## GAME MANUAL

# ASTRA EXODUS

in multi





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## REQUIREMENTS

Operating System: Windows Vista / 7 / 8 / 8.1/ 10 64 bit. Processor: 2.5 Ghz Intel Core 2 Quad Q8300 or equivalent. Memory: 4 GB RAM. Graphics: 1 GB nVidia Geforce GT460, 500 MB ATI HD4850 or equivalent. DirectX: Version 9.0c. Storage: 4 GB available space. Sound Card: DirectX 9 Compatible Audio. 3-button mouse, keyboard and speakers

## INSTALLATION

If you purchased the game through Steam, you can install it and launch it through your library in a normal fashion, when you do so; any missing libraries will be installed automatically. The same if you use any other delivery platform.

When installing from the Slitherine website, an installer will be made available to you for download, which after execution will install the game locally. In any case, a launcher will be placed in your desktop, which you can use to start the game.

## INTRODUCTION

"They came out of the darkness, to the light of our progress, unstoppable and relentless; they crashed against our bravery. Then only thanks to the Keepers, the Exodus began and through the Great Eye, we found salvation from the Dark Ones.

However, the curse followed us, as strife, conflict and fratricide plagued our ancestors, among the cold void. Then in a blink of an eye, lost to the stars, somewhere between the Great Eye and final salvation; our brothers were.

In the end, as our hope was almost extinguished, final salvation was found; when we set foot in what we know call Terra. Such is the tale of the Exodus, of the burning of our home, the tragedy of our brothers and rebirth of our people."

> Leopold Garibaldi, First President of the Terran Republic Extract from Terra's Exodus Legacy Archives

It's been millennia since the ancestors of the Terran Republic left their ancient home world in search of salvation, an event now forever known as the Exodus. Sadly, their descendants know little information about this massive event, including most importantly not only what exactly caused it, but also how it developed across centuries.

As this previous extract proves, the information known today looks and sounds more like the stuff of legend or myth, than actual data for study. But such is the case given the side effects of the long cryogenic sleep, the massive material damage suffered in this voyage and of course the natural passage of time.

Now, a renewed interest on their forgotten history, has led the leaders of this new human government; to chase their past across the stars and find any potential threats to what is left of humanity, which might be lurking in the void. To this end, a special branch of the government, called the Exodus Legacy Task Force; has been created by presidential decree. More importantly, you have been chosen to command it, under the tutelage and leadership of High Admiral Marissa Garibaldi.

Your objectives then, as commander of the E.L.T.F., are as follows:

- Explore and expand the borders of mankind, neutralizing any threats to the Republic
- Investigate and research any remaining signs of what is now known as the Exodus
- Secure the location of planet Earth if possible

Good luck and Godspeed Commander.

## QUICKSTART

Double click the icon on your desktop to start the game. While loading you will be shown tips on several game topics, which might be helpful. Once the load process has finished, you will find yourself on the main menu. Here you can start the game on any of its two modes: Campaign or Skirmish.

The Campaign consists of a series of story missions, which are heavily affected by the players decisions, with custom objectives and restrictions accordingly. In contrast, the Skirmish mode the player can fully customize a single game session, picking one or all of four victory conditions, select and customize his or her faction and of course the opponents present.

To start a Campaign, click on the appropriate menu option, select a difficulty and create a Profile to save your progress from mission to mission. You can click Start to commence the mission, but before that you will be shown a briefing, expanding upon the story and more importantly the mission objectives.

To start a Skirmish game, click on the appropriate menu option. You will be presented with a game settings panel, where you can specify the galaxy size/shape, victory conditions, challenge options and many more. After that you pick your faction, which you can optionally customize, and finally your opponents.

Once the game starts, you will be presented with an initial Starsystem with a single Colony, shown in the center of the screen. This Colony will have some installations already and a fleet will be stationed in the Starsystem as well, unless you picked a primitive start, in which case you get neither. You can move the camera here using the WASD keys or by dragging the mouse while holding the middle mouse button. You can also zoom with the QE keys and rolling the mouse wheel.

Click on your Starsystem and then on the colony, or straight through the corresponding planet icon, here you will want to specify a build project for the Colony. Usually a scout frigate or a colony ship is best at the start. Click on the bottom left empty build queue and then on the project you want on the middle panel. Right click or click Back on the bottom right corner, until you get back to the galaxy view.

You should now command your starting fleet if available, so select it first by clicking on its panel will be shown on the left side of the screen. Here, in the composition section, you can select which ships you want to command specifically. Then you can right click on a Starsystem to give the selected ships a move order. Exploring yellow, orange and blue stars is often a good starting strategy, as these are more likely to host colonizable planets.

Finally, before passing the turn, you can click on the research DataNet notification, which are placed on the right side of the screen; to go the research screen. Here you should pick a tech or more, for your scientists to start researching, before passing the turn with the button in the lower



right corner of the screen or by pressing the Spacebar. Generally speaking, Production and Resources techs are best at the start.

Depending on your luck and game settings, you might come across a menace initiated galactic battle, while exploring the galaxy. Here you need to give orders to your ships. You select them with left click or with a left click and drag selection box. Orders are given with right click on the target, to either move or attack, or by clicking on the specific order in the selection panel on the bottom left side of the screen.

	10 - A	
Strategic Effect	Key	Mouse
End Turn	Space	
Move Camera Left	А	Middle Hold & Drag Left
Move Camera Up	W	Middle Hold & Drag Up
Move Camera Right	D	Middle Hold & Drag Right
Move Camera Down	S	Middle Hold & Drag Down
Zoom Camera In	Q	Mouse Wheel Up
Zoom Camera Out	E	Mouse Wheel Down
Select Object		Left Click
Execute Order		Right Click
Camera Zoom		Wheel Scroll
Previous Game View		Wheel Click
Government DataPanel	F2	
Colonies DataPanel	F3	
Planets DataPanel	F4	
Fleets DataPanel	F5	
Research DataPanels	F6	
Designs DataPanels	F7	
Factions DataPanels	F8	
Heroes DataPanels	F9	
Settings	F10	
Center Camera on Homeworld	Home	
	0	

#### CONTROLS

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Space Battle	Key	Кеу
Select All	LeftShift	1
Select Fighters	LeftShift	2
Select Bombers	LeftShift	3
Select Warships	LeftShift	4
Select Civilian Ships	LeftShift	5
Select Orbital Installations	LeftShift	6
Set selection as group "X"	LeftControl	"Х"
Select group "X"	"X"	
Move selected		Right Click
Attack target		Right Click
Stop	Т	
Retreat	R	
Attack Nearby Strikecraft	H	
Boost Engines	Z	
Reinforce Shields	Х	
Overcharge Weapons	С	
Nanite Cloud	В	
Tractor Beam	F	
Subspace Web	V	
Spatial Compressor	Y	
Cloaking Field	G	
Next Selected	Tab	
Previous Selected	Shift-Tab	
Center Camera on Selection	Space	
Toggle Weapon Ranges	LeftShift	R
Toggle Damage Counters	LeftShift	С
Toggle Squadron Highlight	LeftShift	5
Increase Battle Speed	PageUp	
Decrease Battle Speed	PageDown	

### MAIN MENU

There are 7 Main Menu options at start:

- Continue: Quickly load your last saved game, regardless of game mode
- Campaign: Start or continue a previous saved campaign, vía a profile
- Skirmish: Start a skirmish mode customized game mode session
- Load Game: Load previous saved game, regardless of game mode
- Options: Change the game's options for video, gameplay and sound
- Quit: Terminate the program and go back to operative system

## INTERFACE

## STARMAP

The management of the starmap involves mainly moving the game's main camera through the galaxy, including changing its view to the Starsystem and planet level, when necessary. To move the camera, which is called panning, you can use either the WASD keys or click and drag the middle mouse button accordingly. Additionally, for zooming, the QE keys can be used, as well as the mouse wheel. You can also move the mouse pointer to the left or

right edges of the screen, in order to have the camera moved in that direction.

To enter the Starsystem view, you need only click on it, right from the galactic map. Then you can enter the planet or colony view, clicking on the corresponding planet, either in the object itself; or in the corresponding Starsystem panel in the lower left side of the screen. Another way of entering the Colony or Planet view, this time directly without going through the Starsystem view first, is by clicking on the corresponding icon below the Star in the galactic view. You can also do the same though the Colonies and Planets main panels.

#### STARSUSTEMS

As we mentioned before, the main feature of the map are the Starsystems, which host the planets you'll want to expand to. There are multiple types of stars, which determine the different types of planets they host.

Starsystem	Planets	Chance
Yellow	Average	15
Red Dwarf	Low	30
White Dwarf	Low	15
Blue Hypergiant	High	5
Red Giant	High	10
Orange	Average	15
Brown Dwarf	Very low	5
Neutron Star	Very low	5

#### PLANETS

Star systems can have up to 5 colonizable planets, out of which there are many classes, each with different characteristics, like how much food or metals they produce. They also have a size and gravity rating, which will affect the Habitability of the Planet and thus the base Morale of any future colonists.

Туре	Max Pop	Food	Metals	Organics	Rares	Research	Credits	Morale	Industry	Upkeep
Swamp	8	3	0 -	5	1 -	1	3	70	3	150%
Tundra	10	1	1	З	1	1	7	90	3	125%
Terran	12	2	1	1	1	1	6	100	3	100%
Arid	10	1	2	1	1	1	9	90	3	125%
Volcanic	6	1	5	1	6	1	7	60	3	175%
Frozen	6	0	2	3	З	6	7	60	З	175%
Ocean	6	4	1.00	4	1	2	4	80	3	150%
Barren	8	0	8	0	3	4	8	50	3	200%
Jovian	0	0	0	0	0	0	0	0	0	100%
Asteroids	0	0	0	0	0	0	0	0	0	100%

Size	Pop Multiplier	Chance
Tiny	50%	10
Small	75%	20
Normal	100%	40
Large	125%	20
Huge	150%	10

Gravity	Construction	Upkeep	Restricted To
Low	75%	150%	Tiny or Small
High	50%	200%	Large or Huge

#### PECULIARITIES

Last but not least, planets can have a Peculiarity, something that differentiates it from all others of its class, giving it unique bonuses for you to exploit.

	Peculiarity	Effect	Requires
1	Ancient Robots	8+ Industry	No Jovian
	Megafauna	10+ Food	Food > 1
(Canon 1997)	Native Population	10+ Food	Food > 1
1997	Alien Ruins	5+ Research	No Jovian
	Exotic Species	25+ Credits	Food > 1
	Precious Gems	25+ Credits	No Jovian
	Metallic Ocean	18+ Metals	No Jovian
	Crystal Caverns	8+ Rares	No Jovian
	Dead Gaia	12+ Organics	No Jovian
	Natural Wonder	50+ Morale	No Jovian

#### ANDMALIES

We know that space is a vast and strange place. In fact, it seems the more we find out about it, the stranger and more alien it seems to us. In Astra Exodus you can find Anomalies, which show up on the map and alter the game rules in some way. There are 3 types of Anomalies you can find across the galaxy: **Wormholes**, **Black Holes** and **Supernovas**.

