THE JUMPGATE

DEFINITIVE GUIDE

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And all the Pilots I have forgotten to thank!

FACTIONS

Solrain:

Medium-fast ships, heavy, fast-recharging shields. A little light on firepower, lots of flexibility in ship loadout because of a large number of MODx slots. (MODx are worth reading up on in JOSSH). All Solrain ships have buckets of cargo space... the Solrain Fighter-class ship, the Intensity can carry a full set of equipment in it's hold to re-equip a downed squadmate. The Solrain Bomber and Medium Fighter are top-of-the-line, and they have a good Light Transport as well. Solrain ships are fairly forgiving for a new pilot; the glut of Flashfire MODxes they can equip can ensure their survival in situations where any other ship would be gunned down before it could escape. Solrain ships often utilize hit and run techniques in combat to gain the maximum advantage from their fast-recharging shields. Solrain ships can generally re-equip to a fairly good degree from their home stations. Solrain are typically RPed (Roleplayed) as greedy, profiteering traders. Which they are. Assassins, Mercenaries, Pirates, Traders, or Factionalists. To piss off a Solrain pilot, call him a Smurf.

Quantar:

Usually have the fastest ships in a given class. They also have a medium load-out of MODx slots. Quantar ships rely on maneuvrability to evade incoming fire; the Quantar fighters, the Typhoon, is an ideal wolf-pack ship. Their speed can carry them out of most trouble; only scouts or an Intensity can really catch them up, and if you are a skilled pilot, you can evade and escape from those also. The Quantar level-3 ship, the Gust, is an amazing combat vehicle simply because it is so small. It is almost impossible to hit with ammo weapons, and can accelerate amazingly quickly, plus can spin on a dime. The Quantar cargo tow is slower than the others, and is generally felt to be sub-standard. The Quantar Light Transport frankly kicks ass. It can carry the same number of missiles as a Solrain Bomber, and boasts two large-size gunmounts as well as a decent turn of speed and hefty armour. The Quantar Medium Fighter and Bomber both rock as well. Quantar ships require a high level of skill to get one-on-one kills against a ship of equivalent type, but they are very good in wolfpacks. Quantar ships usually have more armour than Solrain ships, but the same shielding as Octavian ships (less) One problem with the Quantar fighter is it's reliance on a powerplant from Amanath, that is massively expensive and requires a trip through dangerous unregulated space to obtain. Quantar combat squads are normally RPed as religious zealots. There are, of course, plenty of Quantar traders and factionalists as well. And miners. Miners are wierdos. The derogatory name for a Quantar is "Rocklicker" or something of this vien.

Octavians:

Octavian design philosophy is basicly that bit from the Matrix;

"What do you need?"

"Guns. Lots of guns."

Yeah, so it isn't subtle, so sue me. Try and sue me, and I'll blow you up. That's pretty much Octavians for you. Octavian ships forgo speed, shielding, cargo space and MODx slots for Guns, Armour and Power. The Octavian Fighter, the Phoenix, is the slowest, with the least MODx slots. It is very good as acting as a target for missiles. However, getting in front of it is a mistake that you will regret. Note that you won't regret it for very long The Raptor Bomber is in a similar vien, but it's even slower, and you'll have even less time to regret your mistake in. This is compensated by the fact that it's the size of a reasonably large moon. Anyone failing to hit a Raptor needs an urgent sight test and/or amputation of the head due to unreasonable levels of incompetance. The Octavian Light Transport is a pile of rubbish that is affectionally known as the 'Turkey' or 'That Piece Of Shit'. The Octavian Cargo tow is great, the Light Fighter is rather shoddy, and the less said about the Albatross, the Octavian level 3 ship, the better. The Octavian Scout is really the shining star of the Imperial Navy; it's the fastest ship in the entire game and wolfpacks made up of 5-6 scouts can tear apart a force many times their size. The one problem with it is that the shielding is slightly less effective than tissue paper and they can be swatted out of the sky amazingly quickly, if you can hit them. Octavians are usually roleplayed as factionalists, mercenaries, or Psychotics. If you want to piss off an Octavian, don't bother; it'll all end in tears. Well, blood, more likely, but there you go.

I'm Octavian and I'm a hard-line factionalist borderline-psychotic. Nice to meet you. *twitches while drooling on keyboard*

DOCKING

IMPORTANT!

Important for all Jumpgate Pilots. This is the first thing you will need to know when you finally launch into space.

1) **Target the Station**
2) **Look for the GREEN rings projected from the station**
3) **Maneuver yourself into the rings**
4) **Come to a FULL STOP**
5) **Point yourself at the center of the tube at the apex end of the rings**
6) **Proceed at UNDER 100v, for those still learning, I suggest under 50v**
7) **Look out for 'Bumps' from other ships**
8) **Enter tube without clipping the sides**
9) **Docking Successful.**

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Internal JOSSH Device

*Welcome Recruit. This is **Solder Ronin** speaking, sectional leader of the TRI Department for Novice Pilot Affairs. I have been charged with educating you about TRI's JOSSH system. There's a lot to learn, so pay attention! With a little work on your part, we'll have you up to speed in no time. Are you ready, recruit?*

The following documentation will briefly describe the internal JOSSH device. This guide will teach you what to expect from JOSSH and how to find what you're looking for.

Internal JOSSH Device

Upon entering a station or outpost your internal JOSSH device will automatically open and present a multitude of options. This device provides many more options than the external system, and involves much more pilot interaction. There are three basic components that make up the internal JOSSH device: the communications display module, the location module, and the command module.

The Internal JOSSH Device

Communications Display Module

The communications display module is located in the upper left hand corner of the JOSSH device. The chat window along the top of the screen enables pilots to communicate with other pilots who are currently on duty. For more information on communication functions and commands, check the communications guide.

Pilots will notice a small gray button in the left of the communications display. You will also notice two yellow scroll arrows, which may be

used to review previous communication chatter.

Pilots may also access the options screen from this section by clicking on the icon. From the options screen users may configure Jumpgate according to personal preference. Pressing the esc key will also open the options screen. For more information on configuring your client via this screen, take a look at the options screen guide.

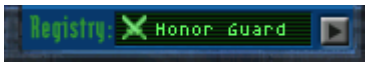
Location Module

The location module can be found in the upper right hand corner of the screen, and looks something like this:

The green text box is the location indicator. This component is used to display which station a pilot is currently docked at. If said pilot is not currently connected to the jumpgate universe, their location will be displayed as 'offline'. (Displayed)

To the right of the location indicator is a button labeled 'map'. Clicking on this buttons opens a map of all known sectors. Take a look at the map guide for more information on using the map.

