto-Tanks (Knights @ 2 AP each)
Up to 1 x Rookie Squad (Horde @ 1 AP)
(Enemies: Alien Sectoids and Snakemen)



ADVANCED X-COM FORCE

1 x Command Squad (Magician or Hero General @ 4 AP)
Up to 2 x Psi-Amp or Blaster Squads (Magicians @ 4 AP each)
Up to 2 x Plasma Squads in Power Suits (Heroes @ 4 AP each)
Up to 1 x Plasma Squad in Flying Suits (Aerial Heroes @ 6 AP)
3 to 5 x Plasma Squads in Personal Armour (Blades @ 2 AP each)
Up to 3 x Sniper Plasma Support Squads (Shooters @ 2 AP each)
Up to 2 x Rocket or Stun-Launcher Squads (Artillery @ 3 AP each)
Up to 2 x Plasma Unmanned Hovertanks (Airboats @ 3 AP each)
Up to 1 x Blaster-Launcher Unmanned Hovertank (Magician @ 4 AP)
Up to 1 x Rookie Squad (Horde @ 1 AP)
...but remember, only 12 AP can be spent on items worth more than 2 AP.
(Enemies: Alien Snakemen, Mutons and Ethereals)



X-COM STRONGHOLD: A landed Stryker VTOL jet transport aircraft, or the guarded primary command centre in an X-COM underground Base.

The Stryker has a combat factor of 6 against all enemies due to its armed defending aircrew, i.e. the pilot, copilot and flight engineer (UFO Strongholds are similarly defended by their Alien Navigators and Alien Engineering ranks).



(I plan to have the 2 figure Rocket and Stun-Launcher Squads with one figure carrying a Rocket-Launcher and the other carrying an Alien type Stun-Launcher. And the same goes for the Advanced X-COM Psi-Amp and Blaster-Launcher Squads. Likewise, the Later X-COM Psionic Defence Squad has one figure carrying a silver Mind Probe globe plus a Laser Pistol while the other figure has a Laser Rifle and a Motion Scanner. Heavy Weapon Support Squads have one figure with a Heavy Cannon and the other with an Auto Cannon. Sniper Squads could be depicted with the 2 figures kneeling and taking aim)

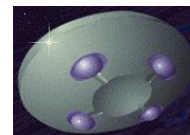
ARMY LIST NOTES

BASING NOTES

Squads and civilians are 2 figures, Hordes are 3 figures, while Terror Units and Ambushers are single figures. All X-COM unmanned Auto-Tanks and Sectoid Cyberdiscs are single models mounted on 1 BW deep bases. Blades, Spears and civilians are on bases ½ a BW deep, or even deeper for Snakemen due to their long tails. (ZOC represent 'fields of fire', limiting movement, and 'Close Combat' also includes point-blank close range)

ALIEN ARMY LIST NOTES

Alien Hordes represent wounded or stunned aliens that have recovered and may return. The Blaster-Launcher's closest equivalent in HoTT is the Magician, which has long range, can hit targets that are out-of-sight, and even attack an enemy already in close combat. Stun-Launchers are less effective against X-COM armour, so they are treated as Shooters. Ambushers are not used in assaults on X-COM Bases as they are unable get into position.



Floater: These have an Aerial Hero General as a mere Flyer General is far too easy to destroy.

Sectoids: The Sectoid Leader has powerful psionic mind control abilities, like all Ethereals have.

Snakemen: These have no Ambushers because they move far too slowly to get into good positions. Chryssalids need to be both fast and powerful, so they are classed as 'Mounted Heroes'.

Mutons: These use high temperature Silacoid incendiary creatures as hand-to-hand only Lurkers.

Ethereals: These should fly, but making them Magicians is more important for their psionic abilities. Their Sectoid Robotic Terror Unit should be very powerful, but having this as a Paladin interferes with the Ethereal Psionic-Magic ability, so it is classed as a Behemoth instead.

X-COM ARMY LIST NOTES

Rookies are wounded soldiers that have been healed with Medi-kits and may return. Stun-Launchers are as effective against Alien Terror Units as Rocket-Launcher Artillery. An unmanned artillery Rocket Tank, if used, replaces a Rocket or Stun-Launcher Squad.



Early X-COM: Troops equipped with Heavy Cannon or Auto Cannon firearms are classed as Spears.

