

**SECURE FEED AUTHENTICATED...
DECRYPTING SECURE TRANSMISSION**

SOURCE AUTHENTICATED...

ASue, Cripple & Sneer, Solicitors
Windrush Tower, Olympus Village, Mars, Sol System O/OSO4 OL1

SOURCE AUTHENTICATED...

Reference: JAS 161200/42
Date: 16.12.3300

PRIMARY TRANSMISSION BEGINS...

To whom it may concern,

It is our solemn duty to deliver to you a package left with us, from a benefactor who wishes to remain anonymous at this time. The package was placed in our care with instructions to be delivered in the event – and only in the event – of your successful membership of the Pilot's Federation.

We have been so notified of said acceptance, following your grading in the recruitment aptitude exams, and so are carrying out this transaction in the manner as specified by our client's wishes.

The package is two-fold. Encoded into this transmission is the first part: a secure code. Use this code to access a starship account, pre-configured with your credentials, including a fully paid, indefinite lease, and comprehensive insurance cover.

The second part of the package is a credit transfer to your personal account, which I can confirm was successfully completed at the time this transmission was dispatched.

The attached message was also to be delivered to you upon receipt of the access code.

We feel this matter has now been resolved to the satisfaction of all parties concerned. If you have any questions, do not hesitate to contact us. The normal fees of one thousand two hundred credits (1200 CR) per hour (plus Federal Service Tax) apply, plus a one off initial contact fee of five thousand credits (5000 CR).

Yours sincerely

J. Sneer

ATTACHMENT-01.

You may be puzzled right now as to why you've just receive this little windfall. Nothing wrong with that – I'd be worried if you weren't.

But now get ready for lesson number one. When a golden opportunity comes your way – and trust me, they're few and far between, my friend – reach out and grab it with both hands. Sometimes it's clever to ask questions, and sometimes it's not.

This time it's not.

All you need to know is that my organisation has a very specific remit: to seek out those who have the potential to become real movers and shakers, those precious few with the talent to mould and shape the galaxy around them, to create change on a grand scale.

We find them, and then we test them.

Consider this your test.

Take the ship. Take the money. No strings, no hidden clauses. Do with them what you will. Blaze your own trail.

Impress me, perhaps you'll learn more.

A Friend

LIVING MANUAL

This is a "Living Manual", meaning that it will update as the game updates, with new features coming online and tweaks are made to improve game play. You will also be notified of changes and updates to the game via website articles, launcher news and in-game news.

Changes will be entered into the following change log:

CHANGE LOG

- 22.12.2014, Initial Manual Release

MAIN MENU



The main menu allows you to manage your game save, friends and groups, as well as set options. The main menu comprises of the following options

Training: Selecting this option will take you to a list of training exercises. These allow you to practice various game mechanics in safety, without fear of ruining your career.

Start: Selecting this option first takes you to a menu allowing you to choose how social you want this session to be.

You can choose to start the game in Open Play, where you have the chance to encounter all other Commanders playing the same way.

You can choose to start the game in a Private Group. To start in a private group you must previously have created one or been invited to one (managed in the Friends and Private Groups Menu).

You can choose to start the game Solo. You will never encounter other human Commanders, but the game simulation will still take into account all other players.

Friends and Private Groups: Selecting this option will allow you to create and manage your friends and private groups.

You can search for Commanders and send friend invites to them. Once they accept the invite you will become friends. You can always see when friends are online, and when they are, you can send text messages to them from in-game and the main menu interface.

You can search for private groups and request an invite from the group's owner. A private group is a filtered list of Commanders that are able to encounter each other when playing in the private group, without the chance of meeting any Commander not in the private group.

You can create your own private group and send invites to friends, or kick friends from the private group. You can unblock Commanders that you have blocked.

Report a Player: Selecting this option summons the report player submission.

Options: Selecting this option allows you to configure graphics, audio and controls.

You can also clear your Commander save here. Note that clearing a Commander save is irreversible.

Credits: Selecting this option allows you to view the credits for Elite: Dangerous.

Save and Exit: Selecting this option saves all current settings and Commander career activities from the play session, and exits the game back to your desktop.

CONDENSED FLIGHT MANUAL

Please familiarise yourself with the following documentation before attempting your first solo flight. A spaceship in the hands of an untrained pilot constitutes a significant threat to themselves and others, and may result in loss of life and/or significant insurance costs.

It is recommended that you read the following documents in the order presented, as later entries may reference information detailed in earlier sections.

In addition, this documentation offers the bare minimum of advice to get your flight career started. There are additional subtleties you will discover by gaining experience behind the stick.

It is strongly suggested that you watch the starting pilot's tutorial videos, accessible from the software launcher, and utilise the training scenarios, accessible from the main menu interface.

INTERFACE

Your vessel is fitted with the standardized Pilot's Interface for ease of use and acclimation between different ships.

BASIC COCKPIT ELEMENTS

Each element of the Pilot's Interface is designed to give distinct feedback. The following is a list of elements:



1 Comms Panel: Communications from other vessels and structures will be displayed here. You can use the comms panel to send messages and initiate a comms-link with other Commanders. Depending on the status of the message source, different colours are used

- Red: Authority vessels and structure
- Orange: Unaffiliated Pilots
- Cyan: Friends

Where possible, pay attention to comms messages that you receive; they may contain useful information.

2 Info Panel: Notification messages about the status of your ship, other vessels and criminal activity will be displayed here.

Some notifications are classed as critical; these will initially display as a large holographic element front and centre, before transitioning to the Info Panel. Pay special attention to these notifications.

3 Signature Waveform: This graphic represents how visible your ship is to other vessels in the vicinity.

Your vessel's signature is composed of thermal and electro-magnetic emissions that can be detected by sensors. Depending on how your ship is being operated, these emissions may be stronger, allowing other vessels to detect your presence further away, or weaker, ensuring that ships must travel closer to your position before you are detected.

Your ship's emissions are represented as a signature waveform. The stronger your ship's emissions, the more agitated the waveform becomes. The weaker your ship's emissions, the calmer the waveform becomes.

When you "rig for silent running" (see "Heat and Signature"), "SILENT" displays on your signature waveform.

4 Fuel Gauges: Your ship's fuel supplies are displayed here.

Your ship's fuel is stored in two reservoirs. The segmented bar represents fuel capacity in your ship's main tank. This fuel is used directly to perform hyperspace jumps, which require significant amounts of fuel per jump.

When you have a hyperspace destination targeted your main tank fuel gauge will highlight to show you how much of your current fuel capacity will be used by the jump.

The active reservoir capacity is represented by a thin bar that sits directly above the main tank display. The active reservoir is drained by your ship's power plant to run all of the systems in the ship. When the active reservoir is drained, it is automatically refilled from the main tank if possible.

Warning! Remember to refuel appropriately. Should your main tank and active reservoir become empty, your ship's power plant will be unable to provide power for life support functionality.

5 Characteristic Indicators: These three indicators provide immediate feedback for common ship statuses.

Mass lock indicator: when lit, your ship is close to a stellar body or large structure – you will not be able to engage super cruise or perform a hyperspace jump until you travel further away from the source of the mass lock.

Landing gear indicator: when lit, your ship has deployed landing gear – your ship's top speed will be limited as a safety precaution. You will not be able successfully dock unless your landing gear is deployed

Cargo scoop indicator: when lit your ship has deployed its cargo scoop – your ship's top speed will be limited as a safety precaution. You will not be able to collect cargo in space unless your cargo scoop is deployed

When you are wanted by the authorities in your current location a "WANTED" indicator will appear here.

6 Power Distributor: This element represents the currently available amount of energy in three specialised capacitors, displayed as energy bars. These capacitors are used to power specialised functions.

You can choose to prioritise the refilling of these capacitors. The current ratio of power distribution is displayed as a number of "pips" underneath each energy bar. The more pips an energy bar has, the more quickly the capacitor is refilled.

The three capacitors are:

- SYS: This displays how much energy is available to recharge shields and power defensive modules. In addition, the more pips assigned, the more resistant shields are to attack.
- ENG: This displays how much energy is available to initiate emergency thrust (boost). In addition, the more pips assigned, the more manoeuvrable and fast the ship becomes.
- WEP: This displays how much energy is available to cool weapon systems. Should this bar deplete your weapons will automatically shut off until the capacitor begins to replenish.

7 Ship Schematic: This element displays a schematic of your ship. When your ship is attacked, an attack marker will briefly display indicating the location of the hit. The colour of the marker indicates whether the attack was absorbed by your ship's shields or whether your ship's hull integrity was damaged.

- Cyan: the hit was absorbed by your shields
- Orange: your ship's hull was damaged by the hit

Your ship's current shield strength is represented by three concentric rings encircling the schematic. As your ship's shield weakens the rings fade away. As your shield recharges the rings fade back into being.

When your ship's shield strength is reduced to zero, the shield dissipates. There is a short delay whilst the shield generator resets. The concentric rings change to display a timer bar that fills up during this time. Once your shield generator resets your ship's shield will reform at 50% strength.

Note, your shield generator will not be able to reset and reform if your SYS capacitor is empty.

8 Hull Integrity: Your ship's hull integrity is represented as a bar and a percentage value, displayed underneath the schematic. Your vessel will be destroyed if hull integrity is reduced to zero. Collisions and weapon hits will reduce your ship's hull integrity if your vessel has no active shield.

9 Speed Indicator: This graphic displays a number of details about your ship's speed. The large segmented bar displays your current speed.

Directly to the right is your throttle bar. The pin on this bar represents your current throttle setting, and the size of the bar represents your throttle range, based on the number of "pips" allotted to the ENG capacitor. The more pips assigned to your ship's ENG capacitor, the greater top speed your vessel will be able to achieve.

To the right of the speed bar is a "sweet spot" indicator. When your ship's speed is within this range it will have maximum manoeuvrability.

10 Sensors: This displays an area of space around your ship, which is represented as a triangle at the centre of a disc.

Contacts that your ship's sensors have detected display as markers on the disc; a contact that sits on the disc above the triangle representing your ship is in front of you, a contact to the left of the triangle is to the left of your vessel and so on.

A contact's height is represented by a vertical line that connects it to the disc. The length of the line describes how far above or below you the contact is; a contact sitting on a tall vertical line is high above your ship, a contact hanging from a small vertical line is slightly below your ship etc.

The appearance and colour of a contact marker contains information:

A flickering marker indicates that the contact has such a weak signature that it is not resolved. Unresolved contacts cannot be targeted. To resolve a contact, fly towards it.

A square contact indicates that its weapon hard points are retracted, whilst a triangle contact indicates that its weapon hard points are deployed.

A hollow marker indicates that the contact is a human commander, whilst a solid color marker indicates the contact is an AI commander.

Colour is used to indicate your relationship with the contact.

- Hostile contacts are coloured red.
- Neutral contacts are coloured orange.
- Allied contacts are coloured green.
- Contacts representing structures and anomalies are coloured white.
- A contact that flashes white signifies that it is currently attacking your vessel.

11 Sensor Scale: This graphic marker represents the scale of the sensor disc. When the marker is to the far left, the scale of the sensor is at its smallest. When the marker is to the far right, the scale of the sensor is at its maximum. A small sensor scale is useful when contacts are very close. A large sensor scale is useful when contacts are very far away.

12 Internal Heat Level: This graphic displays your ship's current internal heat as a vertical bar and a percentage value. As your power plant consumes fuel to operate ship systems it generates heat. Some ship functions, such as engaging the Frame Shift Drive, generate additional heat. If your ship's heat level rises above 100% your ship will be at risk suffering damage and systems may shut down until the ship's temperature is reduced.

13 Nav-Compass: This graphic describes a targeted object's position relative to your ship's facing. The dot represents the object, the closer it is to the centre of the circle, the closer it is to your ship's facing. When the dot is hollow, the object is behind your ship.

The Nav-compass is summoned under specific criteria:

- A targeted hyperspace destination
- A targeted stellar body within a system
- An allotted docking bay pad
- An escape vector when attempting to super cruise very close to a stellar body

14 Target Schematic: This graphic displays a schematic of the structure or vessel you are currently targeting. Where applicable the schematic will display shields of the target as concentric rings.

15 Target Hull Integrity: When you target a vessel that can be damaged, its hull integrity will be displayed here as a bar and a percentage value.

16 Target Information Panel: This multi-function panel displays various information depending on what (if anything) you have targeted.

Nothing Targeted: Your current location name is displayed, along with the controlling faction (if one is present), its government type and the main commodity market type present in the system.

Something Targeted: initially the type of entity targeted is displayed. If you have complete a basic scan, additional information will be displayed:

- Ship/Commander Name
- Hull Health
- Shield Health
- Criminal Status for the current location (clean/wanted)
- If a subsystem has been targeted, its name and structural integrity is also displayed here

The name of your current location and local faction is still displayed.

FOCUS MODE

As well as the basic cockpit elements, the Pilot's interface also features Focus Mode.

Focus Mode allows you to access Focus Panels where you can view additional details and operate specific ship functions. There are three Focus Panels: the System Panel, Target Panel and Comms Panel.

The following commands are used during Focus Mode:

Binding Name	Default K&M	Default Gamepad
UI FOCUS	HOLD LSHIFT	X Button
UI FOCUS/BACK	LSHIFT	B Button
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-pad Right
UI PANEL SELECT	SPACE	A Button
NEXT PANEL TAB	E	Right Bumper
PREVIOUS PANEL TAB	Q	Left Bumper

To activate Focus mode, press and hold **UI FOCUS**. Note that your view draws back slightly, to indicate that Focus Mode is active. At this point, if you decide not to use Focus Mode, simply release **UI FOCUS**.