The 'station commlink access' tab, located directly below the location indicator, is a handy feature that can be used to display a list of pilots who are currently docked at this station.



Above the station commlink access tab is the 'flight registry' toggle. This determines your flight status, and is used to control such things as player vs. player combat. The basic setting is 'TRI Civilian'. With this mode engaged, other pilots will be punished for firing on or destroying your ship. Other register settings are available, such as Honor Guard.

The final component of the location module is a large light located to

the right of the station commlink access tab. a green light indicates that a pilot is currently connected to the jumpgate universe. A red light will be displayed if the pilot is either offline or in sim mode.

Command Module

This portion of the JOSSH device interface allows pilots to issue commands to the station's personnel. This module spans the bottom of the internal JOSSH device.

Along the top of the command module are five tabs: ship configurator, market, mission, trade and simulator. (Trade and simulator are displayed.) When clicked these tabs will bring up five different holographic screens that allow pilots to customize their ship, purchase goods, accept missions, trade with other pilots, and access the simulator.

In this picture a red flag labeled 'sim mode active' is displayed to the right of the tabs. This flag indicates whether a pilot is launching into the simulator or real space.

There is a large green text box below the command tabs. This is the pilot data bar, and displays various statistics on the current user. These statistics are rank and name, credits, experience, and cargo. (Cargo is displayed.) The most confusing statistics are the three numbers displayed as cargo. The first number is the amount of cargo that is currently loaded, the second is the maximum cargo that can be loaded, and the third is the amount of floor space that the docking crew will allow to be used. (This third number includes the ship's cargo.) Floor space can be used as temporary storage space, but will need to be cleared before a pilot can launch.

To the right of the pilot data bar is the 'request launch' button. By clicking this button a pilot will be propelled away from the safety of the station and into space. This button will occasionally be covered while tasks are being preformed, and a pilot will not be able to launch during that time.

Options

The options screen can be used to configure Jumpgate for your specific hardware configuration and preferences. Pilots can access the options screen either by pressing the ESC-key or clicking on the button on the JOSSH interface.

The JOSSH options screen

The options menu contains the following menu choices:

Connect

Clicking on this option allows you to connect to the Jumpgate Universe. The connect submenu contains both a user name and a password field. If you are connecting for the first time you will need to type your pilot name and password, and click 'connect'. In all subsequent connects this information will automatically appear, and simply clicking 'connect' will connect you to the Jumpgate Universe.

Sound

Clicking on this option enables pilots to adjust sound options and volume control for music and in-game sound. Clicking on the blue arrow in the sound options menu cycles through several supported sound configurations.

To adjust the volume for music and sound, move the sliders in the volume controls towards the '+' or '-' arrows. (Note: music volume does not affect the start-up theme.)

Video

Clicking on this option reveals a new window with a number of choices:

Video Card - Determines if Jumpgate should use a primary or secondary video card. In most cases primary will be the logical choice. If you have a 2d card and a 3d-accelerator card, choose secondary.

Resolution - Enables you to choose your screen resolution. Please note that some monitors and/or video cards may not support all the resolutions displayed.

Colors - Choose the color bit depth at which you'd like to play Jumpgate.

Text Options - You have a choice between 2D and 3D-text. Many pilots find 3D-text easier to read.

Buffering - Choose between double and triple buffering. Not all video cards support triple buffering.

Tooltips - Toggles tooltip help visibility.

Particles - Toggles particle effects visibility.

Hardware T&L - Some of the newer video cards support a function called hardware transformation and lighting. If you own such a card, you may check this box to activate T&L.

Control

This submenu can be used to configure your controls to fit your preferences.

The first step is to select your input type. Click the 'cycle input' button until the preferred device is selected. (Your options are keyboard, keyboard and mouse, keyboard and joystick, keyboard and joystick with throttle, and keyboard and joystick with throttle and rudder.) Once you have selected an input type, the default commands for the selected device(s) will be loaded.

Now you can customize your controls. You will notice several buttons near the top of this submenu labeled 'flight,' 'combat,' 'display,' 'MODx,' 'basic,' 'radar,' and 'view'. By clicking through these buttons you will notice that the commands and controls listed on the lower half of the machine will change. To change these controls you will need to select the box to the right of each command, and then press the preferred button, key, or control. (Note: make sure you have your joystick and throttle centered when mapping keys.)

Credits

This screen contains credits and legal information related to Jumpgate.

Quit Jumpgate

Click this button to exit the Jumpgate Universe.

Map

*Welcome Pilot. I am **Zhilaa Katdinal**, Divisional Chief of the TRI Bureau of Stellar Cartography. I've heard you needed some help using your sector map, and I was hoping we could work out some sort of.... deal. You see, I helped design that system, so I can tell you everything you need to know about it. The thing is, we're a little light on sector information from The Gurge...*

This documentation briefly reviews basic map usage and functions. The map can be accessed in flight by pressing 'm', or in station by pressing the button labeled 'map' in the upper right hand corner.

Some pilots prefer to have a hard copy map on hand, just incase their in flight systems should fail. TRI's most current 2D map can be found under the "TRI Files" subheading of the flight academy.

TRI Sector Map Module

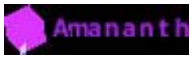
The standard TRI sector map module come pre-installed on all ships, and can be accessed from any station. Activating the map will display a 3D representation of every known sector.

This module consists of four main components and functions: a 3D map display, waypoints, visibility options, and view controls.

3D Map Display

The map display is the core object of the map module. This display contains three basic objects: sectors, stations, and jumppaths. Right clicking on a sector or station will zoom in on the selected object.

Sector - Represents a known space location. Color changes depending on sector control.



Station - Represents a space station. Colored per faction.

Jumppath - A blue line that represents the space spanned by jumpgates.

Map Waypoints

The TRI map module uses two types of waypoints: mission waypoints and user defined waypoints. (Displayed below.)

Mission waypoints are set at time of mission accept, and user waypoints can be set at any time. Waypoints will only remain active on your map until the marked sector is visited. (Certain mission waypoints will remain until the mission has been completed.)

Mission Waypoint - Displays locations of space which are directly involved with the current mission.

User Defined Waypoint - Displays waypoints of your choosing.

Travel Advisory System

The TRI Travel Advisory System (TAS) system places indicators on the flight map to alert pilots to sectors which might be hazardous due to recent combat activity. Originally intended as a safety measure, TAS is also useful to bounty hunters or factional combat pilots looking to see where "the action is".

