



Manual for Gratuitous Space Battles. Version 1.4

Introduction

Gratuitous Space Battles (GSB) is a strategy / management game and space-battle simulator. The game puts you in the role of Fleet Commander for large, very large, and gratuitously humungous fleets of spaceships. Your mission is simple: Blow up the enemy spacefleet in as total and aesthetically pleasing a way as possible. There is no diplomacy in GSB, there is no option to retreat. There is no way to avoid battle, no negotiation, and no sub-plot. There are just zetta tons of metal and many exometers of organo-silicon circuitry and other alien technologies exploding gratuitously against a background of unfeasibly garish nebulae.

Unlike 'real-time-strategy' games, GSB does not give you direct control over each ship in your fleet. Highly competent Spacefleet Captains have not sweated blood and strained their tentacles for years at the academy to be nano-managed at every step of the battle. Your job as Supreme Commander of the fleet is to design and deploy a balanced battlefleet that ensures glorious victory, and to issue orders on exactly how to kick alien ass. You can then hover behind the battlelines in your command podule and gleefully observe the gratifying destruction of your enemies on the holoscreen.

“Observe the destruction of your enemies with glee”

As Exalted Admiral, your role can best be split into four discrete tasks. Firstly, there is starship design. Thankfully you won't be firing up 4D Starship MAX to actually decide where each girder goes, you can leave that to your minions. Your task is merely to decide the selection of key components for each ship, so as to build a balanced armada capable of defending itself against alien scum, and also causing galaxy-shattering amounts of destruction and ultimately total obliteration of your opponents' spacefleet.

Your second task is to take those expertly designed ships and assemble them into fleet formations for each battle. Because you do not yet rule the galaxy, supplies are limited, and you will be restricted by budget and the availability of trained pilots. These limitations will inevitably determine the capabilities of the fleet you can send forth into honorable battle.

The third task is one of observation. Post-battle stats are fine, but nothing beats being able to see exactly which piece of alien space flotsam managed to breach your shields. Whether you win or lose, watching the battle unfold is a key part of your supreme role. By observing enemy fire, you can identify areas where your fleet was weak, or where a different combination of ships or specialist hardware might have swung the pendulum of fate towards the wormhole of victory.

Your final task is to undertake the post-battle post-mortem. It's no good just randomly throwing the few remaining Captains out of the airlock when you lose. That's so last millennium. The post-modern Supreme Space Commander takes time to analyze why his/her/its ships and indeed the enemy ships got blown apart and others made it back to base with hardly a scratch. Learn from your mistakes. To err is human, but humans have such low standards.

Ship Design

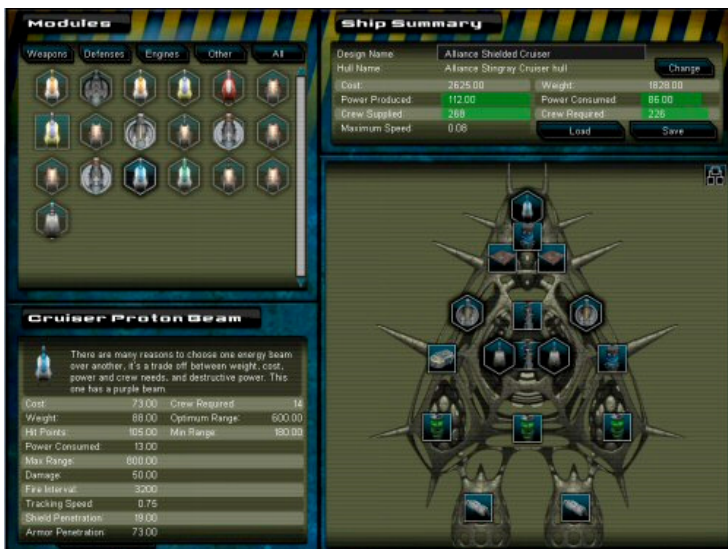
Take time to familiarize yourself with the ship design screen. Work here is vital to success, and although it might not be as glamorous as pushing fleets of mega-cruisers around on the galactic battle-map, it's a key part of how you're going to win whatever huge space-war it is you're fighting these days.

There is no limit to the number of ship designs you can put together, but you do have a limited number of basic hull designs to work with. Thankfully, all our hulls have been designed in a modular fashion so you can bolt together almost any combination of starship components. A ship is received from the shipyard as a basic empty hull (which may have some minimal power production capability, and provide certain bonuses) which you supplement with modules of your choosing. The ship hulls come in three distinct sizes, fighters, frigates and cruisers. Modules, which you use to equip a ship for battle, include engines, shields, armor, crew accommodation and weaponry beyond your wildest dreams, although evidently not beyond the sick and twisted dreams of the weapon designers.