Whilst still holding **UI FOCUS**, tap one of the following commands:

- **UI PANEL RIGHT** to select the Systems Panel
- **UI PANEL LEFT** to select the Target Panel
- **UI PANEL UP** to select the Comms Panel

Then release **UI FOCUS** to focus on the selected panel.

SYSTEM PANEL

The Systems Panel has five tabs that detail information and options about your career and ship. You can cycle through the tabs using **NEXT PANEL TAB** and **PREVIOUS PANEL TAB**.



STATUS TAB

This tab shows you various statistics about your career. Use **UI PANEL LEFT** and **UI PANEL RIGHT** to cycle through subsets of useful data

MODULES TAB

This tab lists all ship modules currently fitted. Each entry displays the following information:

- On/Off check box
- Module Name
- Fixed, Gimbal or Turret mount, described as icons, if the module is a hardpoint weapon
- Effectiveness Rating, described as a letter, where "A" is the most effective
- Size, described as a number, where bigger numbers represent larger modules
- Capacitor used to power active functions of the module, if any
- Power draw from the ships power plant
- Power Priority, described as a number
- Health

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a module. Use **UI PANEL LEFT** and **UI PANEL RIGHT** on a highlighted module to increase/decrease its power priority. Use **UI PANEL SELECT** to toggle the module on/off. Underneath the list is a power Output bar, representing the available draw from your ship's power plant and a power Usage bar, representing the combined draw of all active modules, divided up into power priority.

Power priority is used to determine which modules are automatically turned off should your available power draw be reduced (for example if you fit a smaller power plant, or suffer a power plant malfunction).

When the Output bar drops below a power priority segment in the Usage bar, ALL modules of that power priority will be turned off until available power is restored.

FIRE GROUPS TAB

This tab allows you to configure which weapons will fire when you use your primary and secondary attacks. It allows you to set up groups of weapons and equipment to fire simultaneously. These groups are called fire groups.

The tab is split into two sections. The left-hand section lists all modules fitted that can be activated by using a primary or secondary attack. The modules are grouped according to type.

The right-hand section shows you current fire groups as columns. Each fire group is assigned a number. Below each fire group are entries for each module. Each entry will display one of three things:

- 1: the module will activate when this fire group is active and you use the primary fire command
- 2: the module will activate when this fire group is active and you use the secondary fire command
- Empty: this module cannot be used by either fire command when this fire group is active

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a module. Then use **UI PANEL LEFT** and **UI PANEL RIGHT** to highlight a fire group.

With a fire group highlighted, use **UI PANEL SELECT** to cycle through the three options (1, 2, empty) to assign the module to primary, secondary fire or to remove the module from the fire group.

A fire group will be removed if no modules are assigned to it. When you make a change to the rightmost fire group a new fire group will be created. You can create up to 8 fire groups.

CARGO TAB

This tab is split into two sections.

The right hand section displays a manifest for all cargo currently in your ship's hold.

Each type of cargo will have its own entry, displaying its category icon, name and amount. If the cargo is stolen or mission critical it will be noted here.

Use **UI PANEL UP**, **UI PANEL DOWN**, **UI PANEL LEFT** and **UI PANEL RIGHT** to highlight a cargo type, and use **UI PANEL SELECT** to summon the jettison menu.

In the jettison menu, use **UI PANEL UP** and **UI PANEL DOWN** to select whether to jettison the cargo whilst still retaining ownership, or abandon it, jettisoning the cargo with no restrictions on who else can legally collect it.

Use **UI PANEL LEFT** and **UI PANEL RIGHT** to set the amount of the cargo you want to jettison, and use **UI PANEL SELECT** to execute the operation.

Use **UI FOCUS/BACK** to dismiss the jettison menu.

The Left hand section displays your ship's refinery status, if fitted. The refinery is detailed in the "Mining" section, further down.

FUNCTIONS TAB

This tab allows you to execute a variety of different ship operations from a list. Use **UI PANEL UP** and **UI PANEL DOWN** to highlight the function you wish to use then use **UI PANEL SELECT** to execute the operation.

Where the operation has a slider bar, use **UI PANEL LEFT** and **UI PANEL RIGHT** with the operation selected to increase and decrease the bar.

The functions available are:

- Faction: used to select which side of a conflict zone you wish to temporarily join. Only available when in a conflict zone
- Landing Gear: Deploy/retract landing gear
- Cargo Scoop: Deploy/retract cargo scoop
- Silent Running: Turn silent running on/off
- Ship Lights: Turn ship headlights on/off
- Flight Assist: Disable/enable automatic flight assist
- Rotational Correction: Disable/enable starport docking bay rotation matching
- Preflight Checks: Disable/enable preflight checklist before launching
- Turret Weapon Mode: Cycle through turret fire modes, Fire At Will [attack all hostile vessels in range], Target Only [attack targeted hostile ship] and Fire Forward [work as a fixed bore weapon]
- Report Crimes Against Me: Disable/enable automatic crime reporting when attacked
- Interface Brightness: Dim/brighten the holographic interface
- Gun Sight Mode: Cycle between Leading [targets show a lead indicator for projectile weapons] and Trailing [projectile gun sights move to represent where shots will land]
- Sensor Scale Type: Cycle between Linear [the scale of the sensor disc does not change from the centre to the edge] and Logarithmic [the scale increases from the centre to the edge of the disc]
- Self Destruct: Initiate self destruct, useful when your ship has become stranded due to module failure or fuel loss

TARGET PANEL

The Target Panel has five tabs that detail information and options about your environment. You can cycle through the tabs using **NEXT PANEL TAB** and **PREVIOUS PANEL TAB**.



The screenshot shows the Target Panel with the 'NAVIGATION' tab selected. The panel displays a list of locations and their distances from the current position. A blue arrow icon indicates the nearest location, while an orange arrow icon indicates the locked destination. The list includes Wohler Terminal, Kremainn, and various resource extraction sites. Buttons at the bottom allow switching to the Galaxy Map and System Map.

LOCATION	DISTANCE
KREMAINN	2,881.5s
KREMAINN 2	6.69s
WOHLER TERMINAL	10.5km
RESOURCE EXTRACTION SITE	6.34s
RESOURCE EXTRACTION SITE	6.85s
KREMAINN 2 B	7.18s
KREMAINN 2 A	7.63s
KREMAINN 3	35.5Ls
RESOURCE EXTRACTION SITE	35.1s
RESOURCE EXTRACTION SITE	35.8s
RESOURCE EXTRACTION SITE	35.8s
KREMAINN B BELT CLUSTER 6	1,376Ls

NAVIGATION

The navigation tab displays your current location and the destination location locked into your navigation system, if any, along with the distance to it.

It also displays a list of known, nearby stellar bodies, points of interests and systems. Each location has an icon signifying what type location it is, and also shows the distance to it.

A blue arrow marker is displayed next to the location you are nearest to in the list. An orange arrow marker is displayed next to the location you have locked into your ship's navigation targeting computer.

The list is a hierarchy, with stars displayed first, by distance, then destinations that orbit the stars, then destinations that orbit those destinations and so on.

Use **UI PANEL UP**, **UI PANEL DOWN**, **UI PANEL LEFT** and **UI PANEL RIGHT** to highlight a destination. Use **PANEL SELECT** to summon the destination menu for a highlighted location.

This menu allows you to execute the following operations:

- Lock/Unlock Destination: Lock or unlock the destination into your ships navigation targeting computer
- Lock and Super Cruise: [if destination is in your system] As above, but your ship will automatically begin charging for super cruise
- Lock and Engage Hyperdrive: [if destination is a system] As above, but your ship will automatically begin charging for a hyperspace jump

This tab also has buttons to summon both the Galaxy Map and System Map. Use **UI PANEL UP**, **UI PANEL DOWN**, **UI PANEL LEFT** and **UI PANEL RIGHT** to highlight either entry then use **PANEL SELECT** to view the appropriate map.

TRANSACTIONS

This tab can display entries for a number of different events:

Contracts: Any contracts you have active will be listed as an entry on this tab. For each contract your immediate goal will be displayed, as well as the destination system and the contract's expiry timer.

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a contract then use **UI PANEL SELECT** to summon the contract's information panel. This panel displays the contract's details and also features a button to abandon the contract.

Claims: Any unclaimed bounties will be listed as an entry on this tab. Each claim will display the claim's worth and the system where the bounty was issued.

Fines: Any active fines will be listed as an entry on this tab. Each fine will display the total amount owed and the system in which the fines must be paid, along with an expiry timer, [after which the fine will be converted into a bounty against you].

If the expiry timer displays "dormant", it means that the authority that issued the fine believes you have been killed and have closed your file. Dormant fines will be reactivated should you come to the attention of the appropriate authority [if you are scanned by their authority vessels or detected committing a crime in their jurisdiction].

CONTACTS

This tab displays a list of all contacts your sensors have successfully resolved.

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a contact. A colour bar next to the contact name indicates any special relationship with you:

- Red Bar: The contact is hostile to you.
- Green Bar: The contact is allied with you.

Additional information is shown about selected contacts, including which faction it is affiliated with and the total value of all known bounties issued against it if you have also performed a basic scan.

Then use **UI PANEL SELECT** to set a highlighted contact it as your current target. Brackets will appear around the name of the targeted contact.

If the contact is a starport or outpost, using this command instead summons an interaction menu.

Options available on the menu are:

- Lock Target: Select the contact as your current target.
- Request Docking: select the contact as your current target and Issue a docking request. You should receive conformation of the request momentarily.

SUB-TARGETS

This tab displays a list of sub-targets detected by a basic scan of your currently selected target. Each entry shows the name of the module, its current health, and whether it is currently powered.

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a module. Use **UI PANEL SELECT** to target the sub-system. Targeting a sub-system allows you to aim more precisely at it, increasing the chance of such attacks penetrating through and damaging it directly.

CARGO

This tab displays the cargo manifest of your currently selected target if you have performed a cargo scan (a specialised cargo scanner module is required).

STATUS	MODULES	FIRE GROUPS	CARGO	FUNCTIONS
REFINERY				
			NAME	QUANTITY
			FOOD CARTRIDGES	3
			BATTLE WEAPONS	1
			STOLEN ⚡	
			CAPACITY	4/4



BASIC FLIGHT

You will need to learn several different facets of ship control to become a successful pilot.

MANOEUVRES

The following commands are used to manoeuvre your ship:

Binding Name	Default K&M	Default Gamepad
YAW LEFT	A	A
YAW RIGHT	D	D
PITCH UP	MOUSE DOWN	L-STICK DOWN
PITCH DOWN	MOUSE UP	L-STICK UP
ROLL RIGHT	MOUSE RIGHT	L-STICK RIGHT
ROLL LEFT	MOUSE LEFT	L-STICK LEFT
THROTTLE UP	W	RIGHT BUMPER
THROTTLE DOWN	S	LEFT BUMPER
THRUST UP	R	R-STICK UP
THRUST DOWN	F	R-STICK DOWN
THRUST LEFT	Q	R-STICK LEFT
THRUST RIGHT	E	R-STICK RIGHT
THRUST RIGHT	E	R-STICK RIGHT
ENGINE BOOST	TAB	B Button

Your ship's suite of thrusters allows you to move with six degrees of freedom:

Forward/Backward Motion: Use THROTTLE UP and THROTTLE DOWN to move your ship directly forward or backwards [much like a car accelerating forwards/in reverse]. Note that it takes time for your ship to accelerate and decelerate. When travelling forwards, you will only begin to move backwards once all forward momentum has stopped, and vice versa. Note that your ship's retro thrusters, which provide backwards motion, are weaker than your main thrusters, which provide forward motion, resulting in a slower reverse flight acceleration/top reverse speed.

Up/Down Motion: Use THRUST UP and THRUST DOWN to move your ship straight upwards or downwards [much like the movement of an elevator]. When moving upwards, you will only begin to move downwards once all upwards momentum has stopped, and vice versa.

Left/Right Motion: Use THRUST LEFT and THRUST RIGHT to move your ship directly to the left or right [much like a soccer goalkeeper sidestepping left and right along the goal line]. When moving left, you will only begin to move right once all lateral momentum has stopped, and vice versa.

Note that in the three degrees of movement described above, your ship never changes its facing or orientation (called its attitude). The following movements available do just this:

Pitch Up/Down: Use PITCH UP and PITCH DOWN to rotate your ship in an upwards or downwards motion [much like the movement of your head when you look up and down].

Roll Left/Right: Use ROLL LEFT and ROLL RIGHT to rotate your ship clockwise or counter clock [much like the rotation of a steering wheel].

Yaw Left/Right: Use YAW LEFT and YAW RIGHT to rotate your ship around left or right [much like the rotation of a tank's turret]. Note: Yaw rotation is weaker than pitch and roll.

Default gamepad bindings enable "YAW into ROLL on initial roll". This means that when you make very slight/short lived roll inputs they are translated into yaw movements.

Note that in the three degrees of movement described above, your ship does not change its position in space.

Sometimes you may need to accelerate extremely quickly, a likely scenario during combat. In such cases, use ENGINE BOOST to trigger an emergency firing of your thrusters. This burn takes a moment to engage and only lasts for a few seconds, but can accelerate your ship to speeds in excess of normal capabilities and increase manoeuvrability. Note that when the boost ends, your ship will slowly decelerate to within normal operating speeds.

Emergency thrust requires energy from your ENG capacitor (see Power Distributer section, below); insufficient ENG power will cause the emergency thrust to fail.