Wormholes connect distant star systems, allowing fleets to travel between them almost instantaneously (in only one turn). You can merely order your fleet to travel to the connected Starsystem, in order to have it use the local wormhole for travel. Once discovered, you can also click it in order to move the view between the two systems.

Black Holes greatly reduce the Hyperspace Rating, meaning the rate at which starships travel between star systems, of your fleets; when they come within a 10-sector range of them. This



represents the immense gravity pull of these anomalies, which in the game extends beyond regular space into hyperspace.

Supernovas in turn hide all moving fleets from enemy sensors, making them both an asset and a liability when waging war, when they are within a 10-sector range of them; like the Black Holes before.

These adverse effects, generated by Black Holes and Supernovae, can be negated by researching the corresponding technology; if available on the Research Grid.

#### STATUS BAR

The status bar resides on the top of the screen and shows from left to right: the government subpanel plus the Resources, Treasury and Research tracker sections.

In the Resources Section you will be presented with the Food, Metals, Organics and Rares produces each turn in all your colonies. As well the available freighters for moving these resources across the galaxy.

The Treasury Section includes the Tax management sub panel, where you can increase or decrease your governments Tax Rate. The overall Morale of all your Colonists, which is paramount to determine their productivity. And finally, of course, the amount of Credits within your treasury.

In the top right corner, you find the Research Section, where the per turn Research production is shown, as well as the currently researched Technology and the amount turns required in order to discover it.

#### MAIN PANELS

There are 10 main panels within the game, used to manage its many aspects.

#### DATAVIDS [F1]

Here you can watch videos about the many aspects of the game. This can be done by simply clicking on any of them, within the left side list. You can Play/Pause the corresponding video by clicking on the main screen.

#### GOVERNMENT [F2]

Within this main panel you can check data about your faction, including most importantly the upkeep paid each turn, for the various assets such as colonies and starships within you hold. You can also check stats about the known governments of the galaxy, against your own.

#### COLONIES (F3)

Through this section of the interface you can list and access the colonies you currently own. The main function here though is the prioritization of Colonies for the distribution of resources, by affecting their order in the list with the Up/Down arrow controls, on the left side of each Colony subpanel.

Additionally, the list can be sorted and filtered by many factors, making it easier to find for example high construction colonies, with no garrison present. Finally, any build project currently being worked on can be rushed from here as well, that is if you have enough funds to do so.

#### PLANETS (F4)

Within this main panel you can list and access all the planets you have discovered so far across the galaxy. You can sort and filter this list by many factors, such as Maximum Population and Rares. This is particularly useful for finding out the best planets to settle, as you can quickly sort by Habitable and Non-Occupied planets, sorting the results by the resources you require.

#### FLEETS (FS)

This main panel gives you access to a full list of all your Fleets, with their composition in Starships/Troops and any assigned Admirals. Through this panel you can scuttle ships, assign admirals and locate each Fleet across the galaxy.

#### RESEARCH [F6]

The Research main panel gives you access to the many technologies you research in the game, through the 9 Main, 1 Specialization and 1 Special research fields. You can add as many techs to the queue, within the bottom subsection of the planet, as you want. They will be researched one after the other.

#### DESIGNS [F7]

Here, in the designs main panel, you can list, modify and create Starship Designs. These are used to build Starships in your colonies. You can navigate these by Class, which can be changed. clicking on the arrows within the corresponding sub section.

After clicking on an existing Design or clicking on the New Design button, the full panel will be show, where you will be able to change and/or set the many components of the design. Once you are finished, you'll have to give it a name and save it.

#### DIPLOMACY (FA)

The main function of the Diplomacy main panel is to allow the player to have an audience with a foreign government leader. These have many uses, such as trading techs or starcharts, as well as obviously declaring war or making peace. However, it can also be used to find out the treaties and overall geopolitical status of the many alien factions with each other.

#### HERDES (F9)



Heroes are very special individuals, who have a great impact on the galaxy, thanks to their many and powerful skills. Through this panel you can recruit new heroes if available, upgrade their Skills through Skill Points and assign them a task according to their role.

#### SETTINGS (F10)

Through the settings main panel, the player can save/load the game, change the options (such as video or audio) and exit the game; either back to the main menu or right to the operative system.

#### DATANET

The DataNet is Astra Exodus notification system, for events that are useful to be highlighted for the player and in many cases, take immediate action. This area of the interface is located on the right side of the screen, on top of the Stardate and End Turn sections. Events such as build project completion, fleets arrived at Starsystem and many others will be shown here.

Left clicking on any of its elements will take you to the corresponding panel and/or view, in order to provide more information about the linked event and/or take action about it. You can also right click on top of the DataNet notification, in order to simply dismiss it.

**Note:** Dismissing diplomatic proposals means an automatic rejection to the government that proposed it.



## CAMPAIGN

The Campaign in Astra Exodus is a game mode, in which you face several missions one after the other, that tell a dynamic story; this means that it **reacts to player choices**. You will then affect the story in significant ways, depending on how you play each of the campaign missions.

The progress you achieve through the campaign is saved on a profile, which also keeps track of your choices, any rewards accumulated and other stats. To create a new profile through the Campaign panel, first select the **Difficulty** desired from the corresponding drop-down menu an click the **New Profile** button.

Then, with a profile selected, you can start its current mission; by clicking the corresponding button. Then, and after each mission, you will have access to a briefing; first expanding on your **mission objectives**(required to beat the scenario) and later summing up your achievements on the mission, including any **rewards** you might get on completion.

#### MISSION DAJECTIVES



Each mission in Astra Exodus has a set of objectives to accomplish, before progressing with the campaign. These can include a **Primary, Secondary** and **Optional objective**. In order to progress you must always complete any **Secondary** and **Primary** objectives. **Optional** objectives ones are not required to complete the mission.

However, in some cases you will have two **Primary** objectives, which will be exclusive with each other, in the sense that you can only complete one of them. This represents a choice you need to make in the course of the story, which will inevitably impact this mission's outcome and any following missions you might get. In other words, you can never play all the missions of the campaign in one playthrough, since many missions can be accessed only by making certain choices. This of course, alongside the rewards according to difficulty, encourages replayability.

#### REWARDS

Additionally, with the **Secondary** and **Optional** mission objectives, there are unique rewards waiting those willing to tackle them. These can include special technologies to research later in the campaign and even **additional debriefings** with exclusive art, which expand the story behind the campaign and the game. The availability of these though depends on difficulty, meaning you will only get rewards from the Captain difficulty onwards. There might be an additional surprise as well, to those willing to beat the game on its highest difficulty.

## SKIRMISH

The Skirmish game mode allows you to customize a single game session, adjusting the length and challenge of the game as you desire.

#### GAME RULES

First you will be shown the Game Rules panel, where you will set the Galaxy, Situation, Victory Conditions and the Challenge expected.

#### GALAXY

In the Galaxy section you can set various parameters that determine how the starmaps will be generated. First, you adjust its size, from Tiny to Large. The game usually has over 20 Starsystems per step, but this also depends on the shape. Speaking about galaxy shapes, there are 8 possible to choose from in the game: Distributed, Circular, Elliptical, Irregular, Barred Spiral, 4 Arm Spiral, 6 Arm Spiral and 8 Arm Spiral.

Another Galaxy factor that can be set is the Mineral Richness or Composition, which ranges from Organic (large populations with high morale) to Inorganic (planets with high materials



production). Finally, you can decrease/increase the average amount of planets per Starsystem, which can be adjusted from Rare to Common.

#### SITUATION

Then in the Situation section, you can choose from 3 Beginnings: **Primitive**, **Average** and **Advanced**. In the **Primitive** setting you start with only a single colony, with 4 population and no installations. The **Average** setting is the one the game is meant to be played, starting with 8 population in a colony, some basic installations and a small fleet; which includes a Scout and a Colonizer. You also get the first level techs researched. In contrast the **Advanced** beginning includes a fully populated Colony, an outpost and another colony on the same Starsystem. Plus, a large starting fleet, with 2 Scouts, a Colonizer and a Constructor. Tech wise you get the first level, plus a randomized tech out of the following level, in each field.

The **Events** setting impacts on how often galactic events will fire. Galactic Events change the game rules at random for a set amount of time. These rule changes can mean heroes can't get experience or a dramatic decrease in population growth, for a set amount of time. You always have the option however of researching a technology to avoid its adverse effects.

Finally, there is the **Tech Rate**, which either speeds up or slows down the rate at which you and other factions, generate Research and thus discover technologies; according to the following table:

Tech rate	Research
Very Slow	50%
Slow	75%
Average	100%
Fast	150%
Very Fast	200%

#### NICTORY CONDITIONS

In a Skirmish mode game, Astra Exodus has four possible Victory Conditions: Galactic Conquest, Diplomatic Alliance, Evolutionary Ascension and Score Supremacy. These are enabled only after a set amount of turns, which depends on the galaxy's size.

First the **Galactic Conquest** win condition requires you to own 75% of the Starsystems in the galaxy, in order to claim victory. In contrast the **Diplomatic Alliance** victory needs you to ally with most (all but one) of the factions in the galaxy at the same time.

The **Evolutionary Ascension** victory condition in turn requires you to research and build Ascension Chambers in your colonies, a very costly late game colony installation, which serves to transition your colonists to their next stage of evolution as energy beings.

Finally, a **Score Supremacy** win condition is triggered for the faction with the highest score, after a maximum set of turns happen in game, according to the galaxy's size.

#### CHALLENGE

In the challenge section you can tweak different aspects of the game that make it harder or easier to beat. These are: Difficulty level, Menaces frequency and the ability to enable the Starmarine mode.

The Difficulty level impacts directly on the ability of the AI to fight against you. It affects mainly what information is available to it, what tactics it employs in battles and also grants bonuses/ maluses for the AI to the main aspects of the game.

Ability	Туре	Minimum Difficulty
Maintains combat formations	Space Battles	Commander
Focus on a single target	Space Battles	Admiral
Uses battle abilities	Space Battles	Captain
Autowins against Menaces	Galactic Stage	General
Is unaffected by Galactic Anomalies	Galactic Stage	Elgathi
Has immunity to abnormal gravity	Galactic Stage	Commander
Has immunity to random events	Galactic Stage	Admiral
Troops target weakest enemy	Ground Battles	General
Gives orders to more than one unit at a time	Ground Battles	Captain

#### FACTIONS

The game has 8 different factions, available to play as and face off, in the Skirmish mode. These are the **Terran Republic**, **Followers of Kala**, **Veloran Horde**, **Freudalim Hold**, **Potermi Dominion**, **Okli-to Consortium**, **Ilumina Starnation** and **Guardians of the Seed**. The **Terran Republic** represents the descendants of mankind, who long ago abandoned Earth in a massive and costly Exodus, to make a new and safe home; far across the stars. Thus, they are considered to be great engineers and highly charismatic, mostly due to their rather unique origin.