“Fighters are the spitfires of space”

Fighters

Fighters are the spitfires of space. These tiny one-lifeform crewed vessels are great at zapping at high speed towards the enemy and taking out their fighters. They are also the only craft that can easily attack an enemy ship directly from within its shield. This manoeuvrability comes at a price, so buyer beware. Firstly, piloting a fighter is a highly specialized skill and dispensable (only if you fail miserably at your task) academy-fresh pilot numbers are limited for each battle. Secondly, the variety of fighter modules with which to customize your ship is very limited. Thirdly, a lot of the larger ships have enough armor or shielding to make the fighter weapons all but useless.



Frigates

Frigates are the mid-range ships in terms of speed, cost and weaponry. Standard space-battle doctrine suggests a number of frigates accompany each cruiser. These craft are faster moving than cruisers, and smaller, both of which make them harder to hit by the huge tera-guns. Frigate weapons tend to be fast tracking, which means they can be good at shooting down incoming enemy fighters before they even reach the main line of battle.

Cruisers

Cruisers are the insanely big floating theme parks of death and mayhem that we all know and love. The most gratuitous weaponry and the most impressive gadgets are only available for

these big boys of the fleet. This comes at a cost. Cruisers weigh a silly amount and often limp along at the speed of a Rigelian ultraslug on its way home from a beer festival, making them almost impossible for the enemy to miss.

Modules

Ship modules are specific to ship type. You can't put a fighter module on a frigate, and so on. They also come in two types, standard, and hardpoint. Standard modules have square icons and slots whilst hardpoint modules are shown by a hexagonal icon and slot. The trick is remembering you can put a standard module in a hardpoint slot (a tragic waste of destructive potential), but not vice versa. Basically the hardpoint modules are your guns. You will notice that some slots on each ship hull have lines to multiple points on the ship. This is purely aesthetic, and means that in battle, weapon turrets placed here will be visually duplicated on the ship. It does **not** make them more powerful. It just looks absolute-zero cool.

There are some modules that have diminishing effects when 'stacked' on a ship. For example, adding multiple shield modules will reduce the efficiency of each shield module. You can see the current efficiency of a module by hovering your mouse over its location on the ship.

Although it is legal to leave empty sockets (maybe to save weight or cost), it's generally a good idea to pack your ship full of hardware. You are paying for the hull, and after all this isn't 'Proportional-Response Battles', what were you thinking.

Shields, Armor and Hitpoints

Two of the most important modules in the game equip your ship with shields and armor. You can give ships either, neither or both of these methods of defense. Understanding the way they defend your ships is vital to success.

Firstly, damaged armor does not regenerate (although it can be repaired if an appropriate module is on-board), so every shot that damages it will likely be a permanent reduction in its defensive strength for that battle. This means even a tiny amount of armor damage per shot can add up.

On the other hand, shields **do** regenerate over time, until they are completely knocked out by being reduced to zero. Separate shield modules operate independently, so it's possible for 2 modules to be disabled and the third one can still regenerate back to its full strength (albeit giving you one-third the shield strength).

So far, so ordinary, but this is only part of the story. In order to inflict damage to armor, a weapon needs to have sufficient armor penetration power. Without armor penetration being higher than the average armor strength for a ship, the shot will bounce off, achieving nothing. Think of hitting a watermelon (low to average armor) with a tennis ball (low penetration power) where not much happens, compared to firing at the watermelon with a high penetration cruise missile which results in impressive cabin splatter Pollock style and finding seeds in your hammock for months to come. Average armor is the total armor strength of all the ship's armor modules, divided by its number of modules. This can be viewed in the ship stats window, which (depending on how gratuitous your observation podule is) is either at the bottom of the design screen, or launched through the 'graph' button at the top right of the ship window.

Shields have a similar capability with their 'resistance'. Some shields have high strength and low resistance, and vice versa. A shot that hits with a shield penetration value less than the shield resistance will have zero effect.

This is VITAL to understanding the defense of your ships. Some ships could be totally invulnerable to some weapons. In some cases, combinations of ships will be required to take down an enemy cruiser. One ship may be firing shield-damaging weapons, and once they are down, other ships in the fleet will fire armor-damaging weapons to break through to the hull.

Shield Stability

There is another, sneakier way to overcome enemy shields without just getting big, high-shield-penetration weapons. You can 'destabilize' shields using special shield-destabilizing weapons, such as the frigate disruptor bomb. These devices reduce shield stability, and once it reaches zero, the shield will flicker off entirely for a short period of time, leaving the ship defenseless just long enough for a plucky space-gunner to deliver a red-hot beam of high energy explosiveness.

Close-Range Attacks

Another tactic is to get fighters in so close to a ship that they actually attack from within the shield bubble. These attacks effectively bypass the shields entirely. This sounds attractive, but be aware that the enemies armor will still be in full force, and the fighters will be an easy target if the cruiser in question has some dedicated anti-fighter defense lasers or missiles. This is also a good reason to not rely 100% on shields for defense against the enemy, especially one that is fighter-happy. A cunning Space Admiral might screen his cruisers from fighter attacks with a line of cunning anti-fighter frigates to ensure they are turned to space-dust before they even get within range.