To fly expertly, you will need to use all of these movements in conjunction with each other. For beginner pilots, it's recommended that you acclimatise yourself with the basic principles of using throttle with pitch and roll:

- Throttle up to the speed you wish to travel at
- Roll so that your destination/target is roughly above the centre-point of your view
- Pitch up until the destination/target is roughly in the centre-point of your view
- Yaw to fine-tune your facing so that the destination/target is directly in the centre point of your view

FLIGHT ASSIST

The following commands are used to control Flight Assist:

Binding Name	Default K&M	Default Gamepad
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DISABLE FLIGHT ASSIST	Z	Z
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Your ship is fitted with Flight Assist functionality. This software ensures that the ship's suite of thrusters fire automatically to provide counterthrust when needed.

You can disable Flight Assist using **DISABLE FLIGHT ASSIST**. Whilst disabled, motion from any flight control input will continue even after the input stops, e.g. if you **PITCH UP**, your ship will continue to pitch up after you release the control. You need to apply the appropriate counterthrust manually, which would be in this case, **PITCH DOWN**.

Disabling Flight Assist can be useful as it allows you to change the orientation of your ship without affecting its velocity. In essence, you can flight in one direction whilst facing another. It is, however, more challenging.

To re-enable Flight Assist, use **DISABLE FLIGHT ASSIST** again.

SENSORS AND TARGETING

The following commands are used by your sensors and targeting computer:

Binding Name	Default K&M	Default Gamepad
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TARGET AHEAD	T	Y Button
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CYCLE NEXT SHIP	G	G
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INCREASE SENSOR ZOOM	PAGE UP	PAGE UP
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DECREASE SENSOR ZOOM	PAGE DOWN	PAGE DOWN
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All ships are fitted with a sensor suite module that allows you to detect and identify ships and structures around you. The sensor module works by detecting thermal and EM emissions from ships and structures, matching these signatures against its library of entities.

The sensor system uses two forms of pilot feedback. The first is the sensor disc, situated centrally at the bottom of your cockpit's Pilot Interface.



This element describes a sphere of space around a central point – your ship, and the flat plane drawn is a “slice” of the sphere, parallel to your ship's horizontal plane. When your ship's sensors detect entities, they are represented as markers, placed on the sensor disc. The position of a marker relative to the central point describes the entity's location in space relative to your ship.

For example, a marker to the left of the central point represents an entity that is to the left of your space ship. If the marker sits above the flat plane, connected to it by a descending, vertical line, then the entity it represents is above your ship.

You can adjust the scale of your sensor disc using **INCREASE SENSOR ZOOM** and **DECREASE SENSOR ZOOM**. When contacts are very close to you, you might want to decrease your sensor zoom to increase the granularity of nearby contacts. When contacts are far, you might want to increase zoom.

As long as your sensor module is powered you have access to the following sensor operations:

Passive Scan: active at all times, your ship's passive scan automatically detects emissions in a three hundred and sixty degree radius and is able to reveal contacts of ships and structures around you.

When the emissions are very weak or very far away, the sensor system can only approximate the location of the emission source, and will not provide any information or targeting solutions. Such detections are called unresolved contacts – they appear as sensor disc markers that flicker and constantly change position.

When the emissions are strong enough, or close enough (this distance is determined by the rating of the sensor module versus the strength/distance of the emissions) the sensor system will pinpoint the position of the emissions source and reveal the type ship/structure.

Such detections are called resolved contacts, appearing as fixed markers on the sensor disc that can be locked into your ship's targeting computer.

Initiate Basic Scan: Your ship sensor module has narrow beam, active scan capability which lets you learn more details about a resolved contact.

To initiate a basic scan, you must lock the resolved contact into your ship's targeting computer. There are a number of different ways to do this.

Targeting: The first way to lock a resolved contact into your targeting computer is to target it directly. To do this you will need to manoeuvre your ship until the resolved contact marker is positioned directly in front of the sensor disc's central point, more or less sitting flat on the sensor disc's plane.

This will place the resolved contact directly in front of your ship. You will note that a segmented diamond element appears on your canopy HUD around the entity. Use **TARGET AHEAD** to lock the entity into your targeting computer.

Alternatively, you use the Pilots Interface Focus Mode to navigate to your Target Panel, view the Contacts Tab, and select the resolved contact directly from the list of resolved contacts present. Doing so will lock the resolved contact into your targeting computer.

Finally, you can automatically lock the resolved contact into your targeting computer by using **CYCLE NEXT SHIP**. Each time you use this command your ship's targeting computer will lock the next resolved contact present at your location.

You can only lock a single ship/structure/anomaly into your targeting computer at a time.

When you have a resolved contact locked into your targeting computer its sensor disc marker will become bracketed, allowing you to quickly locate it. A schematic of the target will also display on the Pilot's Interface and its type of entity will be displayed next to it.

Additionally, when you are facing a resolved contact that has been locked into your targeting computer your canopy HUD will display a marker around the entity itself. If the target is a ship, the canopy HUD marker will display three triangles around it. These triangles are three dimensional and rotate to show the ship's facing.

If the target is not a ship, the canopy HUD marker will display as brackets around the target. Next to the marker, the distance to the target is displayed, along with its known name or type.

Completing the Basic Scan: To complete the basic scan, simply keep facing a target. You will see "Scanning" displayed in the Pilot's Interface. Over the course of the next few seconds, additional details can be learnt about the target, including its name, hull and shield strength, and criminal status at this location. You will also reveal the target subsystems (if it has any). These can be viewed by using the Pilot's Interface Focus Mode, navigating to your Sub-Targets Tab in the Target Panel.

Completing a basic scan is very important. Not only do you learn additional details about a target, but, in the case of ships, you learn its criminal status, which will inform you whether you can legally attack the target without committing a crime.

Once you have completed a basic scan on a resolved contact you will retain all information gained whilst it stays at your location. Even if your sensors lose the emissions of the contact, should you reacquire it the results of the basic scan will be instantly reapplied.

Advanced Scan [Optional modules required]: Your ship can be fitted with a number of advanced scanner modules, which let you learn additional information about your current target that you would otherwise be unable to obtain.

For all intents and purposes, such scanners are treated as weapons which must be assigned to a fire group and "fired" at your target for a set length of time.

Advanced scanners are active and highly visible to a ship's sensors. You will be notified when you are the target of an advanced scan, though your sensor will not be able to determine the origin source.

DOCKING AND UNDOCKING

The following commands are used during Docking and Undocking:

Binding Name	Default K&M	Default Gamepad
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL SELECT	SPACE	A Button
LANDING GEAR	L	L

All pilots must be aware of an able to follow docking protocols which have been standardised across the known galaxy.

To dock, you will need to fulfil three criteria:

- You must not be under attack by the authorities
- You must be within 7.5KM of the starport or Outpost
- You must be granted docking permission

To request docking permission, get within seven and a half kilometres, then target the starport or outpost. When you have the starport or outpost targeted, use the Pilot's Interface Focus Mode to navigate to the Contacts Tab in the Target Panel.

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight the starport or outpost. Use **UI PANEL SELECT** to summon the interaction panel. Use the same commands to highlight and select the Request Docking option.

You should receive audio and comms conformation of the request. Assuming that the dock has free births, you will receive permission to dock momentarily.

Once permission has been granted you will be assigned a docking pad and given a time window within which you must complete the docking process. Your allotted pad and time window is displayed directly above the sensor disc in the Pilot's Interface.

Because starports and outposts are massive structures, when you lock them into your targeting computer the nav-compass will become active, helping you to navigate to them.

DOCKING AT STARPORTS

Fly your vessel to the docking bay airlock. Coriolis starport schematics, displayed in the Pilot's Interface when you lock the starport into your targeting computer, show arrows on the faces of the starport that point to the airlock to help you locate it.



Once you have located the airlock, fly through it, taking care to match rotation and avoid collisions with the airlock walls and other vessels using the starport.

Inside the docking bar the starport will engage your ship's rotational assist.

After passing through the airlock and into the docking bay, locate and fly towards your allotted pad, which will be illuminated with a holographic descent path that also displays the pad number. Once in the airlock, your nav-compass will target your allotted pad, helping you to locate it.



Before attempting to dock, deploy your ship's landing gear using the LANDING GEAR command. You will not be able to dock unless your landing gear is deployed.

Note that when your landing gear is deployed, your flight characteristics change: your ship's top speed is reduced as a safety precaution.

You can also define landing gear override commands in Options > Controls from the Main Menu, allowing you to alter your control scheme to make landing easier, for example by swapping head-look commands for yaw.

Once you have flown close to your allotted pad the sensor disc in the Pilot's Interface is replaced by a docking assist element that shows your ship's attitude and position in relation to the pad.



Using this element, line up your ship centrally above the pad, parallel to it, with the schematic of your ship pointing away from you in the docking assist element. When you are in the correct position, the pad schematic will highlight blue.

Slowly lower your ship straight down onto the pad. When you are close enough, the pad's docking clamps will engage and secure your ship, completing the docking process.

DOCKING AT OUTPOSTS

Fly directly towards the outpost. Your nav-compass will activate and point directly towards your allotted pad. Note that due to their three dimensional nature, outpost docking pads might be placed on all faces of the superstructure.

Once you have visually located your pad, use the same process as docking at a starport.



DOCKING RULES

It is important to note that all ports have very strict rules and laws which you must obey if you wish to succeed as a pilot:

- Access Control: Do not wait in the airlock, or over a docking pad that is not allotted to you
- Weapon Control: Never fire your weapons inside a docking bay
- Time Control: Always complete your docking process within the allotted time window
- Loitering: Never enter a docking bay without docking permission

Failure to comply with these rules may result in fines, bounties and ship destruction.

Once you have successfully docked, the docking assist element is replaced by the starport service-link element. Use **UI PANEL UP** and **UI PANEL DOWN** to highlight the option you want, and then use **UI PANEL SELECT** to select it. The three options are:

- Starport Services: Select this to open up the starport services interface
- Enter Hangar/Return to Surface: Select this to transfer your ship into or out from an internal hanger. Some services require your ship to be transferred to an internal hanger
- Launch: Request permission to exit the starport or outpost

Undocking: The process for undocking is very simple. Once you select Launch from the starport service-link you will, after a short delay, be released from the docking clamps.



Note, ensure your throttle is at zero before undocking to avoid collisions upon clamp release.

If you are in a starport you will be allotted a time window within which you must exit the docking bay. Note that as you exit the airlock the starport's rotational assist will terminate; ensure you clear the airlock smoothly and briskly.

At any time you can turn on pre-flight checks by using the Pilot's Interface Focus Mode, navigating to the Functions Tab of the System Panel which features this toggle. When active, the pre-flight check requires you to input a series of commands before launch permission is granted.

The pre-flight check is a great way to safely recap your control method's various commands.

COMBAT

The Following commands are used during combat:

Binding Name	Default K&M	Default Gamepad
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-pad Right
UI PANEL SELECT	SPACE	A Button
DEPLOY HARDPOINTS	U	BACK Button
PRIMARY FIRE	MOUSE 1	R-TRIGGER
SECONDARY FIRE	MOUSE 2	L-TRIGGER
CYCLE NEXT FIRE GROUP	N	A Button

The galaxy is a potentially dangerous place. Every member of the Pilot's Federation must be able to understand and employ the basic principles of ship-to-ship combat.

HARDPOINTS AND UTILITY MOUNTS

Weapons modules are fitted exclusively to your ship's hardpoints. Ships have a differing number of hardpoints, of differing sizes.



All hardpoints are internal weapon bays that must be deployed before use. Use **DEPLOY HARDPOINTS** to deploy your ship's hardpoints.

Utility mounts are small external hardpoints that can be fitted with a number of non-weapon modules, such as anti-missile point defence turrets, heat sink launchers and chaff launchers.

Some modules fitted to utility mounts do not require hardpoints to be deployed, though they might still need to be assigned to a fire group.

FIRE GROUPS

Weapons must also be assigned to a fire group. A fire group is a collection of weapons/device modules that all activate at the same time when a fire command is received. Each fire group has access to a primary and secondary fire command, allowing for even more customisation. Use **PRIMARY FIRE** and **SECONDARY FIRE** to activate weapons assigned to those fire commands in the active fire group.

Ensure that your weapons are assigned to a fire group. Use the Pilot's Interface Focus Mode to navigate to the System Panel's Fire groups Tab.



In this tab, use **UI PANEL UP** and **UI PANEL DOWN** to highlight a weapon module. Then use **UI PANEL LEFT** and **UI PANEL RIGHT** to highlight a fire group.

With a fire group highlighted, use **UI PANEL SELECT** to cycle through the three options (1, 2, empty) to assign the module to primary, secondary fire or to remove the module from the fire group.

WEAPON BRACKETS

Weapon Bracket HUD: When you deploy your ship's hardpoints, note that the canopy HUD gains two large bracket elements. These brackets are labelled Primary and Secondary, followed by a number representing the currently active fire group.



Elements representing the weapons assigned to this fire group sit on the brackets, with weapons assigned to the primary fire command attached to the primary bracket and weapons assigned to the secondary fire command attached to the secondary bracket.

You can cycle through your fire groups at will using **CYCLE NEXT FIRE GROUP**, allowing you to employ many weapons using primary and secondary fire commands.

Each weapon element displays a number of pieces of information:

- Weapon/device name
- Mount type Icon (fixed/gimbal/turret)
- Ammo Count/Coolant Bar
- "Target out of Range" Warning (only when ship locked into targeting computer)

Some modules fixed to utility mounts do not need hardpoints to be deployed but can or must be assigned to a fire group. In such instances, the weapon brackets will be displayed even when hardpoints are not deployed.

SECONDARY BRACKETS

Some modules fixed to utility mounts or internally can be used without the need for deploying hardpoints or being assigned to a fire group – they merely need to be powered.

When such modules are fitted and powered, the canopy HUD displays smaller, secondary brackets with the associated modules present. This allows you to view important information about the module, such as charge time or ammunition at all times.