Later X-COM: The Psionic Defence Squad represents partially trained psionically resistant soldiers.

Advanced X-COM: Blaster-Launchers and skilled Psi-Amp soldiers are both treated as Magicians.

OPTIONAL RULES

OPTIONAL CRYSSALID RULES

When an X-COM soldier, or a civilian, is destroyed by a Chryssalid (but not when either of these are lost by recoiling over a table-edge) they immediately become a 'Zombie'. These alien controlled Zombies are treated like Hordes, except that when a Zombie is killed it cannot return later but instead instantly turns into yet another newly hatched Chryssalid!



Although classed as 'Heroes', Chryssalids cannot engage Aerial troops in close combat, and when they are 'ensorcelled' they may not be 'desorcelled' and return like true Heroes can. Extra Chryssalids will count towards the Alien 12 AP breaking point when they are lost.

Heroes can sometimes mutually destroy each other on an equal score, but this does not cause the X-COM corpse to become a Zombie since both mutually killed each other before any soldier could be impregnated.

OPTIONAL FLEEING RULE

All fleeing troops that meet a table *side-edge* make a free turn to flee along that table-edge towards their own original base-edge. This is like the HoTT rule that allows "turning when fleeing to avoid an obstacle" and the DBA "pivoting to flee along a table side-edge".

This is necessary to prevent fleeing troops from leaving the battlefield and being lost far too easily.

Note that fleeing is an involuntary combat outcome, not a tactical move, so is not slowed by terrain.

(I would also suggest using the DBA shooting rule whereby the target edge only needs to be ½ a BW, otherwise HoTT has some weird situations that disallows shooting at what are rather obvious targets)

RANDOM ENEMIES AND LOCATIONS

THE TYPE OF MISSION: The Aliens roll two dice, adding +1 if X-COM has reached the Advanced tech level:

- 2 to 4 = an Alien Harvesting-Abduction mission by a Medium sized UFO.
- 5 or 6 = an Alien Scouting and Reconnaissance mission by a Small UFO.
- 7 = an X-COM Assault Mission on a newly discovered Alien Base.
- 8 or 9 = an Alien Urban Terror Raid on a major city by a Large UFO.
- 10 to 13 = an Alien Assault on an X-COM Base by a Huge Battleship UFO.



(If just using the basic terrain then Terror Raids have a compulsory BUA and are occurring in the countryside on the outskirts of a city, and all Base Assaults are above ground with the base entrance as the Stronghold)

INTERCEPTION AND AIR-TO-AIR COMBAT: The X-COM player rolls a single die.

Add +1 if Later X-COM, or +2 if Advanced X-COM, and -1 if a Large or Huge UFO:-

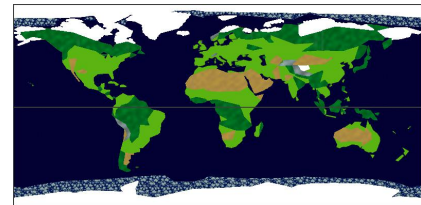
- 0 to 4 = the UFO lands intact and proceeds with its mission.
- 5 to 8 = the UFO has been successfully shot down and crash lands.

If shot down the mission becomes an X-COM ground assault on a crashed UFO.



WHERE THE UFO LANDS: Unless shot down, Urban Terror Raids are in major cities and Base Assaults are in underground interiors (and the attackers have no Stronghold). Otherwise the Alien player rolls two dice:-

- 2 or 3 = Frozen Arctic terrain.
- 4 = Mountainous terrain.
- 5 = Dry Desert terrain.
- 6 to 8 = Cultivated Farmland.
- 9 or 10 = Dense Forest terrain.
- 11 or 12 = Tropical Jungle terrain.



WHICH ALIEN RACE IS PRESENT: The Alien player rolls a single concealed die.

(Exception: Advanced X-COM can see the die roll due to their possession of 'Hyper-wave Decoders')

Add +2 if opposed by Later X-COM, or +5 if opposed by Advanced X-COM:-

- 1 to 3 = Floaters
- 4 or 5 = Sectoids
- 6 or 7 = Snakemen
- 8 or 9 = Mutons
- 10 or 11 = Ethereals



Now both sides secretly decide on their order-of-battle based on the forces available.