Cargo pilots intending to pass through a Hazard Zone are urged to hire or otherwise arrange combat escort, as a precaution.

Amber Travel Zones - indicate relatively low levels of threat, usually an isolated incident, or an event that happened several minutes in the past and now represents "stale" information.

Red Travel Zones - indicate recent or sustained combat action and are best avoided by peaceful traffic.

Visibility Options

The visibility options are located in the lower left hand corner of the map. These options can be used to display sectors based on faction location or control.

To display sectors by faction location, disable both the 'all' and 'control' buttons (located in the center function set). Now select each faction that you would like to be displayed from the first tier. (The TRI logo represents neutral sectors.) Sectors near the selected faction will now be displayed.

To display sectors by control, enable the 'control' button, and select each faction whose control you would like to see displayed.

To display all sectors, enable the 'all' button again.

In the third tier, on the far right, are two waypoint icons. By disabling these buttons each waypoint type can be displayed or hidden. To the right of the waypoints is a weather cloud icon, which toggles weather visibility.

Map tip: you will notice that sectors that are affected by a weather storm are tinted to the color of the storm. To quickly determine stormy sectors, disable the "all" visibility option and the weather visibility option. You will now be able to quickly and accurately determine which sectors to stay away from.

View Controls

The view controls are located in the lower right hand corner of the map. This section of the map interface contains camera control functions such as zoom, slide, and rotate.

The square button in the middle of the map control module will reset the map to a top down view, and the 'x' button in the lower right hand corner will close the map.

market

*Greetings, pilot. This is **Dorakk Thol**, sectional chief of the TRI Bureau of Trade Regulation. TRI has noticed that your TRI credit account has been steadily growing, and I think it's important that you learn how to use the market interface in case you would like to begin spending.*

TRI and their various partners offer a huge selection of wonderful toys for every pilot. These are available for purchase at the market. Every single item found here cannot only be applied for personal use, but can also sold for a tidy profit.

Basic Market Interface

The basic market interface can be used to perform two basic tasks - purchasing and selling. The left portion of the screen displays the station's inventory, and the right portion displays your inventory. You will notice that the station inventory section has a list of equipment types - this portion of the market display is used to simplify item browsing at a station, due to the large amount of items that are kept in stock. (To the left of each sub-category you will notice an icon. these are useful symbols to know, as each item will always display this icon for easy reference.)

Station Inventory portion of Market Interface

Along the top of the market inventory list you will notice several small boxes - these are sort options. The market inventory can be sorted in several ways:

	Name	Alphabetical sort by item name. An item's name is also displayed in green text below its picture.
	Price	Numerical sort by retail price before tax. An item's price is also displayed in black text in the thick green band below each item.
	Size	Numerical sort by size. An item's size is graphically displayed with a set of boxes to the right of each item. Each box represents 1 cubic unit.
	Rank	Sort by rank required to purchase item. Rank requirements can also be found in the upper right hand corner of

		the item purchase pop-up. (You will need to click on the item for this to be displayed.)
	Quantity	Numerical sort by quantity in stock. The quantity of an item at the current location can be found in the upper left hand corner of each market item box.
	Ascending / Descending	Determines sort order of inventory. If the "up" arrow is selected, the largest/last items will be displayed at the bottom of the list, and the smallest/first at the top. The opposite is true for the "down" arrow.
	Show All On/Off	With the "show all" option turned off, out-of-stock items will be hidden from view.

It is also important to familiarize yourself with the items available at each station. Below is a short description of each sub-category displayed in the market:

Commodities

Commodities are the basic elements which are used to produce every other piece of equipment in the Jumpgate universe. These items range from essentials such as food and water to advanced chemicals, medical supplies and electronics. Commodities are generally the most profitable items to trade. Like with any other market item, clicking on a commodity reveals additional information, such as size, price and a more detailed description.

Power Plants

Power Plants furnish the energy needed to power a ship's various systems. This unit produces the energy needed for all ship functions. This does not necessarily mean it provides *enough* energy for all other systems to function at maximum efficiency all the time. if you are flying at full speed your engines might draw so much energy from the power plant that there just isn't enough left to sufficiently power your other systems.

Engines

Engines provide the thrust needed to propel you ship forward. Your main engine system is also hooked into your braking thruster subsystem, and the strength of one directly affects the other.

Radar

Radar allows you to keep an eye on the activities taking place in your vicinity. The better your radar, the greater your range. Different objects will appear in different colors, to make them easily identifiable. Asteroids are gray, faction ships are their respective faction colors, stations are yellow and jumpgates are light blue.

ECM

Electronic Counter Measures, or "jammers", distort the signals emitted by the radar systems other ships receive about your vessel. By distorting these 'scans' the effective range of enemy radar is reduced. While these devices will not make you invisible, they will make it much harder for other pilots or enemies to spot you and pinpoint your location.

Capacitors

Capacitors are energy storage devices that hold a charge which can be used to power your guns. This is a vital piece of equipment since so many of the weapons systems require such a large amount of power to fire. Keep in mind that the more guns you mount, the more energy you'll need. Sometimes it may be more effective to mount only one powerful gun instead of several weaker ones.

Shields

The shields module's main function of is to protect the hull of a ship from any outside damage. This includes not only enemy fire, but also collisions with other objects. Like all equipment, shields need energy to function. Each time your shields take damage they loose some of their power and then slowly recharge. Once shields are depleted your hull will take direct damage. Your hull is still protected by armor, but several direct hits will eventually destroy any ship.

Guns

Guns seem to be the favored piece of equipment for some reason. These weapons are either energy or projectile based, or a combination their of. All energy weapons must be recharged by your power plant before they can be fired again. Their power diminishes over distance and eventually dissipates completely. On the other hand, projectile-based weapons do not require much energy and may be fired continuously, but they have a limited number of projectiles and generally do less damage. These guns will be automatically re-loaded upon docking with a friendly station. Ammo-based weapons require you to lead your target, i.e. you have to aim where your target will be at the time of impact. To aid you with this technique you can supplement these weapons with a targeting computer (available in the MODx section of the market).

One special item that is listed among the guns is the mining laser. The mining laser represents a special sub-category of the weapons section. This device is mounted to a gun hard point and activated by pressing the fire button. Mining lasers extract ore from asteroids, which is then transported into you cargo hold. While a mining laser is not a weapon, its extractor beam will do a small amount of damage to a target.

Missiles

Missiles do much more damage than guns, but their number is limited to the amount of hard points on your ship. After softening up your opponents shield and armor with your guns, a well-placed missile is like the last magno-bolt in their escape pod.