GUN SIGHT RETICULES



Gun Sight Reticules: when you deploy your ship's hardpoints, note that your canopy HUD gains gun sight reticles. Each type of weapon has its own reticule style, and they are designed to fit together when multiple types of weapon are in the same fire group.

As part of each gun sight reticle element there is a small precision marker, representing accurately where the weapon shots will go.

When you have a resolved contact locked into your ship's targeting computer these precision markers move based on the distance to the target. This is because your weapons are calibrated to fire directly forwards, regardless of where they are placed on your ship, and although perspective makes it seem like all attacks travel to the centre of your view, in reality they do not.

On larger vessels, hardpoints can be spaced very far apart, so far that small ships might not be able to be hit by all weapons at once (very small ships can literally fly between the weapons on very large vessels). The precision marker moves to show exactly where your weapon attacks will be at the point where they reach the distance of the target.

Gun sight reticles for projectile weapons feature an additional element. The canopy HUD element on the ship locked into your targeting computer gains a lead indicator. When firing projectile weapons, aim at the lead indicator as opposed to the target itself – this indicator shows the position of your projectile attacks will be in at the time when they reach the distance of the target.

Some weapons require an additional precision lock before they can be activated. You must keep your aim on target whilst the precision lock is acquired. The gun sight reticule for these weapons indicates the progress of the precision lock, accompanied by an audible tone. When the lock is complete the indicator will freeze and the audible tone will become constant. A precision lock will fail if you lose track.

Some gun sight reticles will flash additional elements when their associated weapon successfully strikes the target. This extra feedback helps when using projectile weapons that have a travel time to target.

SUB-TARGETS

If you have targeted a sub system on a ship, the canopy HUD target element around the ship gains an addition – a small precision target placed directly over the location of the module, helping you to aim more accurately at it.

MOUNT TYPES

There are three different mount types that weapons use:

- Fixed: The weapon fires straight forward along its bore line
- Gimbal: The weapon has limited movement and is able to semi-autonomously track a ship locked into your ship's targeting computer
- Turret: The weapon has full rotational movement and can autonomously track and engage targets

Fixed-mount: These weapons are straightforward to use. Manoeuvre your ship so that the gun sight reticule – and especially the precision marker – are over the target (or, in the case of projectile weapons, over the lead indicator), then use the associated fire command to attack.

Gimbal-mounts: These weapons operate differently when a ship locked into your targeting computer is in front of your ship; the gimbal-mount will move autonomously towards the target. The point at which this auto-aim occurs is based on how strong your sensors are and how strong the emissions of the target are.

You are still required to use a fire command to execute the attacks.

When a gimbal-mount weapon auto-aims, you can see its precision marker move towards the target. If the precision marker moves outside of the gun sight reticule, it gains a small reticule of its own so you can still quickly identify the type of weapon.



Gimbal-mount weapons are very useful for slower ships that might otherwise have trouble keeping up with their target. However, their auto-aim is very imprecise, causing them to wander when attempting to track targets autonomously, making them ineffective at range or for sniping sub-targets. They also tend to be less powerful than their fixed counterparts.

Turret-mounts: These weapons operate differently from other weapon mounts. Turret-mounted weapons are completely autonomous, able to track targets and fire upon them without pilot input, as long as the target is within their fire arc.

Turrets can be set to three different modes of fire:

- Fire at Will: The turret will automatically engage all hostile resolved contacts
- Target Only: The turret will only engage the ship locked into your targeting computer
- Fire Forward: The turret aims directly forward and acts as a fixed weapon.

Turrets aim based on the same parameters as gimbal-mount weapons and, as such, suffer from the same deficiencies, only more pronounced. They tend to be weaker than all other weapons, and suffer the most extreme wandering.

Even so, they can be extremely effective at covering angles of attack that would otherwise be in your blind spot.

AUTO-AIM VULNERABILITIES

Because gimbal-mount and turret-mount weapons use a target's emissions to enable auto aim, they are vulnerable to enemies that can lower or confuse their emissions.

You will need to get closer to ships with lower emissions to gain the advantage of auto aim.

Ships fitted with chaff launchers can temporarily completely defeat auto aiming weapons. Whilst a ship is under the effects of a chaff cloud, all auto aim weapons will suffer extreme wandering if the ship is locked into the targeting computer.

SHIELDS

Ships can be fitted with a shield generator. When powered, these generators form a field around the ship that absorbs attacks and converts them into harmless light. Each time a shield is struck, its field's bond is weakened.

Given time without attack, power is drawn from the ship to strengthen the bond. If enough successive hits are scored on a shield, it temporarily breaks. A broken shield causes the shield generator to reset.

Once this completes, the generator will begin to internally reform the shield. Once the shield bond reaches fifty percent of its maximum strength the shield is expanded to cover the ship once more, where given time and power, it will continue to recover until its bond is at maximum strength.

Shields are represented in the Pilot's Interface as concentric blue circles around a schematic. When a shield is broken, the concentric rings are replaced by a warning element that also counts up whilst the shield is internally reforming.



Shields are in general, more effective at absorbing kinetic-based attacks from projectiles and less able to resist thermal-based attacks from lasers.

SHIP DAMAGE



Once a ship's shield is broken (or if it has a destroyed or missing shield generator), attacks on target will strike the hull, causing damage that is permanent until the ship can be repaired.

Hull is represented on the Pilot's Interface as an orange bar and percentage value underneath a schematic.

A ship does not suffer any operational penalties for suffering hull damage, but should its hull integrity be reduced to zero it will break apart and be destroyed.

In general, a ship's hull is more able to resist thermal-based attacks from lasers and more susceptible to kinetic-based attacks from projectile weapons, being especially vulnerable to explosive attacks from missiles.

PENETRATING ATTACKS

Attacks that strike a ship's hull have a chance to penetrate through and damage internal modules.

For this to occur, the attack's flight path must intersect the location of the module on the ship. The chance of penetration varies – some weapons are much more effective at penetrating than others.

When an attack penetrates, some of its power is lost as it travels into the ship, resulting in less hull damage, but some of the damage is transferred directly to the module hit.

WEAPON AMMUNITION

AND WEAPON COOLING

Some weapons require ammunition to fire. If so, the amount of ammunition available to them is displayed on the weapon element attached to the weapon bracket.



Once ammunition is depleted, the weapon will be unable to fire until you restock at a starport or outpost.

Some weapons that use ammunition use magazines. Magazines are automatically swapped when emptied, resulting in a delay as the empty magazine is replaced.

All weapons are connected to a closed cooling loop, separate from the ship's main cooling system. This cooling system draws energy from a specific capacitor to keep weapons operation. Weapons cannot activate if the capacitor is drained. For more information, see ship construction, below.

SHIP SYSTEMS

Your vessel features a number of systems that, as a pilot and Commander, you should have at least a basic working knowledge of. Experienced pilots know the limits of their vessel, and how to get the most out of it, operationally and when outfitting.

SHIP MODULES

Your ship is fitted with a number of modules that provide functionality. Some of these modules are mandatory; your ship would not be space-worthy if they were missing. Others are optional, increasing its capabilities beyond basic flight.

All modules have a class indicating their size, and a rating, indicating their effectiveness.

Class: This is rated from 1 to 8. Size 1 modules are the smallest, size 8 modules are the largest. Each ship has a number of module compartments of varying sizes which can be fitted with modules.

You can fit a module of a smaller class into a compartment.

In general, larger modules are heavier. It is important to take mass into account; the heavier a ship, the more strain is placed on its drives and frame shift drive, reducing their effectiveness.

Ratings: Modules are rated using an alphabet system, where "A" is most effective overall. Note that this rating is only a guide; some modules feature benefits that are not taken into account by the rating.

HARDPOINTS INTERNAL LIVERY			
PULSE LASER (LOANED)		RATING	F
MASS	2.00 T	CLASS	1
SMALL HARDPOINT		CLASS	1
BUY AND EQUIP	SELL	SWAP	
BACK			

MANDATORY MODULES

The following modules must be fitted to a ship before it is considered space-worthy and allowed to leave port.

Power Plant: This module consumes fuel from your ship's fuel tank, converting it into energy that powers the rest of the ship's modules.

Critical damage to the power plant will cause a catastrophic failure, destroying the ship.

Life Support: This module ensures that the ship has a breathable atmosphere for the crew. It requires energy from the power plant to operate.

Critical damage to life support or a serious breach of the hull will trigger your personal Remlok emergency breather to deploy. You should seek an environment with a sustainable atmosphere immediately.

Power Distributor: This module draws energy from the power plant to fill three capacitors: SYS, ENG and WEP capacitors. These capacitors are used exclusively to power activation costs of specific operations.

Fuel Tank: This module stores ship fuel for use by the power plant. Should your ship run out of fuel, the power plant will fail and suffer catastrophic failure. Ensure that you regularly refuel your vessel.

Drives: This module consists of a suite of thrusters that propel your vessel through space. Drive modules require energy from the power plant to operate, and also drain the active reservoir directly during flight.

Critical damage to drives will cause your ship to lose all propulsion capabilities. In such cases you are advised to abandon and scuttle your ship using the self destruct override.

Sensors: This module provides basic scanning and communications functionality: passive and basic scans and docking link systems. Sensors require energy from the power plant.

Critical damage to your sensors will prevent you from detecting structures and ships and disable your ship's targeting computer.

Frame Shift Drive: This module allows your ship to effectively travel faster than light by compressing space around it.

The FSD requires energy from the power plant to operate and also draws fuel directly when activated. Fuel is drawn from the active reservoir during super cruise, and from the main tank when completing a hyperspace jump.

Critical damage to the frame shift drive will cause catastrophic failure, destroying the vessel completely.

OPTIONAL MODULES

There are many varied modules that can optionally be fitted to a ship to add or enhance its capabilities. The following is a list common, optional modules:

Shield Generator: This module creates a protective field around a ship that absorbs incoming attacks that would otherwise cause serious damage. The shield generator requires energy from the power plant to become active and draws from your ship's SYS capacitor to recharge (see Power Distributor section, below).

Heat Sink Launcher: This module allows you to purge all current ship heat into a heat sink which is then ejected from the vessel. Heat sink launchers require energy from the power plant to operate, and draw from your ship's SYS capacitor to initiate a purge.

Fuel Scoop: This module allows your ship to skim the outer reaches of a star, collecting fuel for your main fuel tank directly. It requires energy from the power plant to operate.

To use the fuel scoop, approach a star in super cruise and "skim" close to it, along its impact ring (the yellow circle that surrounds the star and signifies the minimum angle you must face from the star's centre to avoid collision course).

The closer you fly to the star's impact plane, the higher rate you will scoop fuel at. However, be aware that the ambient temperature increases along with proximity to a star; you risk cooking your ship if you remain too close.

Refinery: This module allows the refining of asteroid chunks to obtain precious materials from them. It requires energy from the power plant to operate. Refinery modules have a hopper and one or more resource bins, depending on the model.

To use a refinery you will also need to equip a mining laser. Mining lasers can cause chunks of resource-laden rock to splinter and break free from an asteroid. Use your ship's cargo scoop to collect a chunk, which will be placed in your refinery's hopper.

In the Pilot's Interface, use Focus Mode to navigate to the Cargo Tab of the System Panel. Here you can use the refinery interface to assign the various resources in the asteroid chunk to free resource bins. Once you have assigned a resource to a bin, any further chunks collected that contain the resource will automatically be refined into the appropriate bin.

Once a resource bin is full, as long as you have room in your cargo hold a canister of the refined commodity will be generated. You can choose to vent your refinery's hopper and resource bins into space at any time, clearing them.

Weapons and Scanners: There is a wide variety of modules that give a ship offensive, defensive and interrogative capabilities. All such modules require energy from the power plant to operate, and many of them also draw from the SYS or WEP capacitors to activate.

POWER DISTRIBUTOR

During flight, the following commands are used by the power distributor:

Binding Name	Default K&M	Default Gamepad
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-Pad Right

The Power distributor siphons energy from the power plant into three capacitors:

- SYS: Used to recharge shields and activate scanners/defensive modules. In addition, the more pips assigned, the more resistant shields are to attack
- ENG: Used to activate emergency thrust (known as Boost). In addition, the more pips assigned, the more manoeuvrable and fast the ship becomes
- WEP: Used to cool the weapon cooling loop

You can dynamically prioritise which capacitors are filled most quickly at any time during normal flight to ensure you have the correct energy available at all times.



Use **UI PANEL UP** to prioritise the ENG capacitor.

Use **UI PANEL LEFT** to prioritise the SYS capacitor.

Use **UI PANEL RIGHT** to prioritise the WEP capacitor.

Use **UI PANEL DOWN** to distribute energy equally between all three capacitors

Each time you prioritise a capacitor a small "pip" marker will appear underneath the associated capacitor bar. The more "pips" a capacitor has, the greater priority it has and the faster it will be refilled. As noted, any additional benefits based on "pips" will also increase/decreased based on the number of "pips" assigned.

A capacitor can have a maximum of 4 "pips" assigned.

A module that requires energy from a capacitor will not be able to activate if the capacitor does not have enough energy available, even if the module has sufficient power from the power plant to operate.

Learning to operate the power distributor "on-the-fly" will grant you significant benefits over pilots that fail to take advantage of it.

HEAT AND SIGNATURE

Managing heat levels uses the following commands:

Binding Name	Default K&M	Default Gamepad
SILENT RUNNING	DELETE	DELETE
DEPLOY HEAT SINK	V	V
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL SELECT	SPACE	A Button

There are two components to heat: a ship's internal temperature and its external signature.



INTERNAL HEAT

As power is drawn from the ship's power plant to keep modules operational heat is generated within the vessel. Over time, this heat can build to dangerous levels, effectively cooking the ship until it begins to suffer damage. If left unchecked, the ship will suffer a catastrophic failure and be destroyed.