However, if X-COM lost the previous battle the Alien player decides what the X-COM force will be, thereby representing severe combat losses and their replacement by whatever X-COM has available. The Alien force from a crashed UFO is decided by the X-COM player, in order to represent survivors. Small and Medium sized UFO's never have any Terror Units or any Blaster-Launcher Squads present. Large UFO's always have at least 1 Terror Unit and no Blaster Squad, and any Base Assaults and Huge UFO's always have at least 1 Terror Unit plus a Blaster Squad, even when these have been shot down.

TABLE LAYOUT: The Aliens choose and place terrain, except on Urban Terror Raids or when Assaulting an X-COM Base, where X-COM chooses and places the terrain. Both sides have a Stronghold, unless conducting a Terror Raid or Assaulting a Base. The Aliens always place their Stronghold first if they have one, followed by X-COM. X-COM always rolls for the table-edges, and always deploys first and moves second.



ELEMENT RANDOM DEPLOYMENT: The Aliens (or X-COM if defending their base) divides the table into four quarters and rolls for each element to see in which quarter it is placed, 200p or more from the enemy. A roll of 1-2-3-4 is placed within that quarter, 5 means you can choose, and 6 means the opponent chooses the quarter but it is still placed by the dice roller. If the quarter lacks the room for deployment then choose any quarter, as if you had rolled a '5'. Troops may still form groups with elements in adjacent quarters.

TERRAIN CLIMATE REGIONS

As HoTT terrain types are a little bit vague, here they are in more detail using DBA style 'Climate Regions'. The following chart may look complicated, but actually you just roll the dice and take whatever is offered. Brackets shows maximums, and any underlined block line-of-sight. **Brown** is **Bad Going**. **Red** is **Impassable**. If a maximum is exceeded, chose another from that same box. Otherwise choose any type for that region.

Region:-	Compulsory Features:-	Roll either two or three times for Optional Features:-					
		1 Linear Terrain	2 Bad Going	3 Sight Blocking	4 Undulating	5 Impassable	6 Built Up Area
Frozen	<u>2 Snowdrifts</u>	<u>Glacier (2) or The Sea (1)</u>	Soft Snow (3)	<u>Snowdrifts (3)</u>	<u>Icy Hill (3)</u>	a <u>Crevasse (1)</u>	a <u>Research Outpost (1)</u>
Mountain	<u>2 Craggy Hills</u>	Road (2) or River (2)	Rocky Area (3)	<u>Wood (3)</u>	a <u>Cliff (1) or Steep Hill (3)</u>	a <u>Lake (1) or Mountain (3)</u>	a <u>Village or Monastery (1)</u>
Farmland	<u>2 Enclosures</u>	Road (2) or River (2) or The Sea (1)	Enclosure or Vineyard (3)	<u>Wood (3) or Orchard (3)</u>	<u>Gentle Hill (3) or Wooded Hill (3)</u>	a <u>Lake (1)</u>	a <u>Farm (1)</u>
Forest	<u>2 Woods</u>	Road (2) or River (2)	Marsh (3)	<u>Wood (3)</u>	<u>Wooded Hill (3)</u>	a <u>Lake (1)</u>	a <u>Village (1)</u>
Jungle	<u>2 Jungles with paths</u>	Road (2) or River (2) or The Sea (1)	Marsh (3) or Enclosure (3)	<u>Wood (3)</u>	a <u>Gully (1) or Wooded Hill (3)</u>	<u>Jungle Hill (3) with a path</u>	a <u>Village (1)</u>
Desert	<u>2 Sand Dunes</u>	Road (2) or The Sea (1)	Scrub (3) or Cactus (3)	an <u>Oasis (1) or Sand Dunes (3)</u>	a <u>Gully (1) or Craggy Hill (3)</u>	a <u>Cliff (1) or Mountain (3)</u>	a <u>Tent Camp or Fuel Station (1)</u>

Frozen: A **Glacier** is a 1 BW wide **Good Going** frozen **river** that still affects magic. **Snowdrifts** block sight. A **Crevasse** is an **impassable** gully. **Soft Snow** and **Snowdrifts** may be placed on top of **Glaciers**.

Sight: All hills have hillcrests that block line-of-sight, but **Craggy Hills** and any **Woods**, **Oasis**, **Orchards** or **Jungles** reduces the command range of ground troops *entirely* within them and shooting is limited to just 50 paces. The same applies to all **Snowdrifts** and **Sand Dunes**.