The **Followers of Kala** are a secretive group of tall blue skinned aliens, who created their society around the worship of their goddess Kala. Despite their humanoid form, no males are known to exist for the species. The Kala are highly creative, being able to see more opportunities for research than others, as well as having a more harmonious society; with a high morale.

The **Veloran Horde** is not really a government or state, more like a collection of war like clans of small reptiloid aliens, who survive in the void by raiding and scavenging foreign starships. They are considered a plague among most civilized nations in the galaxy. The Velor are known for their great numbers, due to their higher reproductive rate, and their uncanny ability to extract minerals from any planet.

The **Freudalim Hold** is an ancient republic like government, of purple eyed, tall and strong humanoid aliens, with a distinctive bone protuberance around their heads. They used to control large parts of the galaxy, but thanks to pettiness and infighting, that's long gone. They did however keep their knowledge of many sectors and the tactics they used in the past to conquer them.

The **Potermi Dominion** is a monarchical regime of green skinned, military minded and four armed aliens of avian like descent, which has dominance over many smaller factions. The Ulari have taken a central role in the galaxy, being called in many instances to mediate between warring factions. They are known best for the precision of their weapons and the high gravity tolerance they possess.

The **Okli-To Consortium** is a corporation-based government, made up by a species of winged yet flightless humanoid mammals, who are newcomers to the galactic stage; being merely a superstitious based agrarian society up until 200 cycles ago. The Okli are known throughout their galaxy for their industrious nature and their ability to manage their treasury in an unparalleled efficient manner.

The **Ilumina Starnation** is a totalitarian state of humanoid aquatic reptilians, with strong prehensile tails and corrosive teeth, that are known through the galaxy for their strength and ferocity in battle. They used to be a vassal of the Potermi Dominion, up until a couple hundred cycles ago, where continuous revolts finally led to their freedom.

The **Guardians of the Seed** are a unique group of plant-based life forms of immense size, which seem to have been created or at least influenced artificially, by some kind of highly advanced life form; which they call Seed. They are known for their mostly subterranean nature and their ability to forego any pollution production in their industrious efforts.

Each of these are quite different from each other, both aesthetically as well as gameplay wise, even though they maintain enough common characteristics; to make sense about the fact that they share the same universe.

#### TRAITS

The faction traits are in game abilities or modifiers, which represent the characteristics of the government and/or species they are assigned to. They help differentiate the players and can be changed if desired, through the faction customization system.

Each Trait has a set amount of **Trait Pick Points** (TPPs) associated, which can be either be positive or negative. A Faction can have at most 10 TPPs spent on a maximum of 6 Traits in total.

Additionally, each trait can have up to two excluded traits, meaning the other two can't coexist, with said trait in a faction. This prevents inconsistencies like Plantoids species with the Polluters trait for example.

lcon	Traits	Classification	Modifier	Points
	Ancient	Special	Already knows the contents of the galaxy	4
	Apathetic	Combat	50% Troop Initiative	-1
	Aquatic	Special	Extra pop in Ocean and Swamp planets	4
	Blind	Combat	80%Starship Weapon Accuracy	-2
	Bureaucrats	Production	120% Upkeep	-2
	Careless	Population	80% Taxes	-3
	Charismatic	Population	125% Trust and Relations gain	2
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		Claustrophobic	Production	80% Minerals	-4
	*	Clumsy	Combat	80% Starship Defenses	-3
		Collectivists	Special	One less hero can be recruited	-2
	ALC: NO THE REAL	Creative	Special	One extra tech choice per level	4
		Dumb	Production	80% Research	-4
		Ecological	Production	80% Pollution	2
	蓉	Engineers	Combat	120% Starship Defenses	3
		Farmers	Production	120% Food	з
	Ŕ	Fertile	Population	120% Growth	З
		Fragile	Combat	50% Troops HPs	-1
		Greedy	Production	120% Corruption	-2
		Нарру	Population	120% Morale	З
•		High G	Special	No High Gravity Malus	2
		Honest	Production	80% Corruption	2
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		Individualists	Special	One extra hero can be recruited	2	
		Industrious	Production	120% Production	4	
	Ŕ	Infertile	Population	80% Growth	-3	
		Large Homeworld	Special	Large Homeworld	1	
		Lazy	Production	80% Construction	-4	
		Low G	Special	Gravity Malus on average planets	-2	
		Managers	Production	80% Upkeep	2	
		Merciful	Combat	80% Starship Weapon Damage	-4	1. 1
		Miners	Production	120% Minerals	4	
4 °		Peculiar	Special	One positive peculiarity in the homeworld	3	
		Plantoid	Special	Generates no pollution	6	
		Polluters	Production	120% Pollution	-2	
		Predators	Combat	120% Starship Weapon Accuracy	2	
	S	Smart	Production	120% Research	4	

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	Subterranean	Population	150% Max Population	5
	Tacticians	Combat	150% Troop Initiative	1
<b>V</b>	Tedious	Population	75% Trust and Relations gain	-3
	Territorial	Population	75% Max population	-3
	Thorough	Population	120% Taxes	з
	Tough	Combat	150% Troops HP	1
<b>X</b>	Uncreative	Special	One less tech choice per level	-4
$\mathbf{\hat{e}}$	Unhappy	Population	80% Morale	-3
	Warlords	Combat	120% Starship Weapon Damage	4
	Wasteful	Production	80% Food	-3
×	Xenophiliacs	Special	Assimilate colonies at double speed	2
	Xenophobic	Special	Assimilate colonies at half speed	-2

#### CUSTOMIZATION

Besides picking the faction you want to play as, as well as those of your opponents, you can also customize whichever faction you choose; to be exactly to your liking. This includes changing the graphics, lore and traits that embody the faction.

You can pick how your ships look, the emblem or logo of your faction and the leader portrait by clicking on the corresponding arrows; next to these graphical elements. In the case of the starships, you change the form with the left/right arrows and the color with the down/up arrows.

Then you can change the lore of the faction, including obviously the name, but also the description, leader, title, plural, etc. for your new faction. In order to do this, you merely need to click on the corresponding section and merely type the text you wish to enter for each field. Consider that these values are used by the game, in order to build the text, it is show to you, for example in DataNet notifications; but most importantly during diplomacy.

Finally, and probably the most impactful customization option, is the adding and removing of traits to your faction. As stated before, you can have up to 6 traits, with a maximum aggregated Trait Pick Points (TPPs) of 10. In order to remove traits, you merely need to click on those assigned already and to add new ones just click on the one you want, from the right side list of them. Some might be greyed out and unresponsive, this means you don't have enough TPPs to afford them.

## COLONIES & OUTPOSTS

Colonies are settlements, constructed in habitable planets (all but Jovians and Asteroid fields) across the galaxy, where your population (colonists); work for the benefit of your faction. This includes the generation of resources, the construction of build projects (such as Starships and Installations), the repairing/ resupply of starships and the training/garrison of troops.

Outposts in turn are merely resupply orbital stations, which are built around non habitable planets, like Jovians and Asteroid Fields; in order to expand the range of your fleets. They make it possible to expand quickly, without the need of building expensive Colonizer class starships first.

## RESOURCES

Colonies produce 5 main resources so to speak: **Food**, **Materials**, **Construction**, **Credits**, and **Research**, either through the labor of your colonists or through some automated additional generation; provided done by Installations and/or a Peculiarity the planet might have.

**Food** is used to feed your colonists, as each of them consumes 1 Food in order to survive and is grown by your **Farmers**. This food can be either grown locally or imported from other colonies. Failing to meet a colony's food requirement will inevitably lead to starvation and the eventual death of a colonist. You therefore need to have a Colony's food requirement satisfied, in order to have it grow in population. **Materials** is a category which englobes 3 different resources: Metals, Organics and Rares. These are produced by **Miners** and used to construct build projects across colonies. Organics are mostly used for Troops, Engines and Missile Weapons. Metals are essential for Armor, Ordnance, Installations and building in general. Rares in turn are required for Power Generation/Storage, advanced modules and Energy Weapons in general.

**Construction** is generated by your **Workers** and represents the local colony's ability to turn materials in to assets like Installations, Starships, etc. Construction has the added problem of generating Pollution, which not only reduces the build rate of projects, but also the population growth of the colony.

**Credits** represents a faction's monetary wealth. They are generated mostly by Taxes and Commerce, but also can come from treaties and other diplomatic interactions. Colony wise this value is increased by growing more population (which means more taxes) and by assigning more population to be **Traders**, to take advantage of the planet's commerce rating.


**Research** is an abstraction of the ability of your colony to contribute to the current research project, your faction is trying to discover, through the application of colonists to be **Scientists**.

#### FREIGHTERS

Since all colonies pool their resources together, Freighters are required to move them from planet to planet, in order to support the colonial build projects across your government. By default, a Freighter is required to move one unit of Food or Materials, and they can be built in any of your colonies.

A lack of available freighters will mean that some colonies will not be able to import what they need and/or export its resources to the rest of your empire. The prioritization of the available freighters is determined by the placement of the Colony within the corresponding panel, as described in the **Interface** section.

# LABOR DISTRIBUTION

As mentioned before, in order to produce resources in your colonies, you will have to manage to manage their population in order to focus their efforts across different fields. So, they can be turned into: Farmers, Miners, Workers, Traders and Scientists. In order to do so, all you need to do is to drag a population unit from one labor, and drop it to the field you wish said troop to partake in. This will automatically update the colony's resource generation, including management values like the Morale, Pollution and Corruption levels.

# MORALE, POLLUTION AND

Morale represents how happy your colonists, both with their local environment, meaning the planet where they live and infrastructure(installations) they enjoy; and the overall context of your government of faction. This later part is impacted mainly by the tax level, but also by different techs you can discover. It affects mainly the production of Materials.

Pollution represents the level of contamination a colony suffers, thanks to its industrial activity, derived from the construction rate generated by its workers and installations. It reduces both the population growth rate and the overall construction generation, meaning you might get less construction the more workers you employ in some instances.

Finally, Corruption is a local value which affects the Commerce and Research generation of a Colony, effectively reducing the efficiency of both your traders and scientists. It depends mainly on the distance to the homeworld of said Colony, but also on the total number of colonies under your control.

# BUILD PROJECTS

There are 5 types of build projects: Industry Conversion, Installations, Starships, Troops and Terraforming.

**Industry Conversion** consists of using the Construction rating of a Colony to generate Credits, Research or build Housing; thus, increasing population Growth. **Installations** improve the



Colony's infrastructure, boosting the productivity of your laborers, automatically producing resources, providing social services and/or planetary defense.

**Starship** construction is another possible build project for a Colony. It is essential for both expansions, through Colonizer and Constructor class starships, as well as defense

via warships of different sizes; which need can be designed to your specifications.

Another possible project for a Colony is the building and training of combat **Troops**, these are transported by your freighters across the galaxy to defend your colonies and assault those of the enemy. Finally, when technology allows it, there is the possibility of **Terraforming** a planet through a costly build project; transforming it into one closer to Terran like planet.