In the Pilot's Interface the ship's internal temperature is displayed as a bar directly to the left of the sensor disc.

Ships are plumbed with cooling systems that collect heat and transport them to heat vents. These vents feature heat-conductive fins that radiate the heat out into space, allowing the ship to maintain heat levels within sustainable operational ranges.

The cooling system operates automatically, opening up vents as the ship's internal temperature rises to dangerous levels and closing again when the temperature drops.

In extreme operating conditions, such as when flying close to a star or when flying under excessive power draw the cooling system may be unable to cope. In such instances it is advisable that you manually turn off modules not required.

You can do this by using the *Pilot's Interface Focus Mode*, navigating to the Modules Tab in the System Panel.

Use **UI PANEL UP** and **UI PANEL DOWN** to highlight a module and use **UI PANEL SELECT** to turn it off. The more energy a module requires from the power plant, the more heat will be removed when it is turned off.

A ship fitted with heat sink launchers can temporarily cool down dramatically in a short space of time by activating the launcher, which purges all heat from the ship into a heat sink. This heat sink is then ejected into space. If a heat sink launcher is assigned to a fire group, then using the appropriate fire command with the fire group selected will activate a heat purge. Alternatively, use **DEPLOY HEAT SINK** to activate a heat purge.

Note that using a heat sink launcher is a short term measure – the ship will continue to increase in temperature until the source of the heat generation is removed.

SIGNATURE AND SILENT RUNNING

A ship's radiating heat, combined with EM emissions from some modules (primarily shields) constitutes its signature. This signature is what ship sensors can detect, allowing them to locate and identify the ship.



Although heat is the primary component of a ship's signature, this does not equate directly to the ship's internal temperature, though it is linked. Rather it is based on the amount of heat being radiated out of the ship.

In simple terms, the hotter a ship is internally, the harder the cooling system works, the more heat is radiated and the bigger its signature becomes.

The greater a ship's signature, the further away it will be detected by sensors as an unresolved contact, and the further away this detection will allow sensors to pinpoint and identify the ship as a resolved contact, allowing them to target and scan it.

By manipulating which modules are on, receiving energy from the power plant, it is possible to reduce your ship's internal heat levels to a point where your ship's signature is effected, becoming weaker, and thus harder to detect. A ship's signature can be significantly reduced by such manipulation, allowing it to remain stealthy for as long as the pilot can live without the functionality of the unpowered modules.

Without module power manipulation the cooling process occurs automatically, so that the hotter the ship becomes, the easier it is to detect. You can manually override this cooling by rigging the ship for silent running.

Use **SILENT RUNNING** to rig the ship for silent running. When so rigged, your cooling vents are locked shut, preventing heat from being radiated out into space. Your shield, if fitted, is also turned off.



Flying whilst rigged for silent running ensures that only as little discernible heat emissions as possible emanate from the ship.

Some emissions are unavoidable, such as the heat component of thrusters, so even when rigged for silent running a ship can still be detected by sensors. However, the range at which detect can occur is massively reduced.

It is important to note that when rigged for silent running your power plant still generates heat whilst providing energy to modules. This heat remains inside the ship and can quickly rise to dangerous levels. Therefore, rigging for silent running is not recommended for extended periods.

Use **SILENT RUNNING** again to rig the ship for full power, reactivating the automatic venting system and turning the ship's shield back on if fitted.

SHIP SYSTEMS

The following commands are used during different modes of travel:

Binding Name	Default K&M	Default Gamepad
ENGAGE FRAME SHIFT DRIVE	J	J
DEPLOY HARDPOINTS	U	BACK Button
LANDING GEAR	L	L
CARGO SCOOP	HOME	HOME

There are three distinct modes of travel available to a ship. Depending on the scale of the journey, pilots may fly through "normal space" using conventional thrusters.

For longer journeys still limited to the same system, pilots engage the ship's frame shift drive to compress space around their ship, giving the impression (and effectively the result) of travel at speeds faster than light.

For journeys between different star systems, the pilot once more uses the frame shift drive, operating it at maximum effect. This allows incredible distances to be covered in seconds. However, the imprecision of such travel requires special destination targeting.

NORMAL SPACE

Under normal flying conditions, a ship uses the thrusters of its conventional drive to propel itself through space. Most activities occur in normal space, such as combat, docking and mining.

Use the controls specified under Basic Flight to fly your ship in normal space.

SUPER CRUISE



Star systems are too large to fly around in normal space. Even at maximum speed, the fastest ship would take at least two centuries to reach Pluto after setting off from orbit around Earth.

Instead, for such journeys, the ship's frame shift drive is used, compressing space around the ship and reducing the journey down to minutes, even using your ship's conventional drive. Travel in such a manner is colloquially known as super cruise.

The process of using the frame shift drive to enter *super cruise* has a number of stages and requirements.

USING THE FRAME SHIFT DRIVE TO SUPER CRUISE

Mass Lock: Before you can engage the frame shift drive you must ensure that your ship is not mass locked by a large structure such as a starport or outpost. Your ship's mass lock status is displayed on the Pilot's Interface, to the right of your ship schematic.

If the mass lock indicator is lit, you will need to travel away from the entity that is mass locking you using the ship's conventional drive until the indicator light goes out.

Retract Hardpoints/Gear/Cargo Scoop: Due to the enormous stress placed on your ship's hull when frame shifting you must retract your hardpoints, landing gear and cargo scoop before you can activate the frame shift drive.

Use **DEPLOY HARDPOINTS** to retract hardpoints that are already deployed.

Use **LANDING GEAR** to retract landing gear if deployed.

Use **CARGO SCOOP** to retract your cargo scoop if deployed.

Drive Charge: Assuming the ship is not mass locked, use **ENGAGE FRAME SHIFT DRIVE** to activate the frame shift drive. A canopy HUD charge bar indicator will display, showing the remaining time before the Frame shift Drive will compress space.

CHARGING

The amount of time required by the frame shift drive to compress space will increase if there are ships nearby as the frame shift drive has to work harder. The larger the ship, the longer the charge time will take. You will receive notification if your frame shift drive is inhibited in such a manner.

Ships will never prevent the drive from charging, but it is important to note that whilst charging your frame shift drive also outputs a large amount of heat. Very long charge times can cause your ship's internal temperature to rise to dangerous levels.

It is advised to increase your distance from other vessels before activating the frame shift drive to avoid excessive heat build up.

Escape Vector: If you are extremely close to a stellar body such as a planet you will need to orient your ship's facing away from it before the frame shift drive compresses space, to avoid flying directly into the stellar body or its atmosphere.



To help you orient your ship to a safe direction your canopy HUD gains an Escape Vector element. Simply aim the ship towards the Escape Vector whilst charging. Your ship's compass will also activate and point to the Escape Vector, allowing you to find it when it is not initially visible through the canopy.

Throttle Up: Once the frame shift has completed its charge you will need to throttle up to maximum and fly straight to engage space compression. You can throttle up at any point during the charge time.

TRAVELLING IN SUPER CRUISE

Once all requirements have been met and the frame shift drive has charged it will compress space around your ship and enter super cruise.

Piloting a ship in super cruise is similar to normal flight, with the following exceptions:

Minimum speed: A ship in super cruise is always travelling forwards, at a minimum speed of 30km per second, even when throttle is set to zero.

Variable Maximum Speed: The maximum speed attainable whilst in super cruise varies depending on the proximity and mass of nearby stellar bodies.

As a ship travels close to a stellar body, the mass of the body impedes the frame shift drive's capabilities, reducing available top speed. As a ship moves further away, the impeding effects of stellar bodies reduce and the ship's potential top speed increases.

It is important to note that this impeding effect is not all-powerful. It is possible for a ship to attain a speed greater than the impeding effect of a stellar body allows, by first travelling away until the effect is removed, gaining speed and then flying back towards the stellar body.

The impeding effect will kick in, slowing the ship over time rather than instantly dropping its speed to the impeded maximum. Take this into account during long journeys where your speed has increased dramatically.

By setting your throttle in the blue "sweet spot" range, you will ensure that your ship generally slows down to suitable speeds when approaching a stellar body without further throttle manipulation.

Reduced Control: For a ship to remain in super cruise it must fly forwards. Rotation that causes the ship to face a direction other than its direction of travel, or lateral movement, risk causing an emergency drop into normal space. Because of this, flight assist cannot be turned off and vertical/lateral thrusters are disabled.

Pilots will also note that ship response becomes sluggish during super cruise.

Additional Canopy HUD: To aid navigation whilst travelling in super cruise, additional orbit lines will be displayed on your canopy HUD for known stellar bodies.

Stellar bodies also display blue approach rings around them to help you gauge distance.

When close to a star, planet or moon, a yellow impact ring will be displayed around the body. This ring indicates the minimum angle you must face away from the centre of the stellar body to avoid colliding with the body's mass lock effect, which will drag you out of super cruise in an emergency drop.

A collision course will also activate an impact alarm in the cockpit.

A destination that you have locked into your navigation computer is still displayed during super cruise as a canopy element with distance and ETA displayed.

Sensor Disc Changes: Whilst travelling in super cruise the sensor disc operation changes slightly. The scale automatically adjusts to show stars and planets within a 2 minute time horizon from your ship, based on the maximum speed your ship could currently achieve after all stellar body proximity impediments are taken into account.



Ships are automatically visible within a 40 second time horizon, based on the fastest ship's speed.

When you lock a vessel into your ship's targeting computer, the scale of the sensor disc automatically changes so that the target is approximately half way between the centre point of the disc and the outer edge, to maximise legibility.

Pilot's Interface Travel Information: The most common use of super cruise is to travel between two locations in a system, for example from a system's star to a starport.

To aid this, any destination locked into your navigation computer [highlighted and selected from the Navigation Tab on the Target Panel of the Pilot's Interface] that is a point of interest or dock location, will cause travel information to appear on the Target Information Panel in the Pilot's Interface.

There are three distinct pieces of travel information for such a destination locked into your navigation computer:

- Alignment:** This indicator lights when you are facing your destination, a prerequisite for successfully dropping out at the destination.
- Distance:** This bar shows the distance range [highlighted in blue] required for successfully dropping out at the destination
- Speed:** This bar shows the acceptable speed range required for successfully dropping out at the destination



This information is used at the end of your journey to fine tune your exit from super cruise; to drop back into normal space precisely at the destination, you need to make sure your alignment, distance and speed are all within the set limits.

EXITING SUPER CRUISE

There are several ways to exit super cruise, some on purpose, and some as the result of unexpected events.

Precision Destination Drop: If you have a destination locked into your navigation computer, and it represents a precise location, such as a navigation beacon, unidentified signal source or starport/outpost, you can attempt to exit super cruise in a precise manner that places your ship within a small number of kilometres from the destination.

To successfully perform a precision drop, you need to be:

- Facing the destination
- Within 1000KM [1 mega metre] of the destination
- Travelling at under 1000KM per second

Whilst all of these requirements are being met a "**SAFE TO DISENGAGE**" will display on the Pilot's Interface. Use **ENGAGE FRAME SHIFT DRIVE** to perform a precision destination drop.



Standard Drop: At any point during super cruise a ship can safely exit and drop out into normal space. Throttle down to zero (30KM per second) and use ENGAGE FRAME SHIFT DRIVE to drop out of super cruise in deep space.

Stellar Body Impact: A ship's frame shift drive will fail if the ship travels too close to a stellar body such as a star, planet or moon. When a ship is about to breach this threshold an impact alarm will sound in the cockpit. The ship will then perform an emergency drop out of super cruise.

Emergency drops allow ships to exit super cruise immediately. However, the violent nature of this event will damage the ship's hull and modules, and upon entering normal space the ship will have an unexpected velocity and spin.

Manual Emergency Drop: At any point during super cruise when travelling at above minimum speed, use ENGAGE FRAME SHIFT DRIVE twice to manually trigger an emergency drop. Note that manually triggering an emergency drop will still damage the vessel and its modules.

Interdiction: Some ships are fitted with special modules called Interdictors. These modules are used like weapons in super cruise and can drag a targeted vessel out of super cruise along with the interdicting ship in a joint emergency drop.

When successful interdiction occurs both ships will suffer hull and module damage.

Frame Shift Cool Down: Once you exit from super cruise there is a short delay before you can activate the frame shift drive again. Normally this delay is no more than 5 seconds or so. If however, you performed an emergency drop, the frame shift drive will need to reset and the delay will be around 40 seconds. Whilst the frame shift drive is in cool down an indicator will display in the Pilot's Interface.

Cancelling the Frame Shift: At any point up until the five second countdown starts you can cancel the frame shift by using ENGAGE FRAME SHIFT DRIVE again. Once the five second countdown begins you are locked in for the ride.

INTERDICTION



Pilots need to be aware of a specific threat whilst travelling in super cruise. Ships fitted with specialised modules can lock a vessel into their targeting computer and attempt to drag both themselves and the target out of super cruise to the same location in normal space.

Such an act is called Interdiction.

When your ship is interdicted, a specific canopy HUD element is displayed. This comprises of an Escape Vector, and alignment rings. Attempt to pilot your ship so that you are aiming directly at the Escape Vector at all times. Doing so keeps your ship travelling at super cruise.

The alignment rings will tighten and highlight when your ship is correctly aligned. They will disperse as your ship becomes out of alignment.

The aggressor will be attempting to keep your ship centred in their own display.

A blue bar to the left of the alignment rings will build as you outperform the aggressor. A red bar to the right of the alignment rings will build as your opponent outperforms you. If your flying is comparable both bars will normalise at half way.

Should your bar reach maximum you will avoid being interdicted. The aggressor however, will still be forced to perform an emergency drop. Should your opponents bar reach maximum you will be interdicted – both ships will perform an emergency drop out of super cruise to the same location in normal space.