Missiles are divided into dumb fire and intelligent categories. Dumb fires travel on a straight path and are best fired at targets that are very close. Intelligent missiles have build-in targeting devices that lock on and follow their target until they either hit or run out of fuel.

MODx

MODx are special items which can be used to perform various tasks. Every ship is outfitted with several special equipment slots. These items can be cameras, scanners, BCUs, targeting devices, or other items yet to be developed by TRI.

Storage

This button allows you to view your storage locker. You may store five units plus one unit per rank level in your locker. (For instance, if you are rank 4 you can store 5+4=9 units.) You can view your storage inventory from any station. To access your stored items you will need to fly to your faction's storage facility.

Trade

*Hello again, pilot. This is **Dorakk Thol**, sectional chief of the TRI Bureau of Trade Regulation. We've notice that you have been attempting to trade lately, and have decided to step in and inform you of a few rules and regulations. Trade is a serious thing which pilots need to learn about and respect...*

The trade interface is a fairly simple interface that can be used to directly exchange items between pilots. Here's what you'll need to do:

trade

To initiate a trade you will first need to click on the 'trade' tab along the top of JOSSH's command module. (The command module resides at the bottom of the screen.) Next you will need to select the name of the pilot you wish to trade with from the pilot list. (You will notice that you can only trade with pilots docked at your current station.) Now hit 'offer,' and it's up to the other pilot where this trade will go.

If the pilot you offered the trade to declines you will not be able to trade with them. However, if the pilot accepts, the pilot selection screen will disappear. You will now see 3 sets of eight inventory slots. The first set is your current inventory, the second set is your trade offer, and the final set is the other pilot's offer.

You will now be given an opportunity to trade goods. Select an item from your inventory, or type an amount of credits in the credits box along the bottom of the trade screen. Now press offer. A pop-up will appear informing you that the trade has been offered and that you are waiting on the other pilot.

Now the other pilot is given the same options you were, and will be able to offer a counter trade. Once they are finished, the pop-up will disappear. If the offer is good enough, select accept and the trade will be completed. If the offer was not to your liking you will be able to offer a counter offer as well, which will restart the cycle.

That's all there is to it! You may cancel a trade at any time by pressing 'cancel'.

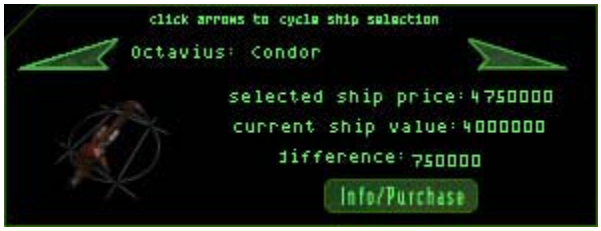
Ship Configuration

*Welcome back Pilot. This is **Solder Ronin** speaking, sectional leader of the TRI Department for Novice Pilot Affairs. I hear you're having trouble configuring your ship, and it is my duty to help you to be all you can be. Let's get started, I've got a transport full of recruits coming in within the hour...*

The following report will teach you the basics of configuring your ship. Keep in mind: this is an interface explanation only, and you will not be given hints and tips regarding specific customizations.

Ship Purchase Dialogue

The ship purchase section of the ship configuration screen can only be accessed from your faction's stations. To view a ship's statistics you will first need to select a ship using the left and right scroll arrows. Once you have selected a ship click the 'info/purchase' button. The information and purchase pop-up will provide you with further statistical information on the selected ship.



System Selection Menu

The system selection menu is a green, arced list of systems located to the left of the graphic representing your current ship. When a system is selected via this menu, the equipment assignment slots will change accordingly.

Graphical Ship Layout

In this portion of the ship configuration screen you will see a top down view of your current craft. Depending on which system you have selected you will see various icons displaying where each component resides on your ship.

Equipment Assignment Slots

The ship configurator contains eight equipment assignment slots, located directly in the center of the screen. This is the most vital portion of the ship configurator. From here you will input all equipping orders for your ship.

Each equipment assignment slot contains four basic components: the **standard item image and icon** , **inventory scroll arrows** , **size indication boxes** , and an **equip status button** .

Slot Breakdown

Standard Item Image and Icon - The item images and icons are standard throughout the interface, and you have undoubtedly familiarized yourself with them already. This portion of the slot displays graphically what item you are looking at, and is accompanied by an icon indicating an item's type and what faction produces it (determined by color).

Inventory Scroll Arrows - These blue scrolling arrows, when clicked, will scroll through every item in your inventory that corresponds with the slot's type. (i.e. shields, missiles, engines, etc.)

Size Indication Boxes - Size boxes are also a standard throughout the interface. In the ship configurator you will notice three different size boxes: open green, solid green, and solid red. An open green box means that you have an open size slot. A solid green box means that the current piece of equipment is taking up that size box. (Note: you may see a mixture of green boxes in a slot. for instance: if you can fit a size three engine, but have a size two engine equipped, you will see two solid green boxes and one open green box.) The final box type, solid red, indicates that an item is too big for your ship.

Equip Status Button - The equip icon will only display if an item will fit on your ship. A blue arrow pointing towards the ship diagram indicates that the item is in inventory, and can be equipped on your ship. Once you have clicked on the blue icon, the item will be equipped on your ship. A red icon with an arrow pointing away from the ship indicates that the selected item is already equipped, and can be unequipped and added to inventory.

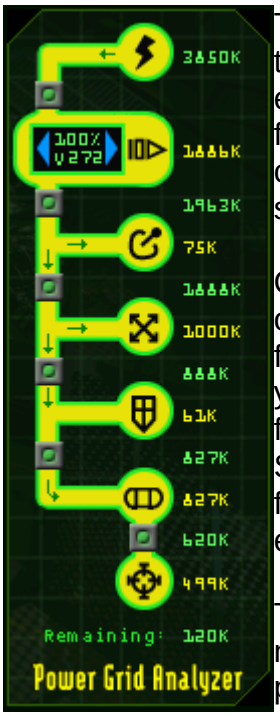
Slot Examples

Note the four red size boxes along the bottom of the screen. This indicates that the capacitor is too big, and cannot be equipped. (Thus the missing equip icon.)

This item is currently equipped, because the equip status button is red. Also, note the size boxes: this powerplant is a size one, and a size two powerplant can be equipped.

This jammer fills all available slots on this ship, and can be equipped. it is currently in inventory, as denoted by the blue equip icon.

PGA (Power Grid Analyzer)



The power grid analyzer will allow you to compare the performance of different components that are equipped on your ship. You will notice that the PGA flows from top to bottom, and that certain components are required to power lower level systems.