To commission a build project to your workers in the Colony, you need first open the build project panel through the Build Queue button, on the bottom left corner of the Colony screen. Once the panel opens in the center of the screen, you will get a list of all the projects available in the Colony for construction. Clicking on any of them will add it to the Build Queue. You can also filter what kind of build projects are available there, through the build project filter, in the upper left side of the panel.

#### MATERIALS OFFICIENCY

**Materials Efficiency** is a percentage calculated for each colony, depending on the materials it has available for its current build project. If a Colony needs 4 Metals to build something, but it is only getting 2, that means the **Materials Efficiency** there is 50%. This directly impacts the build time, in this case doubling the base amount of turns required for your workers, to complete said project. **Materials Efficiency** however has a minimum of 25%, so it will never go below that value in any case.

# GARRISON

Each Colony can have a Garrison of Troops, ready to defend it from a planetary assault or invasion, by foreign forces. There is however a maximum number of troops that can be stationed in any planet, which depends mainly on its size. This number also determines how many troops can invade at one time, the surface of the planet. In order to do this and move troops across the galaxy, you need to have available freighters however, as each troop will require some for its logistics.

•	Size	Max Garrison				
	Tiny	2				
	Small	4				
	Normal	6				
	Large	8				
	Huge	10				
	in the set	•				



## INSTALLATIONS

Installations serve to boost the effect the contribution of your colonies to your faction and protect them from enemy assault, both in space as well in the ground. Overall there are 4 main types of installations, available as colony build projects in the game, they are focused in either **Production**, **Population** or **Defense**.

When pressed for credits, Installations can always be sold by clicking on the corresponding one, under the installations sub panel of the colony screen. This will not only add the equivalent credits to your treasury, but it will also lower the upkeep of the colony in question and thus increase the monthly income.

#### PRODUCTION

Production based installation affect either the Food, any of the different Materials, Construction, Credits or Research the Colony generates. This can imply either a bonus to the rate at which each laborer in the Colony generates these values, or the Installation can simply add a fixed amount of them to the Colony; regardless of its labor distribution. Some Installation on this category might give bonuses to the construction of specific build project types like starships.

#### POPULATION

The Installations devoted to population are devoted to either increasing the maximum population possible on the planet, the population growth rate or the morale of the population. They can however include instead a decrease in the corruption or pollution that is generated in the Colony. Except for the maximum population increase, all of them are percentage based out of a total.

## DEFENSE

Defense based installation can be either of the **Orbitals** or **Surface** kind. Orbital defense installations will participate in any defensive action against the assault of enemy ships, within the context of a space battle. In practice they function as immobile starships, which you can give attack orders to, during tactical battles. Surface defense installations instead protect your colony against ground invasions, by giving your troops an edge in battle.

# RESEARCH

Each of your scientists in all your colonists, produce research each turn, according to the conditions of their native planet, local installations and governors; plus, any faction or tech-based effect. This research accumulated is used then to research one or more technologies in the research queue. You can explore the full semi-randomized tech grid, select a technology for research and manage the resulting tech queue from the Research main panel; as described in the Interface section

To add a technology to the research queue, all you need to do is click on it. If you want to cancel this and remove it from the queue, you only need to click it there. Hovering over any tech will reveal a tooltip, with the full information of its effects, once you discover it. Technologies are color-coded, according to their availability. The ones with a Blue background have been researched, those with Yellow can be researched and those with Red cannot.

## FIELDS

Technologies are organized in Research Fields, which represent a major area of knowledge for your people. There are 9 research fields, plus two additional or extra fields, one for Module Specializations and other for Special (event or campaign related) technologies. In any case, these main 9 research fields are: Engineering, Weapons, Government, Troops, Production, Power, Resources, Defenses and Construction.

To start with the **Engineering** research field mainly contains advances on Propulsion, Sensors, Terraforming and Planet Bombardment. Then in the **Weapons** field, as the name implies, contains several forms of direct Starship weaponry. Moving on to **Government**, here you can find mainly advances on Pollution/ Corruption control, Population Growth and Commerce. Next is **Troops**, again as the name implies, it contains several types of ground Troops and related improvements to them.

The **Production** field however contains advances which improve the Construction, Commerce and Research generation in your colonies. Then, within the **Power** research field, you can find advances on Power Generation/Storage, Hyperspace Range and Sensors. Next is the **Resources** research field, which contains advances that improve the generation of Food and mining of Materials, in your colonies. Moving on to **Defenses**, this field contains advances on Starship Hull, Armor and Shields; as Core Systems devoted to protecting your starships. And finally, the Construction research field, contains advances on repairing/ building Starships, Ordnance storage and exotic Support Modules.

#### LEVELS

In turn each main research Field has 7 different progressive levels, in which you must research at least one tech from a level, before progressing to the next one. Therefore, you'll be able to only to discover one tech per level through research. However, you can still trade diplomatically with other governments, in order to obtain those technologies that you couldn't research before.

With the exception of the first and last level all others are randomized, meaning that in a regular game, out of a possible set of five different techs, you will only get three at random to pick only one from. There are faction traits however, that either increase or decrease this number of available techs. Finally, almost all of the late game techs, which belong to level seven of each research field, are repeatable, giving an increased, cumulative effect each time, they are researched. This guarantees that you will never run out of technologies to research.

#### MODULE SPECIALIZATIONS

As previously mentioned, one category of techs is called Specializations. This one is focused on improving starship modules by enabling Modifiers for them. These modifiers can greatly enhance the effects of a module, while also increasing its cost and power requirements.

Specialization techs are not distributed in levels but in groups, these groups correspond to the major module types. They are then: **Armor, Beam Weapons, Engines, Hull, Mass Weapons, Missile Weapons, Particle Weapons, Shields** and **Support Modules**. Each of these groups have 4 techs available to research in a specific progressive order.

The number of specialization techs that can be researched at any time is determined by the **Specialization Picks** value, which increases by 2 each time you complete a level in the 9 research fields by researching at least one tech of said level. As the name indicates, this system is designed for the specialization of starships and thus completing a group to enable all modifiers of said module category, is generally the best strategy.

# SPECIAL TECHS

Last but not least, the game has a category called Special Techs. This system works differently depending on whether you are playing the Campaign or in Skirmish mode. In the Campaign it is here where you will find the techs unlocked as rewards for completing Optional and Secondary mission objectives at certain difficulties.

In the Skirmish mode however, it is in this category where you will find the techs that serve to negate the adverse effects of Galactic Events, which correspondingly are enabled when these events happen. They can be quite severe at times and thus be damaging for all players. Thus, by researching the counter technology available in this category, you can avoid the effects of these galactic events, whenever they happen; while your enemies suffer through them.

# FLEETS

Your Starships and Troops can be assembled into Fleets, which are stationed at Starsystems across the galaxy, that is when they are not moving between them across the void. Fleets stationed on a Starsystem will be shown to the right of the corresponding star, while fleets leaving said system will be shown to the left.

In any case, stationed or in movement fleets can be selected by left clicking on them, which not only open the fleet selection panel in the left side of the screen; but also allows orders to be given to the corresponding fleet.



# DRDERS

Any selected fleet can be given one order per turn, which are fired with a right click on the contextual target. An indicator is show in the Fleet Selection panel, indicating where the fleet can take an order or action this turn, or if it has already done so. In any case these orders can be: **Move**, **Attack**, **Bombard**, **Invade**, **Colonize**, **Build Outpost** or **Land Troops**.

### MOVE

Fleet movement implies a jump to hyperspace, in order to reach another star. In order to do this, first select the fleet and then right click on the target Starsystem. While hovering the target star, a text will be shown indicating how many turns or ETA it will take to get there. In case the destination is outside the fleet's hyperspace range, then the line and ETA text will be shown in red, indicating the move order cannot be executed.

#### ATTACK

An Attack fleet order is executed against either, a local enemy fleet or colony in the system, by right clicking in them. This will open the Starsystem Battle panel, where you will be shown with all the details of the enemy Starships, Troops and any Orbital Defenses it might have; in case a Colony is involved. Here you can choose to fight the **Tactical Battle**, **Autoresolve** the battle or attempt a **Retreat**.

The **Tactical Battle** option will take you directly to the action, putting you in command of the battle in real time, but with an extensive time dilation system; to help you make timely decisions. We'll talk more in depth about this in the **Space Combat** section. The **Autoresolve** option will give you an automated result, based on the Might rating of the involved starships. Finally, the **Retreat** option will give you another automated result, where your ships will attempt to retreat, but might take some damage while doing so.

#### BOMBARD

When and if a colony is left undefended from space, meaning there is no friendly fleet in the colony and it has no orbital defense installations, then a bombardment of the surface can commence; if your fleet is equipped with any Bomb support modules that is. After you right click on the target, you will be shown the Colony Assault panel, where you can Bombard and/or Invade the planet. Here you can click the **Bombard** button, to drop one bomb at a time, or the **Drop All** to fully bombard the planet in one go. Each bomb dropped will do damage to the enemy population, installations and troops present; according the stats of the corresponding module. The bombs available for planetary bombardment, not only depend on the modules installed in the starships that compose your fleet, but also on the ordnance it has available.

#### INVADE

In the same Colony Assault panel described previously, either before or after planetary bombardment, if you have troops available in your fleet; you can also invade the enemy colony. Clicking in the Invade button here will take you to the Planet Invasion screen, where you will be shown all the attacking and defending troops, plus any Admirals (acting as Generals in this case) involved.

As with space battles, you will have 3 options here: **Tactical Battle**, **Autoresolve** the battle or attempt a **Retreat**. Choosing to fight the Tactical Battle will take you to the surface of the planet, where you will deploy and order your troops manually. More will be covered about this in the **Ground Combat** section. In turn, choosing **Autoresolve**, will give you an automatic result based on the Might of the troops involved. Finally, option for a **Retreat**, will just cancel the invasion. This will consume the Fleet action for the turn however.

#### COLONIZE

A Colonize order can only be given to a fleet which has at least one Colonizer, among its starships. A confirmation window will be shown though, after you right click the target planet with said fleet selected, before the colony is actually settled; which will. consume the starship.

You can also colonize a planet from its corresponding view, by clicking the Colonize button. It will only be enabled if there is a fleet in the system capable of doing so.

#### auilo outpost

As with the previous entry, the Build Outpost order can only be given to a fleet which has at least one Constructor, among its starships. A confirmation window will be shown though, after you right click the target planet with said fleet selected, before the outpost is constructed. The ship will be consumed in the process. You can also build an outpost from the planet view, by clicking the Build Outpost button. It will only be enabled if there is a fleet in the system capable of doing so.

#### LAND TROOPS

Troops can and should be used to garrison colonies, in order to defend them from an enemy assault. They can either be trained there or freighted across the galaxy and landed. To do this, you only need to select the troops you want to land and right click on your colony. Keep in mind the maximum garrison size, as it may be that not all the troops selected will be able to land.