When two pilots are evenly matched, interdiction can take continue for some time. As time passes, the interdiction effect becomes more volatile, meaning that smaller and smaller mistakes will have a more significant effect.

HYPERSPACE JUMPS

The frame shift drive can be activated to compress space to the point where ships can travel light-years in seconds, jumping from one star system to another in moments. Such travel is known colloquially as a hyperspace jump.

Hyperspace jumps are inherently imprecise. Only stars can act as large enough targets. Therefore all hyperspace jumps can only be used to travel to the primary star in a system; upon arrival the ship will drop out at a random position around the star.

Like using super cruise, there are a number of steps and rules governing a hyperspace jump. These are duplicated below for ease of reading:

USING THE FRAME SHIFT DRIVE TO PERFORM A HYPERSPACE JUMP

Mass Lock: Like preparing for super cruise, before you can engage the frame shift drive you must ensure that your ship is not mass locked by a large structure such as a starport or outpost. Your ship's mass lock status is displayed on the Pilot's Interface, to the right of your ship schematic.

If the mass lock indicator is lit, you will need to travel away from the entity that is mass locking you using the ship's conventional drive until the indicator light goes out.

Retract Hardpoints/Gear/Cargo Scoop: Even more stress is placed on a ship's hull during a hyperspace jump; you must retract your hardpoints, landing gear and cargo scoop before you can activate the frame shift drive.

Use **DEPLOY HARDPOINTS** to retract hardpoints that are already deployed.

Use **LANDING GEAR** to retract landing gear if deployed.

Use **CARGO SCOOP** to retract your cargo scoop if deployed.

Drive Charge: Assuming the ship is not mass locked, use **ENGAGE FRAME SHIFT DRIVE** to activate the frame shift drive. A canopy HUD charge bar indicator will display, showing the remaining time before the frame shift drive will compress space.

Unlike super cruise, a hyperspace jump drive charge time is never affected by other vessels; the compression effect required for such dramatic compression overwhelms the mass effect of ships. A hyperspace jump always takes 15 seconds to charge.

Destination Alignment: Unlike super cruise, a hyperspace jump must have a star system locked into your ship's navigation computer. You can use Pilot's Interface Focus Mode and select a nearby star system from the Navigation Tab of the Target Panel, or select a star system directly from the galaxy map.

Before the hyperspace jump can occur, you must align your ship so that it is facing the target destination, represented as a canopy HUD element.

To help you locate the target destination when it is not initially visible, the nav-compass will activate when you have a star system locked into your navigation computer.

Line of Effect: You must have direct line of effect to the target destination star system. If the line of travel is blocked by a local body, such as a star or planet, the jump will not initiate.

You will need to super cruise to a point in the system where you have direct line of effect to the target destination star system and try again.

Throttle Up: Once all requirements have been met, throttle up and fly straight towards the target to initiate the hyperspace jump.

Cancelled a Hyperspace Jump: Once the 5 second countdown begins you will not be able to cancel the process. Before this point you can cancel a hyperspace jump by using **ENGAGE FRAME SHIFT DRIVE** again.

The jump itself will take a short amount of time, after which you will arrive at the destination star system near its primary star, in super cruise. Note that you should take care to avoid flying too close to the star on arrival.

Hyperspace Jump Economy: Note that the amount of fuel used in a hyperspace jump is not a linear equation. As the jump distance increase, the fuel costs increase exponentially.

Also note that each frame shift drive has a maximum single jump range. Regardless of how much fuel your ship carries in its main tank, each individual hyperspace jump you make cannot exceed the maximum jump range of your frame shift drive module.

FRAME SHIFT WAKES

When ships enter or exit super cruise, and when they perform hyperspace jumps, they leave a cloud of particulates that are known as a frame shift wake.

Frame shift wakes dissipate after a time, but whilst they exist they can be used by pilots with the correct level of skill and equipment.

There are two types of frame shift wake:

- Low Energy FSD Wake: Left by ships entering and exiting super cruise inside a star system
- High Energy FSD Wake: Left by a ship when it performs a hyperspace jump to a new system

LOW ENERGY FSD WAKE

Any pilot can lock a low energy FSD wake detected in normal space into their targeting computer. Doing so will allow them to jump to super cruise with an enhanced probability of entering super cruise near nearby the ship that left the wake.



All a pilot needs is to activate the frame shift drive with the low energy FSD wake locked into the targeting computer. Use **ENGAGE FRAME SHIFT DRIVE** to engage the frame shift drive whilst you have a low energy FSD wake locked into your targeting computer. Note that you must abide by all standard super cruise requirements.

Any pilot can lock a low energy FSD wake into their targeting computer detected whilst in super cruise. Doing so will allow the pilot to safely drop out of super cruise with an increased probability of appearing in normal space near the ship that left the wake.

When a low energy FSD wake is locked into the targeting computer in super cruise, your Target Information Panel in the Pilot's Interface will show the same additional elements that are displayed when you have a precise location targeted: alignment, distance and speed requirements.

As long as you are meeting these three requirements, you can use **ENGAGE FRAME SHIFT DRIVE** to safely drop out of super cruise into normal space, hopefully near the ship that left the wake.

With low energy FSD wakes, time is of the essence. The longer you take to utilise the wake, the less chance you have of arriving near your target.

HIGH ENERGY FSD WAKE

You can follow ships that hyperspace jump in a similar manner. However, to do so requires an advanced scanner, called an FSD wake scanner.



When you lock a high energy FSD wake into your targeting computer, it will initially display the destination as "unknown".

If you are able to complete a scan of the wake using a FSD wake scanner, it will update its description and display the system name that was jumped to.

With the scanned high energy FSD wake still locked into your targeting computer, use **ENGAGE FRAME SHIFT DRIVE** to perform a jump to the destination system, potentially near the ship that left the wake. Note that you must abide by all standard hyperspace jump requirements. You may not be able to perform the jump if your frame shift drive is inadequate.

In the case of all FSD wakes, time is of the essence. The sooner you utilise the wake and follow it, the greater the chance of arriving near the ship that left the wake.

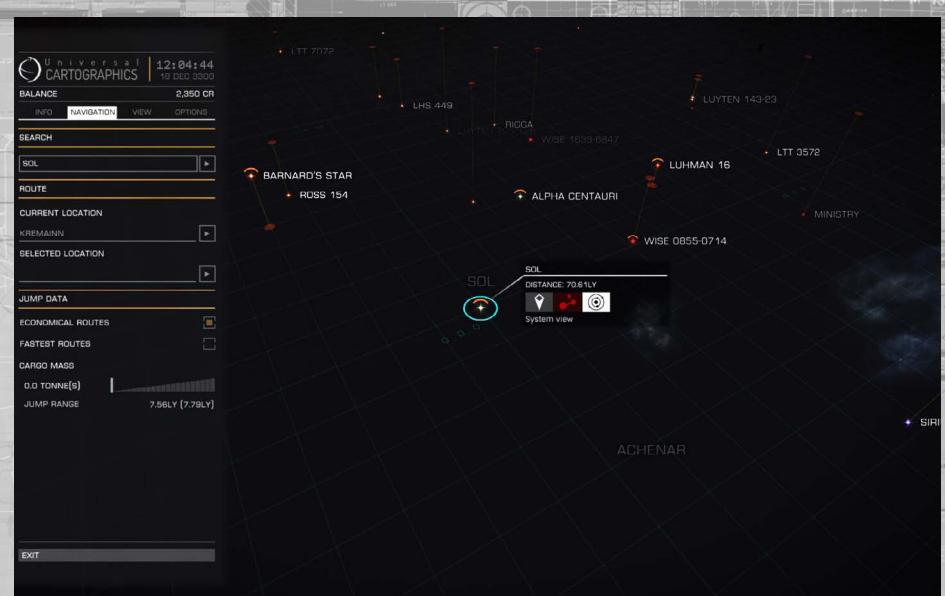
If you leave a high energy wake too long, your scanner may not be able to work out the target system destination.

GALAXY MAP

The following commands are used in the galaxy map:

Binding Name	Default K&M	Default Gamepad
GALAXY CAM PITCH UP	T	
GALAXY CAM PITCH DOWN	G	
GALAXY CAM YAW LEFT	Q	
GALAXY CAM YAW RIGHT	E	
G C TRANSLATE FORWARD	W	
G C TRANSLATE BACKWARD	S	
G C TRANSLATE LEFT	A	
G C TRANSLATE RIGHT	D	
G C TRANSLATE UP	R	
G C TRANSLATE DOWN	F	
GALAXY CAM ZOOM IN	Z	R-STICK Up/Down
GALAXY CAM ZOOM OUT	X	R-STICK Left/Right
GALAXY CAM PITCH AXIS	-	L-STICK Up/Down/Left/Right
GALAXY CAM YAW AXIS	-	X Button
GALAXY CAM TRANSLATE AXIS	-	D-Pad Up
GALAXY SERT Y to X AXIS	-	D-Pad Down
UI PANEL UP	W	D-Pad Left
UI PANEL DOWN	S	D-Pad Right
UI PANEL LEFT	A	A Button
UI PANEL RIGHT	D	RIGHT BUMPER
UI PANEL SELECT	SPACE	
NEXT PANEL TAB	E	LEFT BUMPER
PREVIOUS PANEL TAB	Q	

You can access the galaxy map by using the Pilot's interface Focus Mode, navigating to the Navigation Tab of the Target Panel, then highlighting and selecting the galaxy map button in the bottom left of the panel.



The galaxy map shows a three dimensional display of the galaxy. Star systems are displayed as star-like markers, along with their name. The star system you are currently in has a blue indicator above it.

Systems related to your current missions will have a globe icon next to them. If you own multiple ships, a ship icon will be displayed next to those systems where they are stored.

Blue lines emanate from your current system to nearby systems. These lines represent available systems that you can hyperspace jump to.

Dotted lines represent jumps that your ship could make but lack the fuel to perform.

On the left of the screen is a banner panel with several tabs. This panel is used to show useful information about star systems.

MOVEMENT IN THE GALAXY MAP

A horizontal grid-plane is present in the view. Star systems that are below or above this plane have vertical lines connecting them to it. The grid-plane is used as a floor along which a blue selector ring can move.

If you are using a keyboard, **GALAXY CAM TRANSLATE LEFT, RIGHT, FORWARD** and **BACKWARD** move the selector ring along the plane. Note that when the selector ring approaches the intersection point of a vertical line leading to a star it snaps to it.

If you are using a gamepad, use **GALAXY CAM TRANSLATE AXIS** to move the selector ring.

Note that when you are moving the selector ring along the plane it grows arrow indicators to indicate the axis of travel.



You can raise and lower the view and grid plane. For keyboard and mouse, use **GALAXY CAM TRANSLATE UP** and **GALAXY CAM TRANSLATE DOWN** to move the view and grid plane up and down.

If you are using a gamepad, hold Button X and use **GALAXY CAM TRANSLATE AXIS** to move the view and grid-plane up and down.

Note that when you move the selector ring grid-plane and view up or down it grows arrows to indicate the axis of travel.

You can zoom your view of the galaxy in and out. Using the keyboard and mouse, use **GALAXY CAM ZOOM IN** and **GALAXY CAM ZOOM OUT** to change the level of zoom.

If you are using a gamepad, use LEFT Trigger and RIGHT Trigger to zoom in and out. You are able to zoom to view the entire galaxy.

You can tilt your view of the galaxy. Using keyboard and mouse, **GALAXY CAM PITCH UP** and **GALAXY CAM PITCH DOWN** will pitch the view up and down.

If you are using a gamepad, **GALAXY CAM PITCH AXIS** can be used to pitch the view up and down.

You can rotate your view of the galaxy map around the centre point view of the grid plane. If you are using keyboard and mouse, **GALAXY CAM YAW LEFT** and **GALAXY CAM YAW RIGHT** will rotate the view.

If you are using a gamepad **GALAXY CAM YAW AXIS** will rotate the view.

GALAXY MAP SELECTION OPTIONS

You can highlight a star system by moving the selector ring over the point where it is joined to the grid-plane. Note that the ring has "stickiness" when approaching an intersection to aid in highlighting a star system.

Alternatively, when you can simply left click on the actual star system marker, the selector ring will automatically centre and highlight the star system's intersection point on the grid-plane.

Note that when a star system marker has been highlighted, several new elements appear on the galaxy map.

Interaction Menu: Next to the highlighted star system an interaction menu is displayed. This menu displays the distance to the system from your current location and features three buttons:

- Select: Use this button to select the system, marking it with an orange arrow indicator
- Plot Route : Use this button to plot a route to the system
- System View: Use this button to view the system map of the highlighted star system
- Buy exploration data: use this button to purchase exploration data about the highlighted system [note, you must be docked and the highlighted system must be within 20 LY or your current system]
- Buy Trade Data: use this button to purchase trade data about the highlighted system [note, you must be docked and the highlighted system must be within 20 LY or your current system]

Using mouse and keyboard, left click on a button in the interaction menu to activate it.

Using a gamepad, UI PANEL LEFT and UI PANEL RIGHT will cycle through the buttons left and right. UI PANEL SELECT will activate the highlighted button.

Purchasing Data: when you purchase trade or exploration data for a star system, the additional information will be automatically added to the associated interface panels.