Gully: Ground troops *entirely* inside can only shoot or be shot by those also inside or touching its edge.

Cliffs: These are **Gentle Hills** with hillcrests that have had part of the hill replaced by a **vertical Cliff**.

The **Cliff-Face** itself is **impassable** to ground troops and blocks their ZOC when *entirely* beyond it.

Jungles: Are **impassable** to most ground troops with a ½ BW wide **bad going path** running through them. All troops (except Lurkers) stay on the **path** even when pursuing, recoiling, pushed back or fleeing.

Mountains: These are very large tall hills with an **impassable Cliff-Face** around their entire perimeter.

Aerials: These count **Jungles**, **Woods**, **Orchards** and **Oasis** as **Bad Going** and cannot end a move in these, nor can they enter or fly over **Mountains**, but they may end a move in other types of terrain.

(Roads in Frozen Regions are buried under snow so are unusable, and Steppe is not used in UFO Enemy Unknown)

TERRAIN SIZES AND SHAPES

Minimum sizes are **3 x 1 BW** for a **Gully** and **3 x 1½ BW** for other area features (but **BUA's** are different).

Maximum sizes are **7 x 2 BW** for a **Gully** and **6 x 3 BW** for other area features (but **BUA's** are different).

Circular area terrain features are **3 x 3 BW** if small and up to **4½ x 4½ BW** if large.

Mountains should be as large as possible, so they are between **3 x 6 BW** if long or **4½ x 4½ BW** if circular.

Rivers are ½ to **1 BW** wide and are **Good Going** for combat and recoiling. **The Sea** can be **1 to 3 BW** deep.

Tarmac Roads (without pavement-sidewalks) are **1 BW** wide and **Good Going** for movement and combat.

Most terrain has curved edges, but **Roads**, **Enclosures**, **Orchards** and **BUA Buildings** are straight edged.

Strongholds are **2 BW** deep and **2 to 4 BW** long, placed over terrain, but discard impeding hills or buildings.

TERRAIN PLACEMENT

This uses the same procedure as the 'Element Random Deployment'. The table is divided into four quarters.

Place **The Sea** first if present, then any **BUA**, then the compulsory terrain, and lastly all the optional terrain.

A roll of 1-2-3-4 is placed within that quarter, 5 means you can choose, and 6 means the opponent chooses.

All area terrain, but not linear terrain, must have a gap of at least **1 BW** between them plus any table-edge.

Terrain that lacks the room for placement is discarded. **Rivers** can cross over any other terrain except **Hills**, a **BUA**, a **Gully**, and **impassable** (but can cross lowland **Jungles**). **Roads** can cross all but **impassable** terrain.

TOO MUCH TERRAIN

HoTT says most, i.e. more than half, of the table area must be flat good going. One quick and easy way of checking this is to divide the table into two halves and squeeze all the terrain (other than roads) into the left-hand half. If any terrain overhangs into the right-hand half, it must be over 50% and be too much. Discard items until it all fits in the left half, then remove all the terrain features and place them as normal. (Note: **Strongholds** are not area terrain pieces. They are best thought of as large immovable ground units)

CAMPAIGN RULES

TECH ADVANCEMENT: Roll a die each time X-COM succeeds in winning a battle.

On a score of '5' or '6' they make progress and advance to the next tech level.

Early X-COM becomes Later X-COM, which then becomes Advanced X-COM,

which eventually becomes a mission to Mars for the final battle at Cydonia.



WINNING: X-COM wins by destroying the Alien Master Hive Brain at Cydonia.

The Aliens will win the war if they can completely conquer Earth by either:-

- * beating X-COM in three consecutive battles in a row (causing X-COM to be disbanded),
- * destroying two X-COM Bases (with no organised opposition, Earth is entirely overrun),
- * successfully defending two Alien Bases (infiltration causes governments to surrender),
- * defeating X-COM at Cydonia (if the Aliens are not beaten here, they are unstoppable).



THE CYDONIA TWO-PART MISSION: First the Sectoids and Cyberdiscs on the Martian surface have to be defeated. Then the X-COM survivors go underground to confront the Ethereals with their Sectopod Terror Unit. Only when the Ethereals are beaten, or their Master Hive Brain Stronghold is destroyed, will the Alien threat to Earth be eliminated.