## MANAGEMENT

Fleet management mainly involves the merging and splitting of fleets, according to the selected starships/troops by the player, within fleet movement in the starmap. However, it also includes scuttling specific ships or troops, assigning admirals, changing its name and the overall supervision of their location/status each turn.

Any of your fleets that arrive to a Starsystem, immediately and automatically merge with any that is already present. In order to split some starships and/or troops into another fleet, all you have to do is select them in composition subpanel, of the Selected Fleet panel in the left side of the screen; and right click on the target to give the selected units an order in a new fleet.

Other operations can be done from the Fleets main panel, as described in the **Interface** section. Here you can scuttle ships or troops, assign admirals and locate the fleets across the galaxy. Both here as well as in the fleet selection panel, you can also change its name, by clicking on it and typing a new one.

# **events**

Across your game session, several notable events can and will happen, some as consequence of your actions and others not so much; for which the DataNet will notify you about. These events range game changing galactic wide events, which change temporarily some subset of the main rules of the game, to lore friendly progress check events; to help you weave a narrative in the Skirmish mode. Thus, there are 3 different types: **Exploration**, **Galactic Crisis** and **Narrative** events

# EXPLORATION

While exploring the galaxy, your scouts can encounter all manner of strange phenomena. We already talked about things like Supernovas and Wormholes in the void, but Exploration Events represent the discovery of even stranger things on surface of alien planets or orbiting strange stars.

Events	Category	Chance	1st Effect
Agent rescue	Exploration	4	Grants a free Agent
Ancient Records	Exploration	10	Grants 25 Research
Alien Device	Exploration	6	Grants a random researchable tech
Lost Treasure	Exploration	10	Grants 50 Credits
Splinter Outpost	Exploration	7	Grants a free Outpost
Lost Colony	Exploration	4	Grants a free Colony
Abandoned Starship	Exploration	7	Grants a random buildable Warship
Starcharts Cristal	Exploration	6	Discovers the 3 Closest systems
Temporal Vortex	Exploration	6	Duplicates the investigating ship
Ancient Probe	Exploration	10	Starship crew becomes elite
Xenobiomass Cache	Exploration	6	Adds +1+1+1 materials in nearest colony
Friendly Smugglers	Exploration	6	Grants 25 Freighter Fleets
Industrial Derelict	Exploration	6	Grants 50 industry on nearest colony
Orbital Terraformer	Exploration	6	Terraforms a planet in an owned
Starsystem Hibernation Pods	Exploration	6	Adds 1 free population on nearest colony



The number of these events available for you to find in the galaxy, depends mainly on its size, but also in its shape. It is important to notice as well, that the AI can also scout these out and if your fall behind in the exploration game, you might miss out on many of them.

# GALACTIC CRISIS

With a much greater impact than Exploration events, a Galactic Crisis random event severely alters the game rules, although just temporarily. These are so massive that affect all the factions in the galaxy, regardless of where they start or how much they have expanded.

Regardless of the random event however, the player always has the option to research a corresponding special tech, that once researched serves to nullify the event's effects; to the player's faction. Effectively gaining an advantage then against all others.

Event	Туре	Negative Effect
Xeno Bacteria	Crisis	25% Food
Galactic Plague	Crisis	50% Population growth
Progenitor Mindprobe	Crisis	Heroes can't get experience
Subspace Anomaly	Crisis	Halves fleet ranges and speed
Economic Crisis	Crisis	25% Credits Penalty
Hiperspace Flux	Crisis	Halts all FTL travel for a time
Political Impasse	Crisis	-10 Morale
Lithovore Microbes	Crisis	25% Mineral Penalty
DataNet Infection	Crisis	25% Research Penalty
Worker's Uprising	Crisis	25% Construction Penalty

# NARRATIVE

Narrative Events are only available in the Skirmish Mode, since the Campaign already has its own systems related to narrative. They serve to highlight and incorporate into the lore, the many milestones the player goes through, in a regular game. From colonizing the first world, to a first contact(and interstellar war maybe), to discovering the whole galaxy. Each one of these events has a plaque(pretty image), with a text incorporating the details of the current context of the faction.

# SHIP DESIGN

All Starships produced in Astra Exodus come from a corresponding Design, which serves as a blueprint for its construction. Within that context then, Starship Design then is the system through which the player to sets the **Core**(Engines, Armor, Hull and Shields), **Support**(Generator, Capacitor, Storage, Computer, Command, ECM Suite, Bomb and Special) and **Weapon**(Beam, Mass, Particle and Missile) modules for a starship class; effectively creating a Design for building on his or her colonies.

There are 4 requirements for a valid starship design, that the game checks in order for you to save it and build starships out of it:

- It must have an Engines core module.
- Its Power Generation must be equal or greater than its Power Consumption.
- Its Available Capacity must be equal or greater than its Required Capacity.
- It must have enough Storage for its weapons to fire at least for 30 seconds.

To design a new starship, you need to access the Designs man panel. Which you can do through the corresponding button on the colony build projects panel or, as described in the Interface section, by directly opening the panel through the Designs button on the main button bar; situated on the bottom side of the screen.

# STARSHIP CLASSES

In Astra Exodus all factions have their own classes of Starships, meaning each type or role of ship has a different name and graphic for each faction. This makes for a varied and lore friendly set of starships. In any case and more specifically, there are: **5**  **military**, **2 civilian** and **2 strike-craft roles** in total to base a design out of.

You can select the starship class of your design using the arrows in the upper left side of the

Designs screen, next to the icon of the currently selected one. Then you can either click the New Design button, to start one from scratch, or select one of the Designs on the right-side list; to either view its details or use it as a base for a new one.

Base Acceler	Turning	Braking Base	Base Evasion	Starship Hull	Speed ation	Speed %	Speed Armor	Shields Factor
Fighter	20	1	0.4	1	1	0	5	0.3
Bomber	40	0.6	0.4	1	1	10	5	0.3
Frigate	800	0.6	0.2	0.1	2	100	50	0.2
Destroyer	1600	0.5	0.2	0.08	2	200	100	0.1
Constructor	1200	0.5	0.2	0.08	2	200	100	0.1
Cruiser	2400	0.4	0.1	0.06	2	300	150	0
Colonizer	2000	0.4	0.1	0.06	2	300	150	0
Battleship	3200	0.3	0.1	0.04	З	400	200	-0.3
Titan	5600	0.2	0.1	0.02	3	600	300	-0.5

#### MILITARY ROLES

The military starship roles are: **Frigate**, **Destroyer**, **Cruiser**, **Battleship** and **Titan**. Each of these is 1.5 times bigger in relation to the previous one and has different characteristics that allow it to excel above others.

**Frigates** are cheap, fast and hard to hit given their size. **Destroyers** have additional anti strike-craft weapon mount points, so they excel at escorting bigger ships. **Cruisers** are jack-of-all-trades yet masters of none, being able to tackle many jobs if designed correctly. **Battleships** have tons of heavy weapon mount points and armor; however, they lack defenses against smaller ships. Finally, **Titans** have tremendous firepower and armor, yet they are severely lacking in maneuvering and speed. They are also the only ones who can mount Massive grade weapons, which are devastating against orbital defense installations.

#### CIVILIAN ROLES

In our galaxy you can find basically 2 civilian roles: **Constructor** and **Colonizer**. They are approximately as big as a Destroyer and Cruiser correspondingly. Obviously, as their names indicate, Constructors can build outposts on alien planets and Colonizers can settle them and found new colonies. Colonizer class starships require a population unit on board, to start off the colony, as such this has to be taken into account; when they are ordered for construction in any colony.

There is also **Freighters**, which are also civilian ships which you can build. However, these are auto designed and are abstracted in the game to a point, that all you have to do is build fleets of them from your colonies.

#### STRIKE-CRAFT ROLES

Strike-craft are of course also military ships, however due to their size and special rules, they get their own classification. Strike-craft come in squadrons of five, each of these small starships are a mere fraction of a Frigate in size and can be further classified as **Fighters** or **Bombers**.

**Bombers** are fitted to engage capital ships, since they are equipped with missile launchers and have higher Hull points, while **Fighters** are mainly best employed to counter enemy bombers; although they can also pose a threat to bigger ships in large enough numbers.

Equipment wise, **Fighters** get one Micro size Particle or Mass weapon, while **Bombers** additionally get one Micro sized Missile Launcher. If the required research is done, they can also be equipped with Armor and/or Shields. Strike-craft are launched from specialized bays according to role, which can be fitted into Heavy and Massive weapon mounts, with the latest available modules in each category.

#### CORE MODULES

Core Modules or Systems are essential to any starship, providing core functions like thrust and hyperspace travel. They are the only ones as well, which are automatically scaled accordingly to the size of the starship. Core Modules can be categorized in: **Engines, Hull, Armor** and **Shields**.

The most critical are the **Engines** of course, as without one of these modules a starship design will never be valid. They provide to the starship its hyperspace rating, tactical acceleration, maximum and maneuvering speed. Here you will have to generally choose between a faster deployment time through hyperspace, versus a more agile fleet when in battle, able to avoid enemy fire. Then we have **Hull** modules, that serve to reinforce the structure, adding additional hit points to the equipped starship; which directly indicate the health of the ship. Hit points are consumed each time the ship is hit by enemy weapons and will mean the starship's destruction, if and when they reach zero.

Instead **Armor** provides directional defense, meaning it defends the starship's structure from a certain facing (Bow, Port, Starboard and Stern), at the expense of additional weight and thus a slower maximum/maneuvering speed in battle.

Finally **Shields** also provide directional defense, but in this case at the expense of power consumption. They also can collapse when a section (one per facing) is destroyed, requiring a small time window to reset, during which the ship is vulnerable.

# WEAPONS & MOUNTS

Weapons are offensive modules, that as their name indicates, are used to damage enemy starships by launching at them either energy or ordnance; which nevertheless can take many forms. They have the particularity, among all other modules, that they are equipped in **Mount Points**.

Mount points are specific places in a starship, where a weapon



can be placed or fitted, and have a grade that can be either: **Micro**, **Light**, **Main**, **Heavy** and **Massive**. The larger the mount point, the more powerful the weapon mounted in that spot will be. However, it will also be less accurate and have a smaller field of fire. Also, **Micro** mounted weapons are the only ones that can target strike-craft. Not all weapons



can fit all mount grades, so you'll have to pick wisely if you want to fit all the mount points on an optimal design. Mount points can also be **Fixed** or **Turret**, meaning that they can turn or are restricted to firing in one direction.

In game Weapon modules can be categorized as **Beam**, **Particle**, **Missile** or **Mass** based. Each Weapon has its own characteristics, but certain types tend to excel in certain areas and not in others. For example, **Beam** weapons tend to do extra damage against armor and have average range, while **Mass** weapons have a high rate of fire but poor accuracy. All starship weapons are always placed on a **mount point**, however some special modules that can take an offensive role, can be installed as Support Systems.

# SUPPORT SYSTEMS

Finally, we have many types of **Support Modules**, out of each a starship can have multiples installed. As mentioned previously, they can be classified as: Generators, Capacitors, Storage, Computers, Command, ECM Suites, Bombs and Specials.