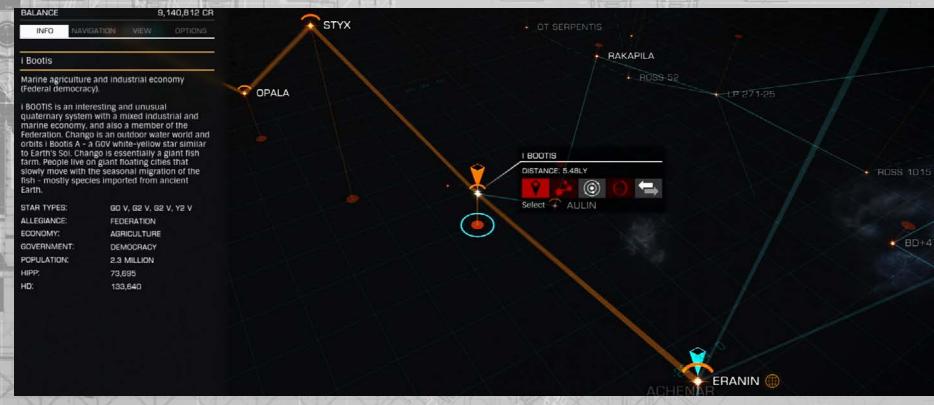


Route Plotting: When you plot a route to a system using the appropriate interaction menu button the lines describing the route will display as orange. It will also lock the first hyperspace jump destination into your navigation computer and select it in the galaxy map.

As you successfully make hyperspace jumps along the route, the next destination in the list will automatically be locked into your navigation computer and selected in the galaxy map.

In the Pilot's Interface Focus Mode Target Panel, on the Navigation Tab, the next destination in a plotted route will display a route plot icon next to it, should you need to locate it in the list.

Note that the route plotter has a limited range.



GALAXY MAP BANNER PANEL

The banner panel displays information about a highlighted system. There are four tabs on the panel. Use **NEXT PANEL TAB** and **PREVIOUS PANEL TAB** to cycle through the tabs.

In all tabs use **UI PANEL UP**, **UI PANEL DOWN**, **UI PANEL LEFT**, **UI PANEL RIGHT** and **UI PANEL SELECT** to highlight and toggle the options.

Alternatively, left click with the mouse on the option you wish to select/toggle.

Info Tab: This displays basic known information about the system, such as the star type, controlling government type, market economies present and population

Navigation Tab: This tab allows you to search for a specific star system by name [use **UI PANEL SELECT** on this option then type the name in using the keyboard].

It also allows you to quickly locate to your current system or your selected system.

Options here also exist to change the nature of the jump route from your current system, showing economical routes [smaller jumps] or faster routes [longer jumps].

Finally, this tab features a slider bar that lets you check jump ranges and routes assuming different cargo loads. Slide the orange marker along the bar to the right to simulate carrying more cargo. Slide the orange marker along the bar to the left to simulate carrying less cargo. The blue marker displays your actual cargo weight.

View Tab: This tab allows you to set various filters on information displayed on the galaxy map.

You can use these options to show factional allegiance of star systems and known trade routes between them. Note that these trade routes represent all ships trading between systems, not just other human Commanders.

When you purchase trade data for a system it is represented as trade routes on the View Tab, visible when trade data has been selected.

Trade commodity categories can be expanded by clicking the arrow next to each group.

Options Tab: This tab features a number of visualisation options for the galaxy map.



SYSTEM MAP

The following commands are used in the system map:

Binding Name	Default K&M	Default Gamepad
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-Pad Right
GALAXY CAM TRANSLATE AXIS	-	L-STICK Up/Down/Left/Right
GALAXY CAM ZOOM IN	Z	-
GALAXY CAM ZOOM OUT	X	-

You can use the system map to view known stellar bodies in a star system. It comprises of a two dimensional view of the system, displaying stellar bodies linked by their orbits. In the centre of the view is a square selector.



MOVEMENT IN THE SYSTEM MAP

Using keyboard and mouse, **UI PANEL DOWN**, **UI PANEL UP**, **UI PANEL LEFT** and **UI PANEL RIGHT** move the view around, whilst **GALAXY CAM ZOOM IN** and **GALAXY CAM ZOOM OUT** zoom the view in and out.

Alternatively, hold both left and right mouse buttons then move the mouse to manipulate the view and zoom in and out using the mouse wheel.

Finally, you can simply left click on a stellar body or structure to snap the square selector's focus to it.

When using a gamepad, use **GALAXY CAM TRANSLATE AXIS** to move the view around and use **LEFT** and **RIGHT TRIGGER** to zoom in and out.

Note that the square selector is sticky as it approaches stellar bodies and man-made structures, snapping to focus on them.

SYSTEM MAP BANNER PANEL

To the left of the screen is a Banner Panel that displays information about the current entity the square selector is focused on.

When nothing is the focus of the square selector the banner panel displays information about the system as a whole. This includes a brief description of the system and details of the factions that are present within it.

Focusing the square selector on a stellar body offers information about its composition.

Focusing the square selector on a man-made structure details the faction that currently controls it, trade data and prohibited commodities (if known) and orbit data. If you have one or more ships stored at a starport or outpost, it will be indicated by a ship icon here.

If you have purchased exploration data about a system, it will be displayed here as stellar bodies that were previously unknown to you.

COMMUNICATIONS

The following commands are used during comms:

Binding Name	Default K&M	Default Gamepad
QUICK COMMS	ENTER	ENTER
UI FOCUS	HOLD LSHIFT	X Button
UI FOCUS/BACK	LSHIFT	B Button
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-Pad Right
UI PANEL SELECT	SPACE	A Button

Your ship features a comms array that lets you communicate with other Commanders. The Comms Panel is displayed in the Pilot's Interface in the top left corner of the view.



There are two main ways to interact with the Comms Panel. You can access quick comms mode by using **QUICK COMMS**. This activates the comms chat window and set the keyboard into typing mode.

When you are done typing your message, press **QUICK COMMS** again to send the message to whatever ship or structure you have locked into your targeting computer. Note that at this time, only human Commanders can receive messages.

COMMS PANEL AND COMMANDER LIST

The second method to access your Comms Panel is to use the Pilot's Interface Focus Mode and navigate to the panel [whilst holding **UI FOCUS**, tap **UI PANEL UP**, then release all commands].

Accessing the Comms Panel by this method will also summon a Commander List element to the right of the Comms Panel.

Use **UI PANEL LEFT** and **UI PANEL RIGHT**, to select either the Comms Panel or the Commander List. Use **UI PANEL UP** and **UI PANEL DOWN** when the Comms Panel is selected to scroll up and down the message history.

You can scroll down past the latest message to select comms chat, note that the comms chat section at the bottom of the Comms Panel highlights blue. Type a message then press **QUICK COMMS** to send it to the ship currently locked into your targeting computer and exit the Comms Panel.

CHAT CHANNEL

Should you receive a hail request from a Commander you will receive audio notification and the Commander's Name will be highlighted. You can use the interaction menu for that Commander to either accept or refuse the hail.

If you accept a hail you will open an audio chat channel between yourself and the Commander. You can use the interaction menu for the Commander to exit this chat channel at any time.

Up to six Commanders may be invited to a chat channel.

BLOCKING A PLAYER

When you block a player, not only do you not receive any further communications from them, you also strongly decrease the chance of meeting them again when entering or exiting super cruise, arriving from a hyperspace jump or flying in normal space.

REPORTING A PLAYER

When you report a player you will be required to fill out a report sheet which is sent to Frontier Developments Plc. You will be asked to detail why you are reporting the player. Please reserve player reports for clear breaches of conduct. Elite: Dangerous' code of conduct can be found here: <https://store.elitedangerous.com/code-of-conduct>

STARPORT SERVICES

The following commands are used in starport services:

Binding Name	Default K&M	Default Gamepad
UI PANEL UP	W	D-Pad Up
UI PANEL DOWN	S	D-Pad Down
UI PANEL LEFT	A	D-Pad Left
UI PANEL RIGHT	D	D-Pad Right
UI PANEL SELECT	SPACE	A Button
UI BACK	BACKSPACE	B Button

When you are docked at a starport or outpost, you can use UI PANEL UP and UI PANEL DOWN to highlight the starport services option and initiate the starport service link. This feeds a special starport services interface into your cockpit.



Use **UI PANEL UP**, **UI PANEL DOWN**, **UI PANEL LEFT**, **UI PANEL RIGHT** to navigate the interface and **UI PANEL SELECT** to select options. You can use **UI BACK** to go back a step in any interface page.

There are several pages to this interface. Note that at different starports and outposts, some services may not be available.

Home: This page details basic information about the starport, your career and ship, and might also offer refuelling and basic repairs and munitions resupply for Commanders who are short on time.

It also displays a news feed; you can select a news item to learn more details.

Munitions: If available, allows you to resupply individual modules which require ammunition or resources to function.

Repairs: If available, allows you to repair modules and hull health individually.

Bulletin Board: If available, displays contracts that are available from this starport. You can select a contract to learn more details and potentially accept it.

Contacts: If available, displays a list of individuals and organisations that you can contact for a variety of services, including claiming bounty payment and clearing your own bounties and fines, and visiting the local black market.

Note that not all contacts are available at all starports or outposts.

Outfitting: if available, allows you to visit the workshop hangar and purchase and sell modules for your current ship.

Shipyard: If available, allows you to purchase a new ship. You will be presented with options to trade in your old ship or store it at this starport/outpost.

Commodities Market: If available, allows you to buy and sell commodities from the local market.

Universal Cartographics: If available, allows you to sell exploration data you have obtained during your travels.

OUTFITTING

When you access outfitting, your ship is transported to the workshop hangar and you are presented with the outfitting interface.



In the bottom right of the view an overview panel displays basic information about the weight of your ship, its potential power draw, cargo capacity and jump range.

As you browse modules to buy and sell, you can see the effect such actions will have on these statistics, represented by red values and a down arrow (the statistic is adversely affected) and blue text with an up arrow (the statistic is improved).

The outfitting interface has three tabs:

Hardpoints: This displays a list of all hardpoint entries available on the ship and the modules (if any) fitted to them. Each entry displays the following data:

- *Module Name:* The name of the fitted module
- *Mount Type (if appropriate):* The mount type (fixed/ gimbals/ turret) of the module
- *Hardpoint Name:* The name of the hardpoint
- *Module Rating:* The effectiveness rating of the module
- *Module Class:* The size of the module

Selecting an entry expands it to show the mass of the module and interaction options:

- *Buy and Equip:* Browse the list of available replacements for this hardpoint
- *Sell:* Sell the module fitted to this hardpoint
- *Swap:* move the module to another suitable hardpoint. If the hardpoint has a module fitted, swap them

When you choose to buy a new module for the hardpoint, the interface alters to display a list of modules available at this starport or outpost that can be accepted by the hardpoint. You can highlight a module to view additional statistics in a companion panel.

Modules that are too expensive are displayed in red.

If the starport or outpost has modules for a specific hardpoint, the hardpoint's entry will gain a blue "+" indicator at the top right edge of the entry.

Internal: Much like the hardpoint interface, the internal interface displays a list of internal ship compartments and modules fitted in them, where applicable.

Some compartments can only accept a subset of modules. For example, the reactor bay can only accept power plant modules. Other compartments are generic and can accept a range of modules.

The same options apply as the hardpoint interface. The only caveat is that mandatory modules cannot be sold; only upgraded, by buying and fitting a new module of the appropriate type.

Livery: This interface has an entry for each decal that may be placed on the ship, as well as entry for a paint job. You can choose which decals and paint job you want to apply to the ship using this interface.

GOODS	VALUE [CR]					GALACTIC AVERAGE
	SELL	BUY	CARGO	DEMAND	SUPPLY	
CHEMICALS						
EXPLOSIVES	182	195	-	-	149,141 HIGH	280 CR
HYDROGEN FUEL	90	93	-	-	145,612 HIGH	116 CR
MINERAL OIL	204	-	-	138,233 LOW	-	172 CR
CONSUMER ITEMS						
CLOTHING	188	202	-	0 LOW	58,301 HIGH	287 CR
CONSUMER TECHNOLOGY	7,054	-	-	3,838 MED	-	6,697 CR
DOMESTIC APPLIANCES	546	-	-	4,101 LOW	-	495 CR
FOODS						
ALGAE	147	-	-	12,247 LOW	-	111 CR
ANIMAL MEAT	1,320	-	-	3,927 LOW	-	1,269 CR
COFFEE	1,320	-	-	988 LOW	-	1,258 CR
FISH	420	-	-	10,972 LOW	-	382 CR
FOOD CARTRIDGES	34	44	-	-	32,518 HIGH	112 CR
FRUIT AND VEGETABLES	330	-	-	3,543 LOW	-	289 CR
GRAIN	219	-	-	23,843 LOW	-	183 CR
SYNTHETIC MEAT	326	-	-	4,575 MED	-	240 CR
TEA	1,496	-	-	3,563 LOW	-	1,443 CR

The trading interface lets you buy and sell commodities. It is laid out in spreadsheet format, with a description panel on the far right.

You can highlight a commodity to see details about it in the description panel.

Selecting a commodity causes a transaction panel to appear, where you can buy or sell commodities as appropriate.

Note that not all commodities are available to buy and sell at all markets.

Note that the market economies are dynamic, affected by the trade of other Commanders and events that occur in the system.

Galactic Average: the galactic average column shows the average price that a commodity is currently worth. You can select the galactic average to summon a drop down list of recently visited markets and markets for which you have purchased trade data.

Selecting an entry replaces the galactic average with notations describing whether the selected system imports or exports the commodity.

CLOTHING		CONSUMER ITEMS
SELL TO MARKET	188 CR	BUY FROM MARKET
	202 CR	
Even in the 3rd century, fashion is continually changing, driving purchases of new clothing for those with some credits to spare.		
SUPPLY	58,301	
CARGO	-	
IMPORTED FROM	YAKUBGAI, CHAMUNDA	
EXPORTED TO	EKONIR, KINI, UZUMERU, LTT 18480, ERAVATE, MBUKURAU LHS 3437, APOYOTA, POTRITI	
SIDEWINDER CARGO SPACE	0 OUT OF 4 US	
CMDR TERRY BAD BALANCE	2,350	

As a newcomer to the life of a starship pilot, and as a new member of the Pilot's Federation, please read the following short guides for additional information you may find useful in your travels across the galaxy.