Hitpoints

Every module on a ship has a number of hitpoints, and this represents the physical strength of that piece of equipment. Once the shields and armor are destroyed, further hits on your ship will damage the individual modules, reducing their hitpoints. When a module's hitpoint score reaches zero, it is disabled. When all of the modules on a ship are disabled, it will explode in a tastefully choreographed ball of flame and you won't be getting your deposit back.

Ship Capabilities

Every ship module has a giga-ton of data associated with it. Selecting a module will display details about it. You can view the modules in one big group, or by selecting the tab buttons at the top of the 'module picker'. Depending on which modules you select, the final capabilities of your ship will vary.

The speed of your ship is a measurement of the combined thrust of its engines, against its total weight. Turning speed is directly related to speed. Some modules have lighter (and more expensive) variants, which may appeal to you. Apart from weight and speed, you will want to keep an eye on crew and power requirements. Basically, you have to supply room for all the crew you need, and power for all the energy you use. This means that almost every ship will need a crew module (or multiple modules) and some power-plant modules. It's a bit of a balancing act to get the right combination of components so you are not wasting power supply or crew capability. Be thankful you don't actually have to balance on one tentacle whilst deciding. You cannot save a ship design that violates the crew and power requirements. The starship design council will slap you in the tentacles if you even try to do this, or more likely, they will just disable the 'save' button.

Saved Designs

Once you have re-arranged the components on the selected ship hull, you can save it with whatever design name you like. Although infamous Space Admirals gravitate towards names such as 'Galactic Death Cruiser' or 'Glorious Chariot of Laser-Fury!' you might start off with more helpful names such as 'Long Range Beam Cruiser' to aid you later during fleet composition and analysis.

Unlike most games, GSB does not give you a big pile of ships to play with. The few ships you are given at the start of the battle are just examples, and any true Space Admiral would be better off ditching them and designing his/her/its own ships from scratch.

Missions

So you have a vast array of expertly designed floating platforms of giga-death, and you are eager to teach Johnny-Alien a lesson. Not so fast. We can't just hurl spaceships at our enemy like a farmer feeding his space-chickens. Your ships will need to be placed into a formation, and given their orders. If you haven't done so already, you need to select the 'battle' option from the main menu, and pick your fight...

“Floating platforms of giga-death”



Choosing A Mission

At the start, you will only have the option of the first battle. The opportunity to fight bigger and more glorious battles will come when you have proven yourself with this trivial encounter. Different battles will pitch you against various enemies (of which we have three). Battles will be fought in different locations, and there may well be spatial phenomena to deal with. In some cases, a nebula may reduce weapon range, or ship speed. This is worth noting before you go any further.

The mission selection screen also shows you three boxes that indicate if you were previously successful in battle on medium, hard or expert difficulty. There is no 'easy' option. If you wanted easy, you should not have signed up

for the space navy and you are not fit to take command of a fleet of Andromedan space mites.

The two key things to be aware of when selecting a mission are the number of pilots available and the fleet budget. All this nonsense about money not being a problem for equipping the space-navy is nonsense. You have to win this war on a budget. A gratuitously huge budget, but a strict budget nonetheless. The politicians back on the homeworld have better things to spend their money on than endless spacefleets. They need to build mega metropoli, nano-factories (on the scale of things, more expensive than you might think) and zero-g swimming pools (vital for party fund-raising).

Survival Mode

Most of the missions are 'skirmish' missions, which involve fighting against a single fixed enemy fleet. There are also 'survival' mode missions, which pit you against endless waves of enemies attacking from all directions. Skirmish missions can be uploaded as challenges to other players, whereas survival missions are strictly single-player affairs. However, survival mode allows you to upload your high score and pour scorn on the feeble attempts of other, lesser

admirals to match your heroic success. You can tell which mission is which by the icons on the left of the mission names.

Anomalies and Supply Limits

Only a first year space cadet thinks that all space battles are fought under the same circumstances. The two major factors that can change the way you fight are the existence of spatial anomalies or supply limits. If either of these is in force for a mission, you will see extra buttons on for them when choosing a mission. Spatial anomalies can have serious tactical implications. Maybe a nebula reduces shield strengths, or possibly the radiation levels prevent any fighters from taking part in the battle. Study spatial anomalies carefully before picking your fleet.

Supply limits are restrictions on the availability of certain ship modules. You didn't think that Type III Neutron Polarizer cannons grew on trees did you? Well if you did, you are flat-out wrong. That's the Type II. In any case, these limits may mean you aren't able to deploy the same fleet for every battle, so pay careful attention to them.

The Deployment Screen

“A smorgasbord of devastation”



The deployment screen is where you place the individual ships in battle formation and issue orders on how to engage the enemy. This is your last opportunity to influence how the battle will play out for your fleet, so take the time to get things right. Don't forget that cruisers move slowly, and fighters move quickly. Position is as important as orders. Once you are happy with a deployment, you can save that for later use. You can have a large number of different saved deployments for each mission.

The map in the center of the screen shows your fleet as green starship silhouettes, and the enemy fleet for this battle as red ships. The highlighted area around your fleet is your ships' 'deployment zone'.