On the PGA, an item that is equipped will be outlined in green. if an item is powered, it will be filled with yellow. Inside of the engine component you will notice a set of arrows and 2 statistics. The first statistic is a throttle percentage. The second Statistic is your maximum velocity. (Note: This is for power consumption analysis only, and does not effect your in-flight throttle settings.)

To the right of the PGA you will notice several numbers. These numbers display your current power based on the maximum amount of power drain caused by each component. The number directly to the left of each system is the amount of power required to run the system at it's full potential. The number between each item is the running total (remaining power).

Mission

*Welcome Pilot. This is **Alywn Pinguar** speaking, sectional leader of the TRI Department for Galactic Mission Oversight and Regulation. Below is the overview of mission standards and objectives that you requested. Since you have not filled out a 103104xz requisition form, you are limited to declassified data and general mission information.*

This is fairly straightforward document describing the basic information related to each mission. You will notice that each mission has certain requirements that you will need to fulfill before the mission will be marked as complete.

Mining Missions

Mining is a good way of collecting raw materials without stripping a planet of its resources. Since each station is constantly consuming these materials, mining missions are always available and often pay very well.

Before you can mine you will need to obtain a few pieces of equipment. The first is a mining laser. (The best of which are produced primarily by the Quantar.) Secondly, you will need a capacitor to power the laser.

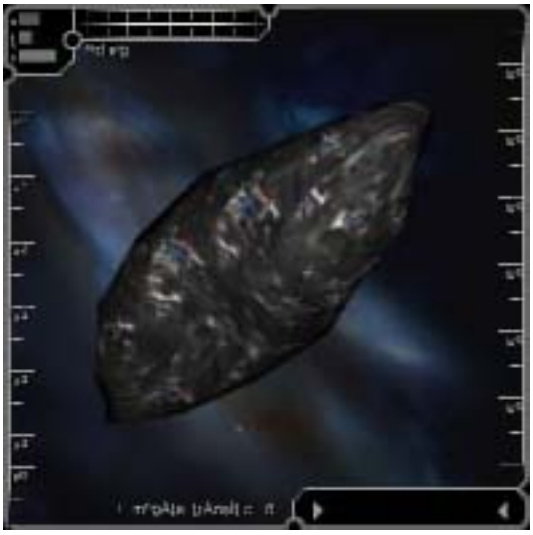
Now you are ready to begin mining. Before you launch, take a moment to figure out where the best place to mine would be. Since you are not cleared for galactic mineral surveys and distribution charts, you may want to take a few scout missions and note which sectors contain which types of deposits.

(Tip: Due to the spatial disturbances that ripped apart known space in the first place, there are large deposits of all types of minerals near the epicenter. It is also rumored that mineral deposits can be mined fasted by actively mining different areas of an asteroid.)

Common Metals

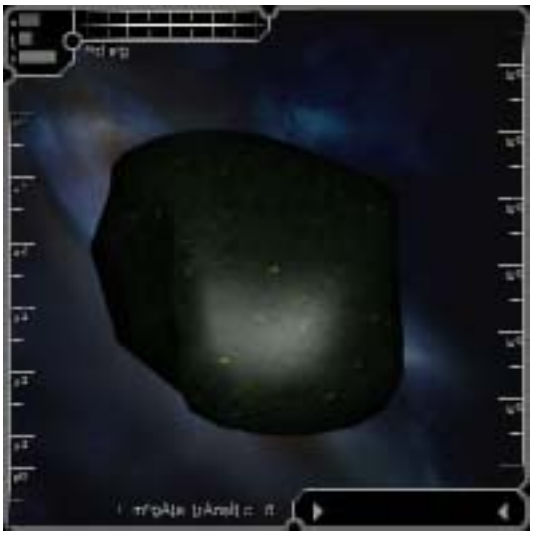
These are the most basic asteroids containing trace elements of common materials. Although such materials sell for a very low amount, they are often needed in large quantities.

Precious Metals



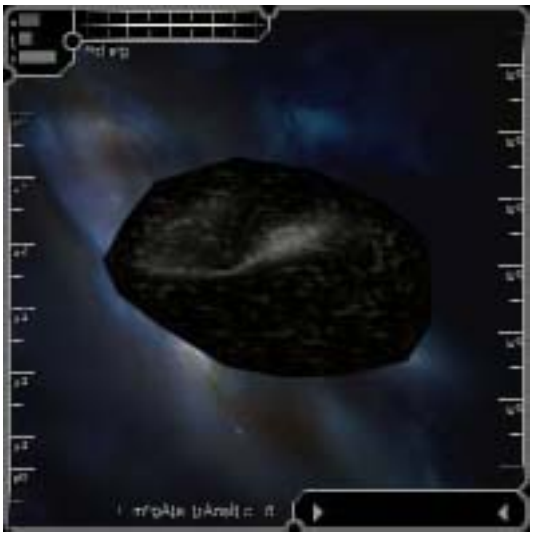
The materials mined from this type of asteroid often are rich in metals such as gold, platinum, and silver. On average, the ore mined from this asteroid will be worth more than common materials.

Radioactive Metals



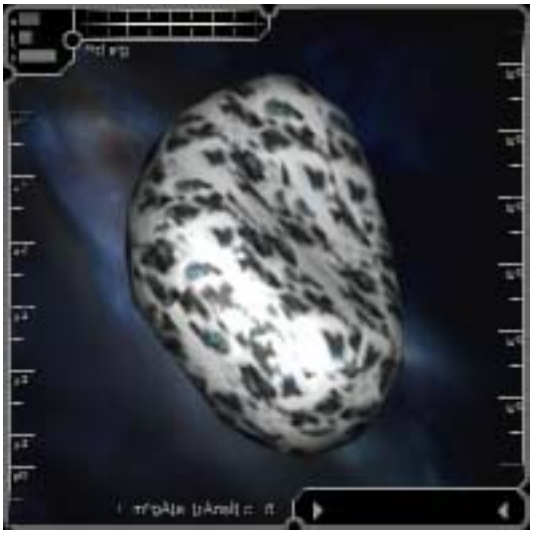
Radioactive asteroids are by far the most worthwhile to mine. Due to the high demand for such materials in reactors and weapon systems, radioactive metals will always be in high demand.

Semifluxors



Semifluxor asteroids are the most despised asteroids in all space due to their dark color, which has created a navigational hazard for many a pilot. Rich in silicon, this type of asteroid will often fetch you a profit comparable to a precious metals mining run.