THE GALAXY IS REALLY BIG

The galaxy you inhabit is comprised of billions of stars. The massive majority are as yet unexplored by any spacefaring nation. Yet even the tiny portion of the galaxy we called inhabited space comprises of thousands of star systems across a distance of hundreds of light-years.

Inhabited space has remained fairly static, but now, with the invention of the frame shift drive and its ability to warp and compress space shortening journey times that used to take weeks into mere moments, humanity stands on the threshold of a new golden age of discovery and expansion. And with all such game-changing events, the grand spider web of interstellar politics that entangles every spacefaring nation vibrate and sing. Strands will snap, breaking old alliances and shattering schemes, and form, weaving new bonds and spawning new plots.

It is an exciting time to take the first skyward step into a greater world, but a dangerous one too.

FACTIONS



Currently, much of human space is at peace; the cold war between the two great factions of the Federation, the oldest interstellar nation, and the Empire, born out of brutal secession from it, has thawed somewhat, but the potential for a crisis is still there.

The constant proxy and low intensity conflicts of the previous decades have now reduced in number and relations have stabilised. It's not a total peace; here and there some conflicts smoulder. A new player has made their presence felt. In a short period of time the Alliance has expanded from a handful of worlds to a much larger coalition of systems, united politically for stability. This has forced the two older powers into realising they no longer dominate.

The independent systems still constitute the bulk of the human inhabited systems. They bring a rich tapestry of cultures and beliefs to the dark of space. From these worlds individuals and governments seek new opportunities deep in unexplored space.

REPUTATION

On your travels, you may encounter many factions, vying for control of a single outpost to domination of multiple systems. Beware how you deal with such entities. Every contract you succeed, fail or betray, every ship you attack, all the profits you make and lose, can affect your reputation.

Gaining reputation can offer many benefits, from reduced costs specialised ships to temporary alliances, whilst losing it can incur serious penalties, spiralling down to open hostility. The trick is deciding who to side with and who to side against, for now man can be friends with everyone; choices will always have to be made.

You can gain and lose reputation with minor factions and the three great nations. You can also attempt to curry favour and progress through the ranks of the Federation and Empire navies.

INFLUENCE

One faction always has overall control within a system. However a system may contain several factions vying for control. Such factions have an influence rating that describes their current power within the system.

By supporting factions, you can increase their influence, potentially causing a change in system control by either peaceful means or violent civil war.

THINGS TO DO

There are many activities and professions available to you, and you are free to try all and any of them, reaping the rewards and suffering the consequences.

The Pilot's Federation does not judge you on your morals but on your ability. You will be closely monitored and ranked in levels of excellence with regards to combat, trading and exploration.

Only a select few manage to reach the rank of Elite in a single skill, and even less are able to show perfection in all areas.

The following are some example professions along with starting advice and instruction.

TRADING



The potential to make your mark (and your fortune) may reside in your uncanny ability to rub two credits together in trade, and finish the deal with three in your hand.

There is no entry restriction to trade other than starting capital, and at its core is a simple, fundamental truth: buy low and sell high. As a trader you will need to carefully study market economies in the systems you pass through.

Learn to spot not just the changing prices of commodities as they are traded between systems, but also the states and events in those systems that might spell the once in a lifetime opportunity – or hide the trapdoor to spiralling debt.

SMUGGLING



Some decide that borders and regulations are for other people. As a smuggler, you take your search for riches beyond the bounds of the law. The rewards can be great, as can the penalties for being caught red handed.

You must learn to avoid detection and seek out the most valuable prohibited and stolen goods to sell on the black market. And you will master the art of flying with one eye constantly looking behind you.

Smugglers tend to trade in smaller quantities than traders; ships that are fast and can run cold are especially useful, for the very best smuggler is usually the one that got away.

PIRACY



There are those who laugh at the rules and precepts of society, scoffing at their reputation among law abiding folk, sometimes even revelling in the fear they inspire in their wake of crime.

All pirates view anything they can take by force as theirs by right, but to become the best pirate you will learn to understand the need to balance reward against risk, learning to farm traders on the trade routes you haunt, rather than slaughter them in wanton bloodlust that will lead to violent retribution.

In addition to skewed morals, a pirate might need to invest in a number of different ship modules to get the best out of this profession. An interdictor device will allow you to drag your hapless victims out of super cruise, and hatchbreaker limpets will allow you take what you need without causing undue damage.

BOUNTY HUNTING



In almost direct opposition to the pirate, the bounty hunter plies their trade across the galaxy, hunting down and dispatch lawbreakers for cold, hard credits. To those able to bring low the greatest of villains go the greatest rewards.

As a bounty hunter, you will need to decide just how far you are willing to push in order to dispense your personal justice. For those who are criminals in one system might be heroic defenders in another, and sometimes enforcing one law might mean breaking another.

As well as the constant threat of violent death at the hands of a criminal whose ability and ship outclass your own, as a bounty hunter you will learn to understand that for every faction you befriend with your help, you are increasing the hatred of another.

Anyone can try their hand at bounty hunting, but if you intend to take it seriously, you might want to consider a FSD wake scanner that will allow you to doggedly track down your prey.

EXPLORATION



With the advent of the frame shift there has never been a better time to join the hallowed ranks of the great space explorers. As well as the wonder of vistas unseen by human eyes, there is money to be made collecting data for the mega-corporation Universal Cartographics.

Perhaps more than any other profession, the explorer understands the long term risks of space travel, and acts accordingly. You will also need to become a jack of all trades, able to turn your hand to any number of short term contracts, as you understand that staying on the move over great distances can shut off opportunities just as fast as it can reveal them.

Explorer vessels should excel at travelling great distances, so a big fuel tank and power frame shift drive are desirable. However, perhaps your closest friend might be a fuel scoop, allowing you to refuel for free, if you are brave enough to use it.



The life of a miner can be dangerous and even frustrating as they search for the "motherlode". It is also has a reasonably expensive entry barrier; your ship will need to be fitted with both a mining laser and a refinery module.

You will need to travel far in your hunt for asteroid belts and clusters rich in mineral resources. And should you manage to fill your hold, you need to be canny or strong enough to make it back to port where you can sell your refined resource.

Mining is definitely not for the faint of heart, or impatient. But for the skilled and patient miner, the chance exists to do something almost unheard of in the galaxy: generate a fortune from nothing more than cold dead rock.

It is important that you are aware of how crime and punishment operates across the galaxy, if you are to avoid falling foul of its intricacies.



JURISDICTIONS

In normal space you will often be flying within the jurisdiction of a minor faction that controls the local space. Most systems have one faction that is in overall control. All space within the system falls under its jurisdiction except the areas of space around starports and outposts that are controlled by different factions.

The faction whose jurisdiction you are in is displayed in the Pilot's Interface, at the bottom of the Target Information Panel. Any crimes you are detected committing in this location will be against the jurisdiction's controlling faction.

Any bounties or fines issued against you will be from this faction.

Some systems and areas within systems have no form of working government. This includes anarchies, where the controlling government is criminal or is suffering collapse, empty systems where there is no form of government at all, and warzones, where normal laws are suspended in the fight for supremacy.

In such locations, there is no law. No crimes are detected or logged. Take due care and attention when travelling in such areas.

CRIME

There are a number of ways that your crimes might be detected. The most obvious path is that you commit a crime directly against a vessel in jurisdiction. The vessel will squawk the crime to the faction authorities and you will instantly have a bounty issued against you.

The crimes of transporting stolen or illegal goods will only be detected by a successful cargo scan, carried out, by an authority vessel; you will receive a fine or bounty immediately. Commanders may perform cargo scans and see that you are carrying stolen goods, but it does not log a crime.

Criminal dumping crimes will only be detected by authority vessels that have resolved you as a contact.

Starport and outpost crimes [such as firing within the no-fire zone of a starport] will immediately be detected and action taken.

LAWS

Most systems share laws, though they may have differing penalties for breaking them. The following is a list of common laws:

- **Assault:** The act of shooting and hitting a ship that is not wanted in the local jurisdiction
- **Murder:** The act of destroying a ship that is not wanted in the local jurisdiction
- **Carrying Stolen/Illegal Goods:** The act of being scanned by authorities whilst carrying stolen/illegal goods
- **Firing in a No-Fire Zone:** The act of firing, without hitting a target in a starport or outposts no-fire zone
- **Loitering in an Airlock or over a Docking Pad:** the act of spending too much time in a starport's airlock or above a docking pad that has not been allotted to you
- **Illegal Dumping:** The act of jettisoning cargo near a starport, or being detected jettisoning toxic waste

FINES AND BOUNTIES

Some crimes are considered "lesser" infractions of the law. For committing a lesser crime, you can expect to be issued a fine by the faction controlling the jurisdiction you were detected committing the crime in.

Fines must be paid to a local security office or liaising official, available in the starport services "contacts" page. Should you fail to pay a fine within twenty four hours [real-time], it will be converted into a bounty, issued against you.

Should you be detected committing a greater crime [in most systems, violent crime fall into this category], then a bounty will be issued against you.

Having an active bounty means that you will be "wanted" in any jurisdiction controlled by that faction. Ships that perform a basic scan will learn of this criminal status and be allowed to attack you with impunity. If you fight back you will likely be committing even more crimes.

A bounty will be cleared if a Commander kills you – they will receive a bounty claim that they can cash in at a starport or outpost.

If your ship is destroyed, your personal escape system will kick in and eject you from the ship, micro-jumping you to the last starport you docked in, where you will be processed by the authorities and your insurance company.

If you have an unclaimed bounty or fine issued against you by the faction controlling the starport you are out of luck – you will need to pay off the bounty as part of the costs of getting a replacement ship. If you have unclaimed bounties and fines issued against you by factions that do not control the starport then you have a stay of execution: those bounties and fines will become dormant as those factions believe you dead.

Dormant bounties and fines are invisible to Commanders. Dormant fines do not tick up towards becoming a bounty. However, if you are scanned by authorities of the faction that issued the bounty or fine, or detected committing a crime in their jurisdiction, the dormant bounty and fine will reactivate.

INSURANCE FEES

Your first ship is essentially on loan, and covered by a comprehensive insurance policy, ensuring that you only have to pay a bounty or fine to be issued with a replacement.

Any modules you purchase and fit to this ship are covered by a lesser insurance – should they need to be replaced you will have to pay a premium excess.

Should you purchase a ship, then this too is covered by a lesser insurance policy – should it be destroyed, you will need to pay a premium excess for it and all modules fitted.

Although the premium excess fees are only small fractions of the ship and modules' actual worth, the resulting bill can still become significant, potentially more than you can afford.

In such circumstances you have a number of options. Assuming you have enough to cover the hull cost [which includes all mandatory modules], you can choose not to pay for optional modules, reducing the cost.

You have access to a creditor who can lend you up to 200,000CR. If you take this option, any credits you make will have 10% deducted at source until the debt is paid.

If you have ships in storage, you can choose to abandon your current vessel claim and select a ship in storage to activate.

If you have no ships and not enough credits to even pay the bounty or fine you owe at the starport or outpost you arrive at after your ship has been destroyed, you are declared bankrupt. All debt and crimes are cleared and you are transported to your starting location where you receive a new loaned starting ship.

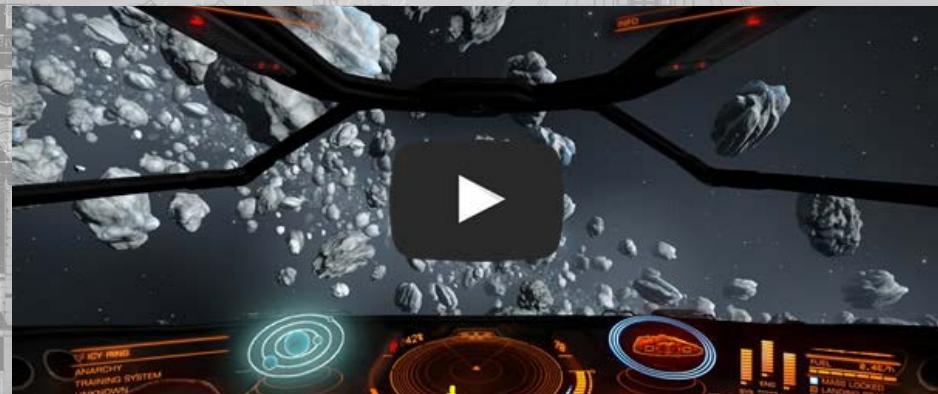
Effectively, your career is reset, but note that you retain all reputation and rank gained/lost [to clear your career completely you will need to clear your save from the main menu].

PILOT TRAINING

Videos can be found at: www.elitedangerous.com/guide/training

1. BASIC FLIGHT CONTROLS

In this Pilot Training video you will learn basic flight controls and manœuvres.



2. DOCKING

In this Pilot Training video you will learn about the basics of docking with a Starport.



3. TRAVEL

In this Pilot Training video, we take a look at travel. Learn about using the Frame Shift Drive (FSD) to supercruise between planets and jump between star systems. The tutorial also explains the nuances of normal flight, supercruise and hyperspace jumps.



4. BASIC COMBAT

In this Pilot Training video you will learn the following:

- How to use the scanner
- How to target ships
- How to divert power around systems in your ship
- Basic flight maneuvers including turn rates



5. STARPORT SERVICES

In this Pilot Training video you will learn about services available at Starports and Outposts.



NOTES

5. GALAXY AND SYSTEM MAP

In this Pilot Training video you will learn basic features of both the galaxy and system maps.





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