(If not using the underground base terrain, X-COM will have to defeat the Ethereals on the Martian surface, with their Master Hive Brain represented by a Pyramid Stronghold)



STRATEGY: The Aliens want to fight lots of battles in order to get more opportunities to disband X-COM, to storm X-COM Bases, or get a firm foothold on Earth by successfully defending two secret Alien Bases. However, each time X-COM wins a battle their tech level may increase, making them even stronger.

Once an Alien Base is established it is so well defended it cannot even be approached, let alone assaulted. Only newly discovered secret Alien Bases currently under construction are vulnerable to an X-COM assault.

The HoTT rule that gives -2 to magical attacks against Magicians who are within 600p of their Stronghold can be a big boost to defending Psionic and Blaster-Launcher troops. And X-COM having to defend one of their Bases or assaulting a newly discovered Alien Base, after they have just lost a battle and the Aliens get to choose the composition of the X-COM force, can sometimes prove to be particularly challenging.

Element Random Deployment itself opens up a whole multitude of new tactics, dangers and possibilities. X-COM will deploy first and be within 600p of their table-edge, but those pesky Aliens could be anywhere, thereby simulating their nasty habit of attacking just as X-COM exits from their Skyranger transport plane. A Horde+Lurker+terrain makes a handy ambushing team, that can grab a kill or at least slow X-COM down. And if X-COM are negligent and deploy too far forward, they may well find Aliens being randomly deployed behind their battleline and near their Skyranger Stronghold, ready to swoop in for a very easy early victory. Alien players would be wise to first find out where their Commander is placed before forming a battle plan.

Hopeless missions can be aborted, but players will suffer from the failed negative effects. You may have complete control over X-COM, but you are still subject to orders from the politicians who raise the necessary finance to both fund and maintain the X-COM Project. Alien strategy on the other hand is dictated entirely by their controlling Master Hive Brain.



APPENDIX #1: BUA BUILDING RULES

BUA's in HoTT are bad going area terrain features that limit both line-of-sight and shooting range, with the purely decorative buildings placed on top. This is fine for ancient, medieval and fantasy armies, who need to keep a strict formation to avoid becoming disordered. However, this makes no sense for troops armed with firearms, fighting in a loose open skirmish formation so they are always disordered, who should treat being inside a building as a positive advantage rather than a negative disadvantage.

So what follows are special rules in order to simulate the true nature of buildings in UFO Enemy Unknown.

BUA PLACEMENT: All BUA's consist of four buildings, each ranging from **1 x 1 BW** to **2 x 2 BW** in size. Each is placed *exactly* **1 BW** from at least two other BUA buildings, at least **1 BW** from a table-edge and at least **1 BW** from all other area terrain features, with the gap between them being treated as good going.

DESERT TENTS are all **1 x 1 BW** and are ordinary bad going that does not block sight, shooting or Aerials. *(They are not just nomads. They may be for archaeologists, TV crews filming wildlife, or homeless refugees)*

The contents of a building has no effect whatsoever...it is purely decorative. Only the outer walls matter. They are never counted as destroyed (the rubble itself is a good defence). They may be entered, exited or shoot through any edge via doorways and windows, and are treated as good going single storey structures.

Basically, all buildings act like woods, except they give combat advantages to those entirely inside, offer no protection from magic attacks, and since they are 'good going' any Aerials and Artillery may enter them.

Here is a summary of all the BUA Building rules that are the same as HoTT:-

- * **Blocking Sight:** Troops *entirely* behind a building have their line-of-sight blocked (just as a wood does).
- * **Shooting Range:** This is unaffected if only passing through 50 paces of a building (just like in a wood).
- * **Zones of Control:** An element's ZOC is not blocked by a building (just as a wood does not block ZOC).
- * **PIP Costs:** +1 PIP to move if *entirely* inside a building and over 600 paces from the general (like a wood).
- * **Movement:** All speeds are limited to 200 paces if already in or would enter a building (much like a wood).
- * **Groups:** Only column group moves, and not elements in a line, is allowed in buildings (just like a wood).
- * **Conforming:** Troops must conform to an enemy that is *entirely* inside a building (just like a wood).
- * **Lurkers:** Their placement can be triggered when deploying in or entering a building (just like a wood).