Ship Positions

To move one of your ships, you can click and drag it around the screen with the mouse. Don't drag a ship outside the deployment zone, or it will be deleted. When you select a ship, a series of overlaid circles will display. These are the weapon ranges of that ship, and you might find this useful in terms of positioning the fleet. Right clicking any of your ships opens up a menu to delete or rename them.

Editing the Fleet

The first mission comes with a partially-assigned fleet, but you will probably want to edit this, and will need to build up fleets from scratch for future missions. The list of available pre-designed ships is shown as icons in a strip to the left of the deployment map. These are ship designs, so you can add as many or as few as you like to your fleet (within limits). To add a ship of that type, simply drag it onto the highlighted deployment zone of the map. To remove a ship from the fleet, either drag it out of the deployment zone, or select it and hit the delete key on the keyboard. Be wary of accidentally deleting ships when moving a whole group of them in formation.

There are three factors that limit the number of ships you can add to your fleet. Firstly there is the number of available pilots (each ship requires a single pilot, whether it's a fighter, frigate or a cruiser). Secondly there is the limited budget for the fleet. Thirdly there is the amount of 'honor' you can earn from the battle. Every credit that you leave in the budget without spending is converted to honor if you actually win the battle. If you win a battle by a comfortable margin you might well be tempted to go back and have another go with a cheaper fleet in order to rack up more honor. Cunningly, the Admiralty honor department will only credit you with your highest level of honor reached for each battle. You can't keep replaying the same battle with the same fleet and accumulate more honor.

Deploy an ARMADA OF DOOM

For large battles where you may want to deploy a large number of identical ships, there is a faster method of deployment. You can right click a ship design and select ‘mass deploy’. This turns your cursor into a compact and efficient ship-placing machine, where you deploy a new ship of that type with every mouse click. Fun though this is, you can stop doing it by right-clicking or selecting an existing ship. A faint outline of the current ship is drawn behind the cursor when this mode is active.

Renaming Ships

Right click on a ship on the deployment map and select rename in order to personalize that ship’s name. You can type your own, or generate a random name from a number of different moddable lists, shown by buttons on the rename window.

Squadron Size

When you deploy fighters, by default they come in a fearsome squadron of 16 ships, but you can change this to a smaller squadron size by right clicking the squads icon and selecting ‘Change Quantity’. (You may not want to assign 16 ships to escort a frigate, for example).

Multiple Ship Selection

There are three ways to select more than one ship at a time. You can draw a box around adjacent ships with the mouse (a rectangle will show you where you are selecting, and the selected ship silhouettes turn white), or you might find it handy to double click a single ship. That will automatically select all the ships in the fleet that have the same design. You can also select multiple ships by holding down the control key as you click ships. With a group of ships selected, you can drag and move them together.

Orders

Every ship in your fleet will need orders so it knows how you want it to fight. Without orders, the ships will still attack the enemy, but maybe not in the way you wanted them to. Tragically, they don’t teach much in the way of strategic thinking at the academy. You don’t want to let your fleet loose on the enemy without orders, anything could happen. With a new deployment, some basic ‘default’ orders are already issued to your ships. Clicking a ship will display details of that ship on the left-hand side of the screen, and above that, is the list of different order ‘behaviors’ that are assigned to this ship.

A ship may have just one order, or many of them, although as some orders contradict each other you will automatically lose any orders that don’t make sense. Some of the most common orders are to engage a certain class of enemy ship, such as ‘Attack Fighters’. Some refer to how to select enemy targets (such as ‘co-operative’), others how to position the ship in combat (such as ‘formation’).

“Why join the space navy if not to shoot aliens?”

Attack Orders

Your ships will always eagerly attack the enemy, and fire on any enemy ships within range. After all, why join the space navy if not to shoot aliens? However, your orders can control how they decide which ship to fire upon when there are multiple targets available, and also which ships to head towards if they are currently out of firing range. The most common adjustment you will make is to go through the three attack orders for different ship sizes, and change the priority and engagement ranges. To edit these, or any order, just click on its name in the list. You can also add new orders by clicking the lowest button in the list.

You may want to change the firing ranges and priorities for a number of reasons. Firstly, not all ships have weapons capable of inflicting damage on all targets. Firing plasma weapons at fast fighters is normally pointless. Secondly, not all weapons have the same firing range, or suit the same purpose. You may only want to move close enough to the enemy for your long-range weapons to be able to blast him from kilometers away, whilst your shorter-range defensive weapons can wait for the enemy fighters to come to you. Some ships could be dedicated anti-cruiser ships, whilst others are anti-fighter.

If you really do not want your ships to engage all three classes of enemy ship, unless those are the only enemy ships left in the battle, then you can simply remove the orders giving fire priorities for that class of ship.