Ice Ore



Formed in the icy depths of space, this type of asteroid is rich in frozen water deposits, but also contains trace amounts of various other elements. Mining these lumps of ice is not very profitable, but is very necessary for life forms needing water to survive.

Transport Missions

Transport missions are fairy simple missions. Once you accept a transport mission, a unique item will be loaded into your cargo bay. These items may contain sensitive data or equipment, such as weapons and equipment prototypes, sensitive data discs, or personal belongings.

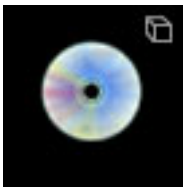
Once you have received your transshipment container, all you have to do is deliver it to the designated station. Unlike most other missions, transport missions will pay on the spot. (You do not even have to sell the item, you must simply dock at the station, and the dock crew will take care of delivery for you.)

The biggest fear for a transport pilot is splashing against a 'roid, or being shot down by rogue fighters. If you splash during the course of a transport mission, the item will be lost, resulting in a failure.

Some complain that transport missions don't pay very well, but as a starter pilot, a few courier runs will help you out in a hurry.

Standard Transshipment Containers

Standard cargo crate. Used for transporting any number of personal or sensitive items. Each crate is magnetically sealed.



Standard data disc. Although small in size, each disc can contain virtually unlimited amounts of data. Secured using any number of encryption techniques.

Standard liquid transport containers. Can also be used for pressurized gases. Usually sealed or locked using magnetic or other means.

Cargo Missions

Cargo missions are slightly more advanced than transport missions. A station offers cargo missions when the supply of a particular commodity is low. To complete a cargo mission you will need to fly to a space station which stocks the particular item, purchase the specified quantity, and then return to the station of origin.

These missions, which consist mostly of profit margin comparisons and long hours behind the flight stick, are one of the riskier missions available. Since pilots are often weighed down by cargo they will need to keep an eye out for renegade fighters. In fact, on an expensive haul, it may be worth your time to split the profits with a few wingmen, and hire and escort fighter wing.

Another thing to keep in mind is that you, unlike the transport pilot, will have to pay for the cargo load out of your own pocket! As risky as this type of venture is, the profits are usually worth it.

Cargo missions can be very lucrative to a pilot who can afford a freighter, but will be considerably more difficult for a low level pilot in a fighter craft.

Patrol Missions

Patrol missions are imperative to local defense within a faction's sphere of influence. These missions are extremely straightforward, in that all you need to do is pass through a series of space locations. Once you have docked, the dock crew will make sure that your ship's flight recorder information is downloaded and sent to central command for processing.

A helpful resource for patrol missions is the in-flight map.

These missions can also be used in conjunction with personal cargo or beacon runs since they are so easy to complete.

Combat Missions

Although TRI encourages peaceful conflict resolution, the protection of enlisted pilots comes before communication with the conflux. To date no method of communication has succeeded, which leaves no choice but to rip 'em and send them back whenceforth they came. Combat missions are often offensive in nature, and are by far the riskiest of all missions.

Once you have accepted a combat mission, you will need to locate and destroy a given number of conflux craft. Combat missions will usually pay better than expected, as each conflux kill will generate a bounty as well as an experience point bonus.

T.R.I. Missions

TRI often issues missions which will serve their interest (and supposedly everyone else's...) These missions range from keeping the conflux population down to running large loads of a particular commodity to a TRI certified production facility. TRI missions can be accepted from any station, and are universally uniform.

Faction Missions

Faction missions are issued from each empire's home world, and provide specific objectives for their members. Faction missions, when completed, build specific buildings and other useful items for that sector, which adds varying benefits and abilities to the faction's station and or pilots.

Scout Missions

Scout missions are one of the more important missions available from TRI's perspective. These assignments, should you choose to accept them, provide TRI with much needed recon data about spatial anomalies and the like.

On occasion, you may also receive scouting assignments from your faction, which often consist of snapping a few pictures or scans of an opposing faction's stations. These assignments can be especially risky if other pilots catch on to your intent. In fact, once your mission has been uncovered by enemy pilots, be prepared to face espionage charges (usually dispensed at point blank from the steaming barrel of a serializer.)

Before accepting a scout mission, you will want to make sure that you have purchased the necessary mission equipment. Depending on the mission, you will need either a camera or a scanner MODx equipped.

Scanning Equipment

Solrain's standard data recording device can be configured to record any number of frequencies directly to an internal disc drive.

Quantar's standard scanning device can record for several hours before the onboard hard drive must be wiped.

Working on a slightly different system, the standard Octavian scanner pipes recorded data directly into the ship's main computer, giving virtually endless hours of recording time.

Visual Recording Devices (Cameras)

The Solrain camera includes such features as automatic zoom and digital image compression. these cameras can be used on even the most invasive espionage missions.

Quantar's VRD (visual recording device) is the most durable camera on the market. this device was used during the GVB wars, and over 80% of damaged cameras contained salvageable data.

Although Octavian cameras are both bulky and somewhat low tech, they do serve their purpose.

SPACEDRAKE'S COMPILED SHIP REPORT

FOR THE THREE FACTIONS v1.1

"Subtle and insubstantial; the expert leaves no trace of motives; divinely mysterious, he is inaudible. Thus, he is the master of his enemy's fate."

Ancient Octavian Saying. 498th passage - Book of Tactics

Date Entry: 104.02.21 12:00 EKT
Subject: Imperial Octavian Navy Octavian Ship Report
Author: André “SpaceDrake” Ricard
Classification Level: General public

Imperial Octavian Navy Octavian Ship Report
Version: 1.1

UPDATER’S NOTE 104.02.21

Fellow pilots,
Although the ship statistics available to new recruits on JOSSH are certainly interesting for new pilots and a good way to get their attention, they actually do not have much in the way of tangible data for pilots to see what ships work best in what roles, and what equipment is best for what craft. The purpose of these reports, then, is to outline the capabilities of the ships that each of the fleets of the Reconstruction Initiative member states. Our first report focuses on the Imperial Navy of Octavius.

The Octavian Navy has, for a fairly long time, suffered from poor research and design. Although the original O2 Phoenix prototypes were fantastic combat craft, they had to be redesigned for safety concerns, leaving the vessel a shadow of its former self. Combined with such engineering disasters as the Raptor Bomber, Octavius suffered militarily for years. In recent months, though, the Imperial Navy has made a comeback with a vengeance, and now fields very capable combat craft as well as the most types of combat craft of any national fleet (with the introduction of the Vulture Assault Gunboat.) Although the Imperial Navy lost the last two “faction wars”, in many engagements they performed admirably and it is the general feeling among the pilot cadre that had the Brotherhood of the Stone not intervened on the side of Solrain, the Oct/Sol War of the Raven would have turned out far differently than it did. Although the Octavian Empire is a husk of its former pre-collapse glory, only fools would still dare to underestimate it.