And here is a summary of all the BUA Building rules that are different from HoTT:-

- * **No Support Shooting:** Troops *entirely* inside a building can only be shot at by one enemy that is *entirely* outside, but those even partially inside may provide support shooting as normal. This includes Artillery.
- * **No Close Combat Overlaps:** Troops *entirely* inside a building ignore any corner-to-corner or mutual side edge overlaps from an enemy *entirely* outside that building. Otherwise overlapping still occurs as normal.
- * **Combat Factors:** All buildings are 'good going', so unlike woods there are no combat bonuses or penalties.
- * **Magic Attacks:** Psionic and Blaster-Launcher attacks are not penalised or affected in any way by buildings.
- * **Aerial Troops:** These fly over buildings at full speed, but if they stop even partially in a building they have entered it and their speed is reduced to 200 paces like all ground troops. While they are fully or partially inside they may be engaged by *any* ground troops and no one can pass under, over or through an enemy.

(The idea is to give those inside a tactical advantage, but adding +1 or -1 to combat factors is way too powerful)

Here is an example of a Farm BUA consisting of four buildings, each of which is *exactly* 1 BW from two others, as well as each of them being at least 1 BW from any table-edge and any other area terrain feature.

I've used a Tool Shed (1 x 1 BW), a single storey Farmhouse (2 x 2 BW), a single storey Barn (2 x 2 BW), and a Cowshed (1 x 2 BW).

Other configurations and combinations are of course possible.

(These are isometric two-dimensional views in order to give each building character, with flat pictures glued onto cardboard bases. The thick black edges shows the boundary of each individual building. This is also how they appeared in the original computer game.)



APPENDIX #2: UFO INTERIORS

Part of the allure of UFO Enemy Unknown is having to fight your way into landed or crashed Alien ships. One easy way of simulating these Alien interiors is to have UFO 'segments', each 6 x 6 BW in size, with all the internal cabins treated as buildings either printed directly onto the segment itself or by having each separate cabin mounted on card and placed individually.

A Small UFO has no internal cabin structure and is treated as a single exposed Stronghold. A Medium UFO has one segment, placed against two table-edges, with the Control Centre Stronghold lying deep within it. A Large or Huge UFO has two segments touching each other, placed over 1 BW from all table side-edges.

Here are some examples of possible UFO interiors.

The first shows a single segment of a Medium sized UFO, with the Control Centre touching two table-edges.



The metallic floor tiles are typical for Alien ships, and can be useful for determining move distances and ranges since 4 of these floor tiles equals 1 BW.

All cabins are 1 BW from each other, thus creating corridors. Note that although the Control Centre may look like a cabin, it is in fact a Stronghold, and nobody, not even the Aliens, can enter it.

(Not shown are the Alien Navigators and Engineers inside giving the Stronghold its combat factor of 6)

As you can see, assaulting a Medium sized UFO is a much tougher proposition than a Small Alien craft. X-COM needs to fight their way through two cabins before the Control Centre can even be reached.

But they may still rout the Alien forces and win by using the normal HoTT victory conditions of course.

And this shows an example of a Large or Huge UFO consisting of two different segments placed together. The Control Centre is touching the Alien table-edge and the UFO is over 1 BW from any table side-edge:-



UFO INTERIOR TERRAIN RULES

Placement: The Alien player places their UFO, if they have one, so that their Control Centre Stronghold is touching the Alien table-edge. Then X-COM places their Skyranger Stronghold. Both may be placed on top of any terrain, even impassable terrain, but for practical reasons discard any impeding hills or buildings. Don't forget the HoTT rule that says a Stronghold must have a 1 BW wide passable ground route to it.

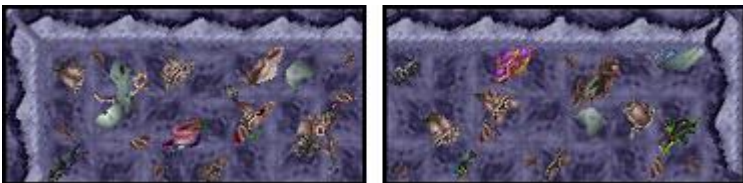
Apart from the Control Centre, the interior of a UFO consists of two types of terrain; **Cabins** and **Corridors**. **Cabins** are treated exactly the same as BUA Buildings (see page 8 of this booklet), and they can be entered, exited, and shoot through any edge via sliding pressure doors, service panels and hatches, plus viewports. The **Outer Hull** is treated in the same way as a BUA Building outer wall, so it too reduces speed to 200p.