Positional orders

Formation and Escort orders allow you to tell your ship where to position itself during battle. Escorts will follow their own desires to engage the enemy, but always stay within range of the parent ship. Fighters are often set up as escorts. Formation indicates you want ships to maintain an exact relationship with another ship. They will attempt to maintain their initial relative position during the battle. Note that ships will automatically attempt not to overlap during the battle itself. When you add certain orders, the ship(s) need to be assigned to a 'parent ship'. Clicking the 'set target' button puts you in 'target assignment mode' where a line from your ship to your cursor indicates the relationship. Click on the ship you wish to escort, or fly in formation with, to assign the current target.

“Your duty here is to observe and learn”

Assigning Multiple Orders

When you have big fleets with a giga-ton of ships, you won't want to be editing orders for each ship individually. Any change you make regarding orders is applied to every currently selected ship. So if you want to change the fighter-engagement priorities of 4 ships to be the same, select them all and then make that change. This will not change any other orders that each ship may have. You can use this system to edit, add or delete orders from single or groups of ships.

Default Orders

Because you will likely have your favorite ship designs, you can also save 'default orders' for a ship design from the right click menu on a deployed ship. This basically gets the factory droids to stick a note in the starship Captains' glove compartment that tells them what to do without you having to re-assign orders every time you deploy a ship of that type.

Carrier Orders

If you have cruisers with carrier modules (you need to unlock them first), you might wonder why they don't get used. Be aware that the brave heroic warriors in your fighters are conditioned to fight until death or glory, and will only reluctantly return to a carrier for repairs if you deliberately issue them with a 'cautious' order.

Viewing Ship Capabilities

If you select a ship on the map, the lower left-hand window will display details about that ship. The small icons show the different modules within that ship. You can click any of these in order to get details on a specific module. Also, if you hover the mouse over a weapon module, you will see that its specific range indicator is highlighted on the deployment map. This allows you to see weapon ranges on the map and could assist when deciding on formations. You can also see this information during the battle.

Editing and Adding Ship Designs

Right clicking the design icons allows you delete them, but be warned that this deletes the design entirely from your PC. Any saved fleets that used this design will be stripped of those ships. There is potential to really screw things up here, so make sure you know what you are doing. You can also edit a design from here, which launches the ship editor with that ship design ready-loaded. If you wish to add a completely new ship design, you can do so by clicking the very top icon with a blueprint and a plus sign. That takes you to the ship design screen. Make sure to save your new design with a new and unique name.



The Battle Screen

Once battle is joined, your duty is not to try and pico-manage your space Captains. Remember everything they taught you about delegating back at the academy? Your duty here is to observe and evaluate the execution of your battle strategy and orders. Your fleet may glide its way to a quick victory, get instantly blown into space dust, or have

to fight bitterly to the last organism. If you lose the battle you haven't lost the war, this is the chance to get to know your enemy.

Score

The top corners of the battle screen show the percentage of each fleet that is operational. Your status is on the left, your opponent's on the right. If your indicator is green, that indicates victory, honor, lobster, cocktails. Red means failure, defeat, shame, spam. Underneath the score, the relative hitpoints of the fleet are shown (intact/total). On harder difficulty levels, your opponent's fleet will likely have more hitpoints. Remember that hitpoints do not equal cost, they are a measure of the physical strength of the summed fleet.

Luckily, we don't wait until the last being is killed, a fleet that drops below 10% on the score indicator automatically forfeits the battle. Also, if the battle looks like a stalemate, the fleet with the lowest level of losses is declared the victor.

At the top of the screen is a button to admit defeat, just in case the battle looks like it will go on too long before inevitable annihilation and you have to go grab a bowl of space-pasta.

Communications

Occasionally you may decide it worthy of your time to care about the idle banter of your disposable cannon fodder, and for that reason a communications window at the top of the screen will show you a selection of their radio-communications.



If you want to see who is talking, clicking the ship name at the left of each comment will focus your viewscreen on their ship, and also select their ship for viewing it's details. The communications window shows all allied radio-chatter, unless you have a specific ship selected (either by selecting the ship name here, or by selecting their ship on the main screen), in which case you are tuned in to a specific minion, and will only hear their comments.

“Red means spam”

Camera

You can move around the battle screen using the arrow keys on your command podule keyboard, or left click and drag the universe around using the mouse (if you avoid clicking a ship). You can also navigate by clicking on the minimap at the bottom left, or clicking and dragging within the minimap. To zoom the view in and out, you can use the mouse wheel or, if the wheel hasn't been invented on your world yet, use the PageUp and PageDown keys. If you move your mouse to the edges of the screen, the map will also automatically scroll. Modern technology eh?

Time

You can't alter the direction of time but you can slow down and speedup the battle using the buttons to the right of the minimap. You can also freeze the battle and then use the zoom or movement controls to see what is going on. This can be helpful when you are commanding a gratuitously huge fleet with multiple ships under fire and you need to observe the status of them all. You can also use the numberpad +/- keys to control speed or use the 'P' key on the keyboard to freeze and resume playback.

Ship Inspector

Clicking on your own ships will bring up a window showing details about them. You can see the current status of the ship's shield strength, shield stability, armour strength and hull type, as well as the integrity of each individual module. Some modules are less effective when they are damaged. Red modules are damaged, green ones are currently being repaired by auto-repair systems.