Generators are used to provide power to the ship's systems, while Capacitors are required for Beam and Particle weapons to function. This is in contrast with Missile and Mass weapons, which require ordnance Storage holds to be installed. Computers are used to increase the chance to hit enemy targets, while Command modules increase the experience gain and starting level of your crews. ECM Suites enable the starship to avoid enemy fire by increasing the starship's evasion. Bombs serve to bomb planets, although one must be careful with their use, as that can carry a significant diplomatic cost.

Finally, and perhaps most importantly, there are the ones classified as **Special**. These modules alter the game rules in some way, not necessarily combat related. For example, the Trading Holds special module allows your ships to generate income while being idle. Then there is the Subspace Web, which grants the ship the ability to temporarily immobilize a target. They have the particularity as well, that only one can be fitted per ship.

Special	Power Req.	Support Space	Effect	
Constructor Module	25	5	Creates an outpost in a planet	
Colonizer Module	50	10	Creates a colony in a planet	
Missile Racks	30	4	50% Bonus to reload speed of missiles	
Repair Drone Bay	20	2	100% Bonus to ship repair	
Tractor Beam	30	2	Halves enemy ship speed for 15 seconds	
Shock Absorbers	30	4	25% Bonus to armor strength	
Shielded Lattices	50	4	25% Bonus to shield strength	
Ordnance Fabricator	40	2	Generates 250 ordnance per turn	
Cloaking field	50	6.	Cloaks ship making it invulnerable for 30 seconds	
Hyper Projectile Tracker	40	4	25% Acc Bonus to Particle and Mass weapons	
Extremis Scanner	40	4	200% Damage vs Menaces	
Trading Holds	40	4	Generates 10 credits per turn	
Exo Mobile Lab	50	4	Generates 5 research points per turn	
Subspace Web	50	4	Immobilizes enemy ship for 30 seconds	
Spatial Compressor	50	4	Allows for short range jumps in battles	
Shield Coils	30	2	Shields restart in one second	
Inertial Dampener	40	4	Removes armor mobility malus	
Hyperspace Interdictor	60	6	Prevents retreat from enemy starships	
Hyper Capacitor	50	4	25% Bonus to beam damage	
Nanite Cloud	60	6	Repairs Hull and Armor mid battle, 20 HPs per second for 30.	

All the Support Modules have a value indicating how much space they occupy aboard a ship: the bigger the ship is the more space it will have and thus the more modules it will be able to fit. This is balanced by the fact that the more weapons/shields/engines/ etc. a ship has, the more support modules will require, so bigger ships will not always benefit the most out of this.

# COMBAT TACTICS

Once you have selected a Class and installed all the required modules you will still need to select a name and most importantly **Combat Tactic**. This setting defines the behavior a ship will have when given an attack order against any target. There are 4 different battle tactics in the game: **Engage**, **Assault**, **Harass** and **Disengage**.

The default tactic is **Engage**, in which the starship will automatically maintain optimum firing distance, with a frontal facing to the enemy. This is better served for slow-moving Battleships and Titans. In contrast, with the **Assault** tactic a starship will always maintain movement, going towards and past the target; in strike-craft like runs. This tactic works best for small starships, like Frigates and Destroyers. The **Harass** tactic has the ship orbiting the target at maximum range, trying to maintain the most distance with it, while nibbling at it with long range weaponry. This long-range tactic is better suited for carriers or missile cruisers. Finally, there is the **Disengage** tactic, which is used mainly for civilian ships. This will trigger an automatic hyperspace retreat, the moment the ship comes into sensor range with the enemy.

# VETERANCY

Each time a starship defeats an enemy, it will get experience in battle, which will in time; allow it to gain Veterancy level. Veterancy levels can greatly increase a starship's abilities in battle, providing bonuses to maximum speed, weapon damage, plus hull, armor and shield hitpoints. Strikecraft are the only units however, which do not grant XP when destroyed.

All starships once constructed, start off as Recruit, but in time they can level up to Elite and become nearly unstoppable thanks to this system. The Command support modules help with this, by both increasing the starting Veterancy level, as well as boosting the XP gained per kill.

Veterancy	ХР	Engines	Damage	Hull	Armor	Shield
Recruit	0	100%	100%	100%	100%	100%
Regular	50	125%	125%	125%	125%	125%
Seasoned	100	156%	156%	156%	156%	156%
Veteran	200	195%	195%	195%	195%	195%
Elite	400	244%	244%	244%	244%	244%

# DIPLOMACY

Diplomacy in Astra Exodus is conducted within the context of an audience with an opposing faction leader, with whom you will be able to interact through diplomatic actions, which will affect how he or she sees you and your people. This is tracked by several values and modifiers, but it is summed up in the faction's Stance (with you), which can either be: **Warring**, **Hostile**, **Neutral**, **Cordial** or **Friendly**. As their names indicate, these Stances will indicate how the AI will respond to your actions and more importantly, help you anticipate any aggression.

In order to open up an audience with an opponent, you can either click on the corresponding faction logo on the upper left side of the screen, under the Status Bar; or you can open the Diplomacy main panel, select the target faction there and click the Audience button on the lower part of the screen. In the Diplomacy main panel, you will also be able to find out all the treaties each opponent has with each other and how they rank in various aspects, in order to keep an eye on the galactic geopolitics at play.

#### DIPLOMATIC ACTIONS

Once an audience has been setup, you will face the leader of the corresponding faction and thus will have the chance to interact through diplomatic actions. The main actions available here are: **Propose/Break Treaty, Exchange, Demand, Gift** and of course **Declare War**. All of these will of course affect your relations with the faction and trigger a modifier in turn. We'll talk more about these later.

Clicking on any of the corresponding options on the Audience screen, will change the following sub options accordingly, to help you compose the diplomatic action you want to send or propose to the opposing leader. Depending then on the Relations, Thrust and Threat values shown in the lower right corner of the screen, is that AI will determine if your proposal is acceptable or not.

#### PROPOSE/BREAK TREATY

Treaties are mutual long-term obligations and benefits between governments, which are agreed to between involved parties, at the behest of one of them. There are several treaties possible in Astra Exodus, these include: **Trade Commission**, **Research Collaboration**, **Open Borders**, **Military Alliance**, **Peace Agreement** and **Non-Aggression Pact**.

The **Trade Commission** has both factions increasing the total commerce they generate, by a total of 20% of what each other generates. Similarly speaking, the **Research Collaboration** does the same but for research. **Open Borders** grants rights of passage and refuel for each other ships and thus extend their range, thanks to the other bases. A **Military Alliance** is a defensive pact, in which if attacked by a third party, both factions swear to help each other; by declaring war against the aggressor. As the name implies, a **Peace Agreement** marks the end of hostilities



between two factions, effectively ending a war. Finally, a **Non-Aggression Pact** is a basic treaty, required for higher tier ones, promising peace between two factions. Breaking it of course, carries a galactic wide diplomatic penalty.

#### **exchange**

In audience you can also exchange or trade **Starcharts**, meaning your exploration of the Starmap so far, and any **Technologies** researched so far. This is a great way to both boost exploration in the early game, at least with opponents you don't foresee to be fighting any time soon. Exchanging techs however is much more important even, as it is the only way of getting extra techs from the same level on a Research Field.

#### DEMAND

Depending on your military strength, you might be in the position to either issue or receive demands to/from other factions. The terms these demands can include: technologies, systems, credits (100 credits at a time), tribute(10% of revenue per turn), cease espionage, breaking all treaties with a third party, the declaration of war against another faction or even the agreement to peace in a war. If the target faction does not accede to the demand, then of course the relations will be negatively impacted, with a corresponding modifier.

#### GIFT

Giving gifts is a fast way of getting into good graces with an opponent, as depending on the gift, the resulting modifier will give quite a boost to relations; however temporary. There are 4 possible gifts to give in the game: **Technologies**, **Tribute**, **Starsystems** and **Credits**. These are like demands, but with a reverse effect so to speak, as the beneficiary is the other.

#### DECLARE WAR

Given the importance such an event has, it makes sense the Diplomatic Action to have a category of their own. Declaring war immediately allows for hostile actions such as Fleet Interdiction, Colony Assaults, Bombardment and Assault to take place. Undefended

Outposts will also fall quickly if attacked.

# RELATIONS, TRUST AND FEAR

For each faction, the game keeps tracks of three essential values, relative to all others; to impact the diplomatic relations and interactions between them. They are also directly used by the AI in order to make its choices, regarding both other AIs and the human player of course. These values are called **Relations**, **Trust** and **Threat**.

First **Relations** represents the overall sentiment of the faction towards another, it fluctuates mainly with the corresponding faction's actions. For example, if you ally with **A**, which is a sworn enemy of **B**, the **B** will not have favorable relations with you **X**. In contrast **Trust** increases slowly with time and can only decrease when a treaty is broken, or a promise is not kept in general. Trust is essential for higher tier treaties and trades, an alliance treaty for example, as the AI not only needs to like a faction but also trust it in that case. Finally **Threat** measures how dangerous a faction feels another is to itself. This is measured in both the might of the relative militaries, but also the industrial capacity involved and the perceived willingness to go to war.

# RELATIONSHIP MODIFIERS

Relationship Modifiers offer a quick, nice and simple way of finding out why an opponent "feels", like it does about you. It shows in game terms, how plus why the Relations and Trust values are what they are. Some modifiers come from your Acceptance or Refusal of foreign diplomatic **actions**, while other come from the galactic geopolitical **context**, from any currently active **treaties** signed and even from **espionage** actions executed against them.

Relations Modifier	Туре	Relations	Lifetime	Trust Impact
Trade Partner	Action	5	20	10%
Warmongering	Action	-5	20	-10%
Historical Rivalry	Context	-5	n/a	n/a
Bombed a planet	Action	-5	20	n/a
Broke a NAP	Action	-5	20	-10%
Close borders	Context	-5	n/a	n/a
Ally of an Enemy	Context	-5	n/a	-10%

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Long Peace	Context	10	n/a	n/a
Ally of an Ally	Context	5	n/a	10%
Same Enemy	Context	5	n/a	n/a
Has treaty with rival	Context	-5	n/a	n/a
Tech Hacked	Espionage	-10	20	-20%
Resources Stolen	Espionage	-5	20	-10%
Hero Assassinated	Espionage	-15	20	-30%
Installation Demolished	Espionage	-10	20	-20%
Incited rebellion	Espionage	-20	20	-40%
Sabotaged Military	Espionage	-10	20	-20%
Foreign Operative Stopped	Espionage	-5	20	-5%
Declaration of War	Treaty	-35	n/a	-100%
Peace Agreement	Treaty	35	n/a	0
Research Collaboration	Treaty	15	n/a	n/a
Trade Commission	Treaty	10	n/a	n/a
Alliance	Treaty	20	n/a	n/a
Open Borders	Treaty	10	n/a	n/a
Non-Aggression Pact	Treaty	10	n/a	n/a

# HERDES

Heroes are very important characters in the galactic community, whose experience and capabilities make them incredibly powerful allies to have, in return for a hefty contract fee and monthly salary of course. It is also through Heroes that we can have a look at the larger galaxy at play from a in game lore perspective: from the Academy of Talos to the Wunet Confederacy and the Quantum Nebula, the backstory of each hero helps shape this narrative. In **Campaign** mode Heroes are unlocked by completing missions, while on **Skirmish** mode Heroes will randomly offer their services to you, either spontaneously or once you find them while exploring the galaxy, stranded on forgotten planets. Regardless of how they become available to you, you will have to pay a hiring fee plus their monthly salary, in order to recruit them to your cause.