Corridors inside a UFO are not cabins but flat good going, although they also have some limiting effects. No troops can move more than 400p because of the minor equipment obstacles lining the passageways. And due to the low ceiling, Aerial troops are also limited to 400p, they can be engaged in close combat by any ground troops, and nobody can move under, over or through an enemy (but they can through friends).

(Limiting entry into a UFO to just the outer double-doors makes it far too easy for the Alien player to create overwhelming flanking positions. Assaulting a UFO should be difficult...not impossible)

SHOT DOWN UFO'S

When a UFO is intercepted, shot down and crash lands, some of the internal cabins are likely to be wrecked. To simulate this the Alien player rolls a single die for each cabin (other than the Control Centre Stronghold). A die roll of '1' or '2' means that particular cabin has been destroyed, and it is marked as such by placing one or more of the following 'Debris Field' markers entirely over it.



Triangular shaped cabins have two of these 'Debris Fields' placed at 90° on top of each other, with some of the debris extending outside beyond the line of the original hull.

Debris Fields indicate that the cabin walls, and even part of the outer hull, is gone, and they are no longer treated as a Cabin-Building. Their only effect is to slow *all* ground troops to 200p. They have no other effects, they do not interfere with line-of-sight or range, and all troops plus Lurkers may enter them.

But in addition they also show that the UFO ceiling above them has a large hole in it. Thus any Aerials can fly into or out of these at full speed, and Aerials are treated as if in the open countryside so most ground troops cannot engage them in close combat (unless already engaged) and passing through is as normal. However, beginning in a corridor or an undamaged cabin, or moving into these, *does* still limit movement.

WHAT HAPPENS TO A CRASHED UFO

If the Aliens are successful in defending their shot down and crashed UFO, X-COM cannot make another attempt on that same craft at a later date.

It may be repaired by its crew and escape by taking off, or it may be rescued by some other UFO, or the Aliens may set the self-destruct and destroy it, or with no power to maintain its structural integrity it and all its equipment completely disintegrates after spending a day or two in Earth's oxygen rich atmosphere.



Either way, there will be no new Alien items for X-COM to capture and research. And the consequences of allowing a bunch of Aliens to disperse and rampage over the countryside would give powerful ammunition to those political opponents who object to the excessive cost of the X-COM Project and how it is being run.

APPENDIX #3: URBAN CITIES AND UNDERGROUND BASES

Cities require far more elaborate building and terrain rules, but are essential for Alien Urban Terror Raids. The best method I have found is to use all the building rules described in Appendix #1, but to have these buildings and roads (this time *with* pavement-sidewalks) on pre-arranged 'segments', each $7\frac{1}{2}$ BW square. Four such segments will cover the entire table, and can be arranged in dozens of different ways for variety:-



Despite appearances, there are only three types of terrain present; **Roads**, **Buildings** and **Good Going**. **Roads** are now 2 BW wide (i.e. 1 BW of tarmac, flanked on either side by $\frac{1}{2}$ a BW of pavement-sidewalk). So two elements side-by-side in a group on a road with centre markings may use HoTT road movement. Very few vehicles are shown as most of the transport has been commandeered by those fleeing the raid. **Buildings** using the rules from Appendix #1 have their outer wall boundaries marked by thick black edges. All the rest of the terrain is purely decorative and is counted as **Good Going**, it being assumed that tough soldiers and powerful Aliens can easily climb over or push their way through fences, railings, hedges and gardens, and any trees are too thin to offer cover and too far apart to block sight or hinder Aerial troops.

X-COM places the segments in any way they wish, but must still dice to see which edge they finally get. *(Because I am using flattened isometric two-dimensional buildings, I would also allow the X-COM player to re-orientate each individual segment so they look right when viewed from the perspective of X-COM. This does mean they'll look odd to the Alien player...but in Alien eyes everything on Earth looks strange.)*

CIVILIANS

All countryside BUA's have no civilians as these have already fled or have been abducted before X-COM could arrive. Underground X-COM Bases also have no civilians as all the scientists, engineers and administrative personal have been evacuated by using established well practised procedures. But major cities will still have some civilians who were unable to escape from the Alien Terror Raid.