Weapon icons, have a white dot in the top left if they currently have an active target. The progress bar at the bottom of the module shows the weapon reload progress. For some weapons, this is slower when damaged. It might distress

you to see that sometimes a missile turret has a target locked, and is ready to fire, but doesn't do so. Don't get your antennae in a twist though, it probably means that the turret still has missiles in flight, and cannot fire until it relinquishes fire-control over the current batch of missiles.

With repair modules, the white progress bar shows how many 'repair supplies' that module has left. When you run out of supplies, the repair module will effectively deactivate, and is useless.

Something else worth mentioning is the ability to view range overlays on the screen. Just click one of your turret icons and it will toggle on or off two large circles on the screen showing the minimum (red) and maximum (white) ranges of that turret, with a crosshair showing its location. (You can also bring up this display by accurately clicking the turret on the ship itself) Also, if you click the small window showing the ship image on the left of the ship inspector, the camera is centered on that ship.

Gratuitous User Interface (GUI)

The buttons to the right of the minimap allow you to toggle on and off a grid on the screen, if you like that sort of thing. There is also a button that takes a screenshot and stores it in your MyDocuments\MyGames\GratuitousSpaceBattles folder. You can also just use the print screen key. The U key on the keyboard toggles the GUI on and off entirely, for a more cinematic feel. This is great for capturing screenshots of you beating a challengers fleet, so you can email and taunt them endlessly about their l4m3 skillz.

Occasionally you may be engaged in a civil war against a rival faction of your own species (such as Federation vs Federation). In these circumstances, in the fury of battle it can be tough identifying friend from foe. There is a button next to the minimap that lets you toggle red/green overlays on the ships to distinguish your ships (crewed by brave, fearless expert warriors) from your enemies (crewed by craven, cowardly, pathetic amateurs).

Ship Explosions

It's always fun when a huge spaceship explodes into plasma, providing you aren't on the bridge at the time. It is however worth noting that those explosions aren't just picturesque. When a frigate or cruiser goes bang, it hurls explosive rubble at high speed that can cause serious damage to nearby ships. The effect of the shock wave is proportional to the power output of the exploding ship. Those high-output powerplants really go up in style. Because of their smaller size and greater manoeuvrability, fighters are immune to shock wave damage, and frigates only absorb half the impact, but it's definitely a good reason not to let all of your cruisers fly in too tight a formation. (Techy note: The blast wave damage ripples straight through a ship's shields, and has armor penetration that matches its explosive force.)

Post-Mortem

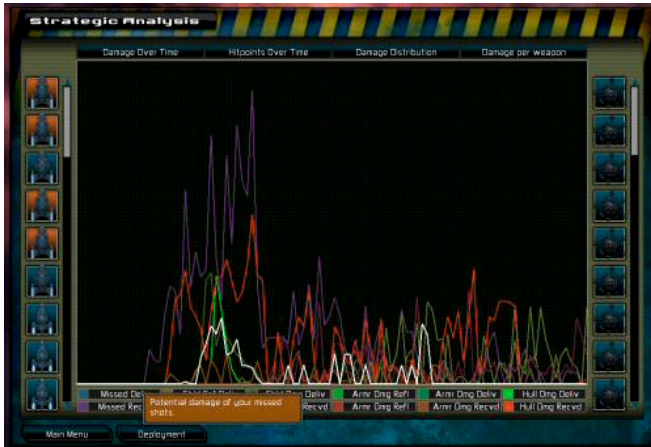
Once it's all over, regardless of outcome you are shown a statistics browser displaying how your fleet performed. This shows how incoming shots fared against your ship, and how its outgoing shots fared against the enemy. This may help you deduce why some ships did badly, and why some enemy ships survived. If the majority of incoming fire penetrated your shields, you might opt for higher shield strength in future, for example. If the battle was a player-issued challenge, you get the option to hurl smug triumphalist gloats at your worthless opponent, or bitterly make feeble excuses for your destruction, as appropriate. Your message will end up in the galactic inbox of your enemy.



Strategic Analysis

When the battle ends, you have the option to review post-battle statistics to see just how many of your brave space-navy had to die to generate a pie chart. The statistics screen has as many controls and options as a type IV disruptor cannon, so here is a breakdown:

The stats screen displays four different types of chart, depending what you want to look at. These are selected by the buttons along the top of the window. They show damage done over time as a line graph, total fleet hitpoints over time as a line graph, and pie charts to show damage distribution, filtered either by ship or by weapon.



Damage Over Time

This chart shows you lines for all the different types of damage down by both you AND your opponent, over the duration of the battle. Different lines denote different categories, such as 'damage reflected by armor'. If you want a simpler chart, you can click the entries along the bottom of the chart to toggle each line on and off.

Hitpoints Over Time

This relatively simple line graph shows your fleets total hull strength (green) and the enemy fleets hull strength (red) over the course of the battle.