Heroes in the **Campaign** will wait for you as long as it takes to be hired, however in **Skirmish** mode many will get tired of waiting and might withdraw their offer. In a regular **Skirmish** game, you can have up to 4 Heroes at your service at one time. However, there are factions' traits that both increase and decrease this number.

Each hero has three possible roles to play: they can be either an Admiral, Governor or an Operative. Admirals, as the name indicates, are experienced starship leaders. Admirals will grant advantages (for instance, bonus damage against menaces) to any ships in their fleet. **Governors** on the other hand focus their efforts on more earthly pursuits, providing aid to your star systems (for example, by increasing the system's morale). Finally, **Operatives** provide you with a way to wage war through more subtle ways (by sabotaging the enemy colonies for example, deep behind the main battle lines) through the execution of **Espionage Missions**.

### SKILLS

Heroes can achieve results thanks to their Skills. Each hero can have up to 4 Skills and usually most, if not all, are heavily related to his or her role in the game. The more skills a hero has, the more expensive his or her services will be. While in service, a Hero will gain experience and eventually levels. With each level gained, out of which there are 10 to gain per hero, you get two Skill Points to spend. These can be used to level up specific skills (up to level ten), significantly improving their effect on the game. This means you will have to decide which skills to level up and which to neglect according to your needs.

	Ability	Role	Domain	Upkeep	Mode per level	
1	Agent	Operative	Counterintelligence Success Rate	5	5%	
	Ancient	Personal	Reveals the whole map	10	n/a	
	Assassin	Operative	Assassinate Success Rate	10	5%	
	Bureaucrat	Governor	Corruption	5	-5%	
	Celebrity	Personal	Overall Hero Upkeep	10	-5%	
-	Commando	Operative	Demolition Success Rate	8	5%	
	Diplomat	Personal	Overall Diplomacy Bonus	10	2.5%	
	Economist	Governor	Credits per Trader	6	10%	
	Engineer	Admiral	Repair Rate	6	10%	
	Entertainer	Governor	Morale	5	5%	
	Environmentalist	Governor	Pollution	6	-5%	
	Exobiologist	Admiral	Damage vs. Menaces	7	20%	
	Farmer	Governor	Food per Farmer	5	10%	
-	General	Admiral	Troop Initiative Bonus	6	10%	
	Hacker	Operative	Hacking Success Rate	9	5%	
	Hiperspatial	Personal	All fleets are always known	10	n/a	
	Industrialist	Governor	Construction per worker	7	5%	
	Instigator	Operative	Revolt Success Rate	10	5%	
-	Instructor	Admiral	Experience Gain Rate	5	20%	
	Miner	Governor	Minerals per miner	7	5%	
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Navigator	Admiral	Ship Strategic Speed	8	0.5%		
Officer	Admiral	Ship Evasion	9	10%		
Researcher	Personal	Overall Research	10	5%		
Saboteur	Operative	Sabotage Success Rate	7	5%		
Scientist	Governor	Research per Scientist	8	10%		
Smuggler	Personal	Freighters	10	3%		
Specialist	Admiral	Ship Accuracy	10	10%		
Thief	Operative	Stealing Success Rate	6	5%		
Trader	Personal	Overall Credits	10	2%		
Wealthy	Personal	No Maintenance, Credits per Turn	10	10%		

#### **CSPIONAGE**

The Espionage system lets the player fight and protect from damage without using his or her military units. As previously mentioned, Operatives are the only heroes who have the skills required to conduct espionage missions. There are seven types of espionage missions available in the game: Sabotage, Counterespionage, Hacking, Stealing, Assassination, Rebellion and Demolition.

A **Sabotage** mission has a chance of destroying an enemy starship at random. **Counterespionage** in turn is used to defend, as it decreases the chance of enemy operatives being successful in their missions. Through **Hacking** you can extract a technology from a foreign power, while **Stealing** is the same concept but it applies to the treasure and its credits instead. **Assassination**, as the name implies, revolves around killing an



enemy hero. However, thanks to cloning technology, their death does not have to be permanent. Then there is **Rebellion**, which can turn a Colony against its own government. Last but not least the **Demolition** mission involves the destruction of an enemy installation at random.

Missions	Target	Turns	Base Chance
Assassination	Hero	20	5%
Sabotage	Planet	10	10%
Counterespionage	Faction	Infinite	25%
Hacking	Faction	10	15%
Stealing	Faction	10	20%
Rebellion	Planet	20	5%
Demolition	Planet	10	10%

#### EXECUTING A MISSION

In order to assign an Espionage Mission to an operative, you need first to select which mission type you want the operative to carry

out, which should take into account his or her skills for it and then the target; meaning which opponent you want to execute it against. Then it will take 5 turns for the hero to start the execution of the mission and then a given number of months, depending on the mission type, for you to get a result according to the given chances. If, however, a Counterespionage Mission is being executed by a defending operative, there is a high chance your operative might have to abort, or risk being caught and maybe eliminated.

# SPACE COMBAT

Whenever two hostile fleets engage each other, either running a fleet interdiction or colony assault/defense action, it will develop into a Space Battle. These combat scenarios can either be resolved automatically, retreated from or fought through a real-time tactical space battle, where you ship design and commanding skills will shine. In any case, a battle is marked on the star map with a red target over a star system. This can happen early while exploring the galaxy, when you encounter galactic menaces, and more generally when a colony, outpost or fleet is attacked later in the game.

One of the most important factors to consider is that Armor and Shield damage is **directional**. This means that there is one section per facing (bow, starboard, stern and port.) for these defenses which you then have to wear down before actually damaging a starship.

This obviously means that maneuvering, fire arcs and facing become quite important.

Fleets can have up to 49 ships each, meaning that a single battle can have close to 100 starships in total, not to mention any strike-craft squadrons that might have launched. Each of these fleets can be under the command of an Admiral, who, thanks to his or her skills, will surely impact the outcome of the fight.

#### ORBITAL DEFENSE INSTALLATIONS

When a Colony is under attack, depending on whether or not it has any orbital defense installations present, the defensive force or fleet will be bolstered by one or more static weapons platform. There are several types of these platforms available, from small missile based **Orbitalforts** to gigantic massive grade weapon capable **Stellarbastions** and supporting **Spacedromes**; with their strike-craft squadrons.

0.D.S.	Hull	Base Armor	Base Shields	<b>Evasion Factor</b>	
Orbitalfort	800	100	50	0,2	
Spacedrome	1600	200	100	0,1	
Starbase	2400	300	150	0	
Battlestation	3200	500	250	-0,3	
Stellarbastion	5600	800	400	-0,5	

#### BATTLE INTERFACE

The selection and command of units in Astra Exodus follows standard RTS practices. You click and drag to select a group of starships, squadrons or defense installations, generate control groups with CTRL plus a number and right click to execute a context command; like move or attack.

An important tool to manage the battle flow and allow tactics to be properly executed, is the **Time Dilation** controls. This allows you to slow down the action to a total stop, or speed it up to accelerate the initial engagement for example. In practice this means that if the player is overwhelmed at any point, he or she can simply press the **Space Bar**, to totally stop the action and give any orders in the meantime. This system allows for the tactical depth required by the starship design system, without forgoing the real time spectacular battles, that are hopefully a blast (no pun intended) to watch; as they are to command.

Finally, there are some basic orders, akin to abilities which we'll cover next, but available for all starships. These are **Halt**, **Retreat** and **Hunt Strikecraft**. The first **Halt** order will cancel any current action or order, including basic movement, the unit is executing currently. The **Retreat** order makes your ship will break away from battle, head towards the closest edge of the battlefield and open a Hyperspace jump point. Obviously, it will be vulnerable to enemy fire in the meantime and you will not be able to cancel the order once given. Finally, the **Hunt Strikecraft** order will command the ship to target the closest enemy strikecraft squadron target and engage it as soon as possible.

#### STARSHIP ABILITIES

Starships, according to the modules they have installed, can also have special abilities available to them, these can have then a

Passive effect or an Active effect on the battle. Meaning that in some cases they apply their effects at all times to the ship, while in other cases the player might trigger them, they will work for a given time window and then reset; again, with time.

Passive abilities include things like preventing enemy starships from retreating or reducing the penalty that armor adds to a starship's tactical speed. These effects are constant and do not need to be activated. In contrast, Active abilities include things like engaging a Spatial Compressor to teleport the starship across the battlefield or a Nanite Cloud, to repair the ship mid battle. All passive and most of the active abilities require the presence of a special support module in the starship design.

Within the Active abilities, there are those which we can call basic, who only depend on the presence of core systems; like Engines and Shields. These abilities are: **Boost Engines**, **Weapon Overload** and **Recharge Shields**. **Boost Engines** allows for a starship to increase its speed momentarily, at the



expense of collapsing any shields available and reducing its weapons damage output. The **Weapon Overload** ability in contrast, drastically reduces speed and shielding, while increasing damage output. Finally, the **Recharge Shields** ability immediately resets a collapsed shield, at the expense of speed and damage output. Basically, you sacrifice all other aspects, in order to benefit one, however temporary.

bility	Туре	Effect
Planet Colonization	Passive module.	Enables the colonization of a planet. Requires a Colonizer
Recharge Shields	Active	Restarts any Shields immediately. Halves tactical speed and reduces weapon damage to 75% for 15 seconds. 30 seconds cooldown. Requires any Weapon and Shields module. Boost weapon damage by 25% for 30 seconds. Collapses Shields and reduces speed to 50%. 1 minute cooldown.
Weapon Overload	Active	Requires any Weapon and Shields module. Halves enemy ship speed for 30 seconds. 1 minute cooldown. Requires Tractor Beam module.
Tractor Beam	Active	Cloaks ship for 30 seconds, making it invulnerable. Collapses shields, and weapons meanwhile do 75% damage. 1 minute cooldown. Requires Cloaking Field module.
Cloaking field	Active	Immobilizes enemy ship for 30 seconds. 1 Minute cooldown. Requires Subspace Web module.
Subspace Web	Active	Executes a short range jumps in battle. 1 Minute cooldown. Requires Spatial Compressor module.
Spatial Compressor	Active	Enables the construction of an outpost in any planet. Requires a Constructor module.
Build Outpost	Passive	Boost speed by 50% for 30 seconds. Collapses any shields and meanwhile weapons do 75% damage.
Boost Engines	Active	Requires any Engines module. Interdict Hyperspace Prevents enemy starships from retreating. Requires Jumps Passive Hyperspace Interdictor module.
Hangar Bays	Passive	Enables the launch of strikecraft squadrons at battle start. Requires any Bay weapon mounted.
Orbital Bombardment	Passive	Enables the bombardment of enemy colonies. Requires any Bomb module.
Repair	Active	Repairs Hull and Armor 5 PPS, over 30 seconds. 1 Battle Minute cooldown. Requires Nantie Cloud module.