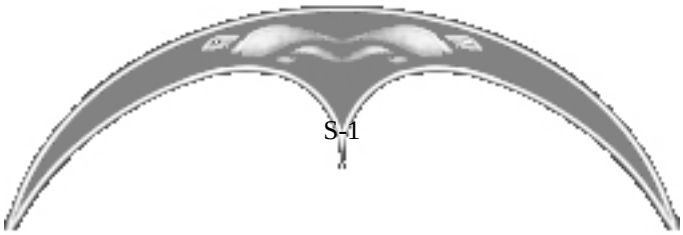
These reports are arranged in the following manner: when components like engines are listed, the recommended part is given along with the size, except for guns, where all practical loadouts are covered. Missiles, MODx and ECM are all given in size alone, due to the variety of parts available in these areas. Speed is given in meters per second, with normal power, afternburn and Flashfire top speeds; Yaw/Pitch/Roll rates are given in degrees per second and indicate the turn rate of a ship not firing its engines. Acceleration is kilo-Newtons of thrust per kilogram. Armor is in millimeters, shields are rated compared to the equivalent protection in mm of armor they provide. Cargo is in cubic meters. Also, classification is slightly changed from the TRI standard to be more accurate (in the author’s opinion.)

I hope this information is useful to new and returning pilots alike. Clear skies to you all!

At your service,
André “SpaceDrake” Ricard

SHUTTLES

Octavian shuttles are fairly clearly designed for one thing: combat. Octavius is the only nation that gives its nugget pilots an unquestionably combat-oriented “shuttle” right off the bat. The Imperial Navy offers a few vessels for hauling at low rank, but the intent of the Octavian shuttle line is obviously to give their nugget pilots something to learn the fine art of combat in before they are unleashed upon the universe in a Raven Light Fighter. While still nowhere near a match for an actual fighter, don’t underestimate an Apteryx. The Albatross and Buzzard, however, are a different matter entirely. Do note that these loadouts are optimal; barring mentor gifting you’ll rarely encounter rookies in ships this well outfitted.

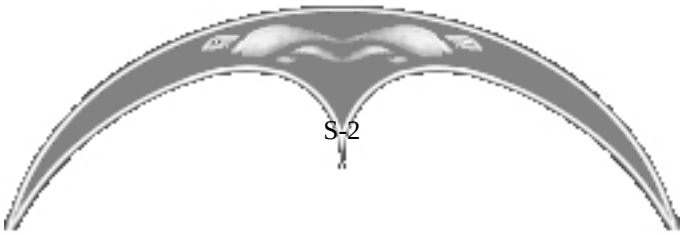


Apteryx

Classification:	Shuttle/Ultra-Light Fighter
Power plant:	Centerfuge MK3 (size 2)
Engines:	Guzzler x 1 (size 3)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Shelter (6009mm equivalent), Deflector (5700mm equivalent) (size 1)
Armor:	9000mm
Capacitor:	Spore, Jug, Seed if using lower-power lasers (size 2)
Laser Config:	Medium Lasers x 2, ER Lasers x 2 (note below)
Ammo Config:	Straker x 2
Missiles (# x size):	2x2
MODx:	2
ECM:	1
Speed (nor/ab/ff):	360/410/710 MPS
Acceleration:	105.3 (laser), 96.5 (Straker) kN/kg
Yaw/Pitch/Roll:	80/90/70 DPS
Cargo:	1 m^3

Notes:

The Apteryx is hands down the best combat ship available to rank 0 pilots in all three national navies. When its chassis is fully upgraded, the 'Ape' can kill any conflux up to C5 with ease (and notorious are the pilots who have brought down Krakens in them). Against other faction shuttles… it performs ruthlessly. It is very nimble and easy to maneuver, allowing pilots to dodge incoming projectile-based weaponry with ease. Many Apteryx pilots prefer to stay in this ship until the Raven class Light Fighter is available. It should be noted that like many lighter Octavian craft, the Apteryx does not possess the proper power plant for utilizing Octavian-manufactured weaponry to its fullest. Although such guns are often in short supply in these war-torn days, Ape pilots should consider using other kinds of lasers. Also of note is its missile mounts – the Ape can mount full anti-fighter missiles, giving it a much heavier punch than most "shuttle" classes.

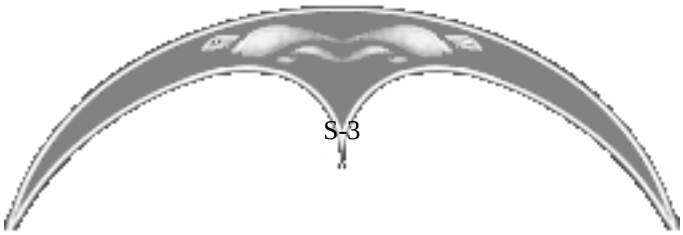


Albatross

Classification:	Shuttle
Power plant:	Centerfuge MK3(size 2)
Engine:	Guzzler x 1 (size 3)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent), Canopy (12240mm equivalent, the only reason to use the Canopy is that it is available at level 8 rather then 13) (size 2)
Armor:	9000mm
Capacitor:	Jug (size 1)
Laser Config:	Medium Laser, ER laser
Ammo Config:	Straker
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	341/389/673 MPS
Acceleration:	83.6 (laser), 81.0 (Straker) kN/kg
Yaw/Pitch/Roll:	70/85/75 DPS
Cargo:	3 m^3

Notes:

The Albatross is designed off the Apteryx chassis, using the same powerplant and engine if available. But unlike its older cousin, the Alby is built for non-combat pilots. With only one gun-mount, size one missiles, and a size one capacitor, it takes a very long time to dispatch conflux, and maneuverability is shaved off a bit (although it still handles like a Light Fighter, except for the acceleration, which is atrocious for a ship of its pedigree.) With that said, this little shuttle can mount the powerful Haven shield…which is the same shield most combat aerospace fighters use. This makes it very hard to kill compared to the Apteryx. The additional cargo space and modx slot are also welcome to aspiring trader pilots. Therefore, it is a semi-decent upgrade for the trade-minded Octavian until he can acquire a Buzzard. Don't try taking on the Conflux hordes in this ship, though.