Damage Distribution

This view breaks up the damage delivered by your ships, and received from the enemy into two separate charts. The different segments correspond to the key at the bottom of the chart, and these segments can be toggled on and off. For example, say you don't care about missed shots, accepting sadly that your gunners have all the skill of a blind Altarian mega-bat. You can toggle 'missed' shots off, and they are no longer part of the calculation, letting you see what percentage of the shots that hit, actually did hull damage etc. You can also filter the data by both your ships, and the enemy ships, by toggling those icons on the right and left of the screen. This way, you can look in fine detail to see what happened to all the shots that the USS Z'Klargon fired at the enemy frigate 'Indestructible'. Obviously if all those shots bounced off, it's time to throw the captain of the USS Z'Klargon into the plasma incinerator.

Damage per Weapon

In the heat of battle, you may occasionally miss some aspect of what happened, maybe you were busy cackling over the obliteration of your enemies. The 'damage per weapon' view can let you see in detail exactly how each of your weapons did. This is similar to the previous view, but filterable by weapons, rather than ships. This way, you can compare what happened to the shots fired from your cruiser Plasma launcher, as opposed to the frigate beam lasers. This may help you design a more destructive fleet next time around.

Fleet HQ

If you were victorious in battle and your flagship returns to base amidst a shower of champagne corks and ticker tape, it's likely you will have earned considerable honor. In this case you should head to the fleet HQ and cash in your honor for access to new ship modules, ship hulls and even the option to play entirely different races. Once you have 'unlocked' a module, you can use it in any ship design and any battle, so you may want to take another look at your old ship designs to see if they can now be improved upon. Unlocking a new race gives you access to the majority of the new ships, but there are always some cunning 'bonus' ship hulls you will still need to manually unlock. Make sure you unlock a race before you unlock ship hulls belonging to that race!

Challenges

Battling against the AI is only part of the war. Once you have beaten the enemy on the hardest difficulty (or before if you are keen), you might want to try your hand at beating fellow humans (or members of your own species, as applicable). This is where the challenge system comes in.

“Battling against the AI is only part of the war”

Issuing A Challenge

The challenge button at the bottom of a missions deployment screen, opens a window where you enter the name of your opponent, and the taunt you wish to display to them. This name must be the username of another GSB player, or



tick ‘all’ if you wish it to be an open challenge. Once the challenge is submitted they will see it the next time they play the game. Do not be surprised if they respond with a challenge of their own. If you have any modded content or an expansion pack installed, there is a check box you can use to tag the challenge as requiring (or not requiring) that expansion pack data to play.

A different method for issuing challenges is to click the ‘custom challenge’ button on the challenge browser. This opens up a new screen that lets you pick every variable you would like for a custom-scenario, including what spatial anomalies are present, and what modules are limited / prevented. You then deploy your fleet and issue that like any other challenge.

Browsing Challenges

The main menu has an option for you to check your challenges. This button will connect online to the galactic server, so ensure your firewall will allow this, or be prepared to fix it if it doesn’t. We recommend doing this in windowed mode the first time.

The challenges listed can be toggled to be either all challenges, or those that are explicitly sent to you by other players. The enemy Admiral may have cruelly taunted you along with the challenge. Accepting a challenge downloads the challenger’s fleet formation to your PC, and battle can then be fought just like any other mission. The server will keep track of how many attempts you make to beat the challenge, before finally doing so.

Races

At the start of the game, you play as the Federation race (blue ships). As you accumulate honor in battle, you will be able to unlock the other races from the Fleet HQ screen. You can change which race is currently selected from the Battle Screen at the top, and you can only have one race selected at a time. It would be the height of dishonor for a warrior to fight alongside his sworn enemies, after all.

Options

GSB is relatively demanding for a 2D game. **Especially on your video card.** You may want to turn some options off from the options screen. It’s also likely you might want to switch to windowed mode, or change the screen resolution. You can also adjust the volumes here, and similar stuff.

Online

This screen allows you to enter your registration code and set your username for challenges. Your username has to be unique. Do not share your serial number with anyone else, of any species, if you do so, it may become disabled by anti-piracy measures, and you will no longer be able to download or upload challenges, or patch the game.

There are two windows of note on this screen. The first is where you enter your serial code, the second is where you select the username that you set to that code. Obviously at this point the game will connect to the internet, so ensure your firewall will not block the game from doing so.

Tech-Support

Tech-support is found online at www.positech.co.uk. It’s worth checking the ‘forums’ link before contacting us, in case your question has already been answered.