# GROUND COMBAT

Whenever a colony is invaded by an enemy fleet, if any defending troops are garrisoned there, then ground combat will take place; between the assaulting troops and the defenders. This combat can be **autoresolved**, **retreated** from or **fought** in real time, on a hexagonally divided representation of the planet's surface. These ground battles are fought with an active time system, which works like a fractioned RTS. The Initiative value of a troop indicates how often it can move or attack in AE, so the higher the Initiative; the more mobile and deadlier the troop can be.

### TROOPS

There are several types of Troops in Astra Exodus, each of them with specific characteristics, that make them more desirable; depending on the location and situation. Some are more suited at defense, others excel in some terrain types and/or to flank the enemy. Precisely there are 4 main types: **Infantry, Armor, Mechs** and **Airborne**.

**Infantry** consists of armed humanoid beings, equipped with robotic like suits and void effective weaponry. **Armor** troops instead are composed of heavy combat land vehicles, in general tracked but also with hover capabilities. **Mechs** in turn are relatively large, bipedal combat crewed robots, with unparalleled surface mobility in the battlefield. Last but not least, **Airborne** troops consist of atmospheric strikecraft, capable of striking quick and hard; anywhere on a planet. Even if each troop in the game has a set type, each is different from all others, both visually of course and on its stats. Speaking of stats, besides the obvious **HitPoints**, there is **Soft**, **Hard** and **Air Attack**; plus **Defense** and **Initiative** to speak about. Each troop type is more vulnerable against one type for attack at least, the clearest example is Airborne units, which are most vulnerable to **Air Attack**. Defense mechanically works as a chance to prevent damage when in combat and can be improved through different techs, out of which there are several for each troop type.

Troops	Types	Soft Attack	Hard Attack	Air Attack	Defense	Hit Points	Trans- ports	Initiative
Gunship	Airborne	16	16	16	16	40	6	2
Planetary Bomber	Airborne	10	14	2	12	35	8	з
Planetary Fighter	Airborne	2	2	8	8	30	6	4
Assault Armor	Armor	6	10	4	10	40	6	2
Hover Tank	Armor	8	12	2	12	40	4	3
Exorangers	Infantry	20	6	6	14	50	6	2
Space Infantry	Infantry	10	2	4	8	30	2	1
Neohuman Marines	Infantry	20	6	6	14	50	4	1
Starmarines	Infantry	16	4	4	12	50	4	1-
Assault Tech	Mech	16	10	6	14	60	8	1
Avatar	Mech	28	28	28	20	80	10	1
Light Mech	Mech	12	6	6	12	40	4	2

Finally, troops of course need to move across the galaxy, for both offensive and defensive operations, Transports or Freighters are used for this; the same which are used for moving resources. Therefore it is logistically very important to manage their availability to ensure both the resource pooling and the unimpeded movement of your armies.

## NETERANCY

As with Starships, each time a troop defeats an enemy, it will get experience in battle, which will in time allow it to gain Veterancy level. Veterancy levels can greatly increase a troop's attack, defense and initiative in battle. All troops once trained, start off as Recruit, but can sometimes quickly level up to Elite and become nearly unstoppable.

Veterancy XP		Initiative	Attack	Defense	
Recruit	0	100%	100%	100%	
Regular	50	120%	125%	125%	
Seasoned	100	140%	150%	150%	
Veteran	200	180%	200%	200%	
Elite	400	200%	300%	300%	

## INVASIONS

Once any orbital defenses of a Colony are destroyed, if the fleet carries troops for the task, a planetary invasion can commence. Invasions are the main part of ground battles, as you will be always be either attacking or defending a colony. The maximum number of attacking troops allowed per invasion depends on the garrison size, which in turn comes from the size of the planet involved, as specified previously in the corresponding section. First a **Set Up Phase** starts, which can last up to 30 seconds (this depends on difficulty), where you need to place your troops across the surface of the planet; which is divided in hexes. This hexagonal territory might be compromised of land or some liquid, like lava or water for example. Only **Airborne** troops can be placed non land based hexagonal territories. The player can also use an **Autodeploy** function, that will automatically deploy the available troops. However, this will rarely will result in an optimal deploy.

Once both the player and AI sets up their troops, the proper **Battle Phase** will commence. On this phase, you order the troops to either move or assault, any hexagonal territory; depending on if it's defended or not. You can only do this once the troop's **Initiative** bar has filled up and this, as explained in an earlier section, depends on the troop's stats. The first side, either attacking or defending, that is able to eliminate the opposing forces; will win the battle.



#### COLONY ASSIMILATION

Whenever a colony is conquered through an Invasion, there will be a set period of turns after called Assimilation, during which the new owner won't be able to select build projects or manage the labor distribution for the planet. This reflects the period during which a new order is established and by default takes 10 turns. There are some Faction traits that either decrease or increase this number.

#### BOMBARDMENT

A Fleet might choose to bomb the planet first or even after an invasion, if capable of doing so. In order to do this, it must have starships equipped with bombs and have enough ordnance stored to use them. It is important to point out though that this will consume the fleet's action for the turn, so it will not be able to move for example after bombardment.

To bombard a colony you merely need to right click the target planet, you wish to drop the bombs on. The mouse cursor will change to the corresponding icon while hovering the planet, if the fleet meets the conditions for the action.

There are many different bomb modules in the game, however they differ from each other not only on their strength and cost, but also their efficiency versus troops, installations and populations. Some are ideal to destroy the population of a Colony, while others in contrast are more useful against Installations and Troops. It all depends if you want to take the Colony, with at least some infrastructure intact, or if you just want to simply remove the enemy from the planet.

Bomb	Precision %	Support Space	Ord. Required	Dmg. Pop	Dmg. Installations	Dmg. Troops
Nuclear Bomb	25	1	200	75	75	50
Plague Bomb	30	1	400	150	50	100
Fusion Bomb	35	1	600	125	125	125
Xenophage Bomb	45	1	800	200	100	150
Antimatter Bomb	50	1	1000	175	175	175

Regardless of the case, the player must consider the diplomatic ramifications of any planetary bombardment, as this will generate negative modifiers for all other factions in the galaxy. Only an historic rival of the victim faction, will ignore such a clear case of attempted genocide in the galaxy.

## MODDING

Astra Exodus was designed from the ground up to be moddable, as pretty much everything in the game is loaded from user editable files, organized in a certain structure. This very same structure, found on the base game directory, must be reproduced by any mod; adding a main data file as well which defines the mod.

So basically, under the /MyGames/Astra Exodus/Mods path, you'll have a data file named after the mod, plus a main folder that contains the mod files; with the same Data and Graphics. folder structure as the main game.

The main file to define first is the main mod LUA file, which describes basic things about the mod, such as its name, description, version and icon used. That file must be placed in the mod root folder, which should be under /My Games/Astra Exodus/Mods/ModX.lua. Under that same folder the Data and Graphics folders must exists, basically then in the following structure:

ModX.lua

ModX

Data

Graphics

In order to work in a new mod, we recommend using either another mod or the main game structure as a base, which you can find in the installed folder. That way you can just replace or modify what you like, add new stuff based on the existing files and eliminate that which you do not want. A good point of entry mod wise though, that was available from launch, is the **Star Wars Mod**.

#### DATA FILES

The data files into the game allow you to define pretty much everything on Astra Exodus, from technologies to factions and starships, everything can be changed or expanded. They are in LUA format, which can be easily opened with any text editor. We recommend using **Notepad++** though. Under the Data folder you have a base file called **Globals.lua**, where you can change the main values of the game, such as how much food a colonist consumes for example. That same folder structure groups: **Abilities**, **Classes**, **Designs**, **Factions**, **Heroes**, **Installations**, **Localization**, **Modifiers**, **Modules**, **Peculiarities**, **Skills**, **Techs**, **Traits** and **Troops**. There is also a **Campaign** folder, however that is unmoddable, at least for now; as it contains the main campaign data files. In any case, opening any of the contained files in these folders, will give you an example of how to change or add one of these yourself.

Abilities are specific and notable gameplay changes, which come from **Technologies** and **Faction** traits. In contrast, **Modifiers** are general and incremental bonuses, applied to different areas of the game; which come from **Skills**, **Technologies** and faction **Traits**. **Classes** are the base starship role representation for each **Faction**, out of which **Designs** are made of, by an arrangement of



**Modules. Factions** are the races or governments with which the player can play as or against and that will be defined mainly by their **Traits**. **Heroes** and **Skills** are used to define the Admirals, Governors and Operatives you will have available in game. **Installations** define the buildings you can construct in your colonies, as **Troops** define the units you can train in them as well. Finally, Peculiarities define planet peculiarities. Finally, under the **Localization** folder, you will find one text file for each language supported by the game. An English file at least must be always supplied for a working mod.

The most complex values you can find on these files, to configure whatever concept each represent, are the references to localized text and the path to the corresponding graphic files. The localized text tag is searched in the files under the Localization folder, as described previously, where each tag must exist for the languages the mod supports. Finally, a graphics file reference is basically the path, from the base folder, to the corresponding image (PNG) file.

## GRAPHICS

The game's graphics come from PNG image files, which as we just saw, are referenced via a relative file path; by the data files. So for every Installation for example, an image must be referenced, in order to be used in game; just like with everything else in Astra Exodus. The game requires PNG files in order to have an Alpha channel available to render, as it is used in almost all possible scenarios, when using these graphics in game. For either drawing, composing or modifying the game graphics; we suggest using **GIMP**.

There are some extra graphic files that need to be supplied for every mod, regardless of any reference from the data files. These are the **mod icon**, **main menu and data net background** images. The first ones can be placed anywhere inside the mod folder, as long as they are referenced on the main mod LUA file, however the DataNet images must be placed in a folder with that name; inside the mod's Graphics folder.

#### STEAMWORKS

Once you have set up a mod, you will probably will want to share it with the community, as that is probably the most fun part of the process. To do this, you can always just zip the files and share it on the Internet, however Steam has a system to make this much easier called Steamworks and the game integrates this to make it even easier.

With the mod working properly and after defining everything on its main LUA file, all you need to do is click on the Up Arrow on top of the mod UI object, in order to upload it to Steam; with your current logged in user. Then you'll be able to change the name, description, add screenshots and a lot more through the mod page; automatically created when you upload it.

From there you will also get the mod ID number, which you need to specify in the main mod lua file, in order to update the mod with a new version. Just make sure to update the **Version** identification string, to differentiate each upload.

# CREDITS

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#### DRAY STUDIOS

Various contracted 2D Art

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