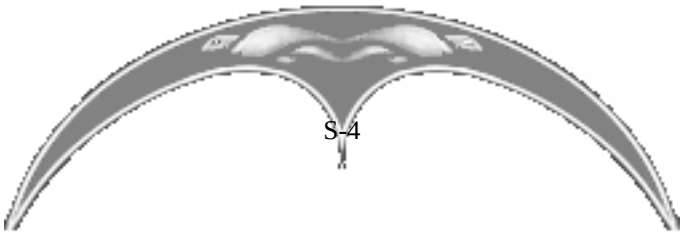


Buzzard

Classification:	Heavy Shuttle
Power plant:	Centerfuge MK3 (size 2)
Engines:	Adventa x 1 (size 4)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent), Canopy (12240mm equivalent, the only reason to use the Canopy is that it is available at level 8 rather then 13) (size 2)
Armor:	9000mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy Laser, Spitfire Ion Cannon
Ammo Config:	Hammer or Cobra
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	343/392/678 MPS
Acceleration:	85.0 (laser), 83.3 (Spitfire), 82.6 (Hammer), 81.0 (Cobra) kN/kg
Yaw/Pitch/Roll:	60/21/68 DPS
Cargo:	8 m^3

Notes:

The Buzzard is an odd bird to say the least. Many pilots have a love-hate relationship with it and skip it in favor of the Raven class Light Fighter. The engine upgrade to the Adventa gives it decent speed and acceleration (mounting a Rush or Burn engine will leave no juice for other systems). The 8 units of cargo space give traders their first real cargo hauler (and one that actually mounts a weapon, as opposed to the Albatross) or miner. The addition of the Haven class shield and 3 modx slots round out its defensive systems quite nicely. The major problem it has, however, is the way the designers added the size 4 engine mount – it is a lateral extension coming straight off of the elongated chassis. This design, however, does not allow for vertical thrust vectoring. In short, it pitches like a freighter. Thankfully its yaw and roll rates are fairly nimble, but this odd handling quirk can make it the single most annoying ship in the five systems to operate. Despite this, it is still a manageable cargo/mining vessel. Pilots are urged to get a Hawk as soon as possible, however. As per weaponry, the Shark Heavy Laser and Spitfire Ion Cannon work well, but the vessel may have trouble utilizing it in combat. It also lacks in the missile department in comparison to the Apteryx (although its mountings are standard for shuttles.)



FIGHTER CRAFT

Octavian Fighter Craft were, for a terribly long time, the red-headed stepchildren of the five systems. Although the O2 Phoenix prototype was quite fearsome, it was eventually redesigned due to safety concerns. The other fighters the Navy fielded were exiled to non-usefulness for ages… but no longer. Thanks to the Empire's upgrade program, the O2-X2, O4-I, and O10-I are all at or above par with the ships of the other nations… and it also has the ferocious O17 Dragon. With the advent of missile size restrictions due to safety concerns, even the O13 Raptor shall likely find use in its narrow role. Mixed fleets are now both a reality and the rule, and the Empire at last possesses craft capable of bringing death to its enemies. Every one of these ships has a use – it would behoove pilots of the Empire to learn to use all of them well.

It should also be noted that this list may not be complete. Rumors continue to circulate concerning the "Falcon" class advanced tactical fighter – a fighter that can change modes between combat and intercept, allowing it to pursue a fleeing foe with impunity (and possibly no afterburners). Unfortunately, it is a project that has been plagued with setbacks and problems (reportedly resulting in the deaths of several test pilots) for, by some estimates, over a year and a half. The latest unofficial news from Octavian High Command is that Project Falcon is continuing, but we should not expect to see the O12 Falcon out for some time yet – the most (some would say laughably) optimistic estimate is perhaps sometime in the second quarter of TRI year 104. (And even then, the Corvette Project is apparently getting more funding.) Until then, however, the Octavian fleet is still very well supplied with top of the line fighters.

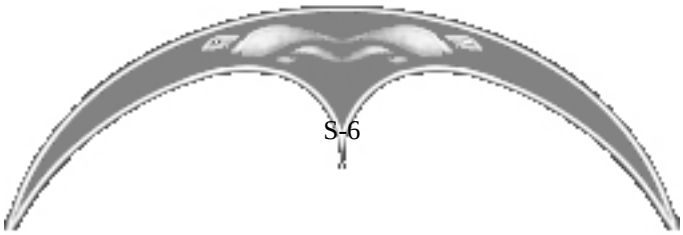
Raven

Classification:	Light Fighter
Power plant:	Instigator, Antagonizer works well (size 3)
Engines:	Impeller x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	10000mm
Capacitor:	Spore, Jug or Seed for Distorters or Strakers (size 2)
Laser Config:	ER Lasers x 4, Medium Laser x 4 (somewhat popular despite range)
Ammo Config:	Straker x 4
Missiles (# x size):	4x2
MODx:	3
ECM:	1
Speed (nor/ab/ff):	476/543/940 MPS
Acceleration:	111.3 (lasers), 114.6 (Distorters), 104.0 (Straker) kN/kg
Yaw/Pitch/Roll:	80/70/70 DPS
Cargo:	3 m^3

Notes:

It used to be that the Light Fighter class in general meant “lesser fighter.” With the upgrades made to the Impeler class engine and the O4-I spaceframe, that is no longer the case (as many hapless Solrain and Quantar pilots have recently found out to their detriment). The O4-I Raven is, when properly equipped, the fastest attack fighter in the five systems. It is capable of running down any vessel that isn’t a Scout. While it does not possess the heavy armament that larger chassis do, it is more than capable of supplementing a larger fighter’s attack and being a general nuisance. It also carries four anti-fighter missiles, which supplement its anti-fighter punch admirably. The only weaknesses the craft possesses are a lack of armor compared to other combat craft and a distinct lack of MODx slots. While earlier models of the O4 were severely lacking in MODx slots, the Raven still suffers somewhat in this category – a pilot must be aware of his FlashFire levels, lest he get stuck in a position where his normal superior speed matters not against a FlashFiring Intensity.

There is an odd quirk involved with this fighter concerning the placement of the cockpit in relation to the engines. If a pilot pitches upward to the point of nearly going in reverse and then applies his engines full throttle (especially on afterburn), the engine wash has a tendency to spray all over the rear-mounted cockpit, blinding the pilot. While this effect is sometimes slightly noticeable on all craft, because the Raven’s cockpit is mounted directly behind and above the engines the effect is far more pronounced and can be troublesome while performing complex flight maneuvers. A pilot who flies with knowledge of this limitation should not have many problems, however.