*Ensure you have the latest video card drivers for your PC before trying anything else. If in doubt, try the demo first. This game uses Microsoft's DirectX9, which should be already installed on your computer. Your video card must support a minimum screen height of 768 pixels. Some smaller netbooks do not support this and **will not run the game**.*

Gratuitous Tactical Appendix

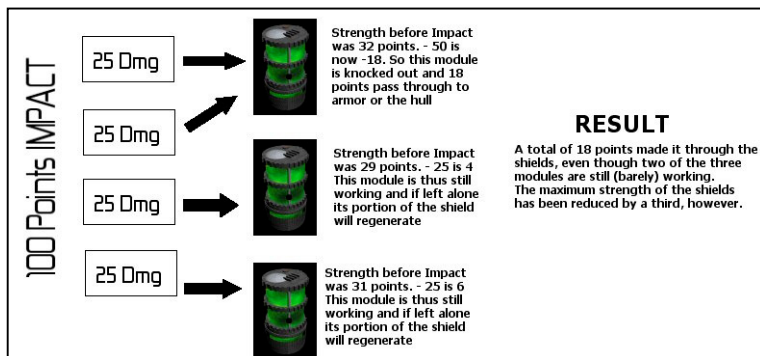
So you've fought your first dozen battles, have absorbed all of the information in the basic fleet admiral's manual, and you want to learn more, MORE! So you can crush your enemies and raise your banner over the smouldering remains of his/her/it's homeworld...

Good for you! Here are some assorted hints, tips and secret information that will help you in your battles...

Dodgy Shields

Nobody knows what sort of third rate industro-droids work on spaceship shield construction these days, but the situation is far from perfect. Shields are often 'knocked out' mid battle, and cannot be restored to full operation once this happens. This is different from shield 'stability' failures, which are quickly fixed. Basically, any shield that gets knocked down to zero strength is down and out, even if the generators themselves are physically intact. You can repair those puppies all you like, the shields are **GONE**. Something else worth noting is that shield modules operate independently of each other. It is possible for a single shield to contribute just 20% to your ships shield strength, but if that shield gets knocked out, it isn't coming back. As a result, you can find your maximum shield strength for the battle reduced by some percentage. How can this happen?

When some alien bastard shoots you, the impact can hit a maximum of four different shield modules in one blast.



Sometimes you are unlucky and a single generator will get all of the impact. Let's look an example when you have three shield modules and some lucky swine manages to hit you and do 100 damage...

The Diagram shows how the damage gets applied. One of the modules has taken twice as much of the impact as the others (that's just luck). Due to earlier fighting, the shields are not at full strength, and each of them is at a slightly different strength value already, although if left alone they will currently all

regenerate. The first shield is knocked out, and some of the damage leaks through to hit the armor and the hull. The poor crewmembers that were working behind this module are likely toast. The other two modules just about hold back their share of the blast, and could in theory recover fully over time. Once all this damage has been handled, the maximum shield strength of the ship has been reduced by a third, no matter what you do.

What lessons can be learned? One is that you are only ever as strong as your weakest shield, because there is always a chance some hot-shot alien marksbeing is going to pull off a cunning shot where all of the impact settles on a single point in your shields. This may encourage you to use a fewer number of stronger shields. Or you may think 'sod it, I'm back at HQ anyway'. It's your call...

The Mathematics of LASER DEATH

There are a vast number of factors that go into the chances of your crew hitting the enemy with their awesome weaponry. One of the most vital factors is the relative value of the target's speed to your weapon's 'tracking speed'. This is the target's current speed, not the maximum speed, so that squad of uber-fast turbo-fighters you developed are about as much use as a scabbard for a laser-sword if you order them to just sit in formation next to a stationary cruiser. Note that a fighter caught in a tractor beam can be slowed almost to a stop, making the combination of tractor plus short range blasters a genuine classic for wiping out enemy fighters.

So basically, the higher the tracking speed the better. If your weapons have a fairly bad tracking speed, you may find that fitting your ships with 'targeting booster' modules, which increase the effective tracking speed of everything on the ship, is a good idea. Regardless of relative speed, there is always a chance (about 2%) of a lucky hit regardless.

Another variable involved in hitting the enemy is the presence of a camouflage shield. If the enemy ship looks like it's faded into another dimension, don't assume you have much chance of hitting the swine.

Given you can track fast enough, and they aren't camouflaged, your success rate will also be skewed by the physical size of the enemy. Getting a hit on a tiny fighter is like swatting a jovian plasma-fly with a baseball bat, whereas even a blind acturan sand-sloth could hit one of those huge cruisers.

Special cases

Not all targeting is handled the same way. That would be too easy. If you want easy, you don't want the space academy. You want the cheesemakers guild next door. Don't worry, it's a common mistake. They should change that sign. Anyway... Take those pesky missiles, for example. They have a chance of hitting as usual, but if you have cunningly illuminated the enemy ship using a 'target painter' module, even from a separate craft, then the missile will always hit. Have some of that, Alien Nemesis!

Also, there is the case of the pesky EMP cannon. This also has a hit chance as normal, but even if it hits, if the enemy has a fancy EMP shield, there is a chance that the pulse will be neutralised, and effectively the weapon has missed. Curses!

Last but not least are the Point Defense modules. These cunning gadgets are also using their tracking speed, but it's compared against the target missile's speed. There is also always a 5% chance of a hit, and a 5% chance of a miss with these weapons.

CREDITS

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Sound Engine: FMOD Sound System, copyright © Firelight Technologies Pty, Ltd., 1994-2009

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