Placement: Before X-COM rolls for the table-edges, throw a die and add 4 to it.

The resultant score is how many civilians are still in the area. These are placed using the 'Element Random Deployment' described on page 5 of this booklet, and cannot end up less than 1 BW from any table-edge. If a Stryker Stronghold is placed on top of any civilians they will be killed, so be careful where you land. *(X-COM must decide whether to have civilians close together for defence or scattered to split up the Aliens)*

Function: Civilians are treated as X-COM Hordes, except they cannot return when lost, nor can they make any tactical moves. But they will recoil through any friends, and X-COM troops may pass through civilians or when recoiling push them back. Civilians still generate a ZOC, form groups and fight just like Hordes do.

Victory: When 50% of the civilians are killed the mission is classed as a failure by the political opponents of X-COM, even if the Alien force is routed, so no tech advancement and the Aliens claim it as a victory. However, X-COM will still get to chose their own forces in the next battle (it is only when routed do the excessive combat loses allow the Aliens to choose the X-COM team in the next subsequent engagement).

Civilians recoiled or pushed back over a table-edge are removed, but they are NOT treated as being lost. They have successfully managed to escape to safety from the Alien attack, which is good news for X-COM. Lost civilians, but not those that have left the table, WILL count towards the X-COM 12 AP breaking point. *(X-COM's orders are protect the civilians! And the aim of an Alien Terror Raid is to kill as many as possible)*

ALIEN AND X-COM UNDERGROUND BASES

These also use four terrain segments, much like the Urban City Terrain, with the following differences. There are no roads, just 1 BW wide 'corridors' and 'rooms' instead of 'cabin-buildings'. But in addition:-

- * one segment will have a Command Centre Stronghold (the attackers have no Stronghold),
- * some impassable ½ BW wide 'rock or dirt walls' will be present, which the rooms may touch,
- * two of the four segments will have either 1 or 2 of the three special large 'entry point' rooms.

Instead of rolling to see which table-edge a player gets, Underground Bases will use a different procedure. There will be 3 'entry points', which the defender of the Base cannot deploy in...2 x Aircraft Hangers (2 x 3 BW) with an Access Lift (2 x 2 BW) for an X-COM Base, and 3 x 'Grav-Lift' rooms (2 x 2 BW) for the Aliens. The owner of the Base gets to arrange the Base Segments in any way they wish, but they won't know in advance exactly which of these entry points, or all of them, the attacker is going to use.

Defending a Base is the only time that X-COM, and not the Aliens, uses the Element Random Deployment. *(See https://www.ufopaedia.org/index.php/X-COM_and_Alien_Bases for visual examples of base rooms)*

MARTIAN SURFACE TERRAIN AT CYDONIA

You could use four pre-arranged 'Martian Segments' for this, or the following random terrain procedure:-

	Compulsory Features:-	Roll either two or three times for Optional Features:-					
		1 Linear Terrain	2 Bad Going	3 Sight Blocking	4 Undulating	5 Impassable	6 Built Up Area
Mars	2 Rocky Craters	Dry Gully (3)	Rocky Area (3)	Dust Dunes (3)	Gentle Hill (3)	a Fissure (1)	Alien Outpost (1)

A **Crater** is a circular gully. A **Fissure** is an **impassable** gully. An **Outpost** is four weird looking Alien Buildings. Unlike on Earth, a Martian **Dry Gully** (but not other features) must extend into an adjacent table quarter. The **Alien Stronghold** is a 2 x 2 BW Pyramid, representing the entrance into the Underground Alien Base. X-COM has no Stronghold at Cydonia, as they landed by shuttles while their mothership remains in orbit.

Music

Having mysterious menacing music playing in the background often helps to set the mood during a game. So here are but a few of the many, many possible listening suggestions:-

- UFO: Enemy Unknown (PC game music): <https://www.youtube.com/watch?v=Urhpb8l00yvg>
- Pax Imperia (PC game music): <https://www.youtube.com/watch?v=UQmcjYZvui0>
- Green Desert (by Tangerine Dream): <https://www.youtube.com/watch?v=txiqvgeSmRQ>

(And for those of you playing 'normal' HoTT fantasy type games, this PC game music fits rather well:-

Empire of the Fading Suns: <https://www.youtube.com/watch?v=TDFcQUHcbz0&list=PLE8BFB1FB250D115B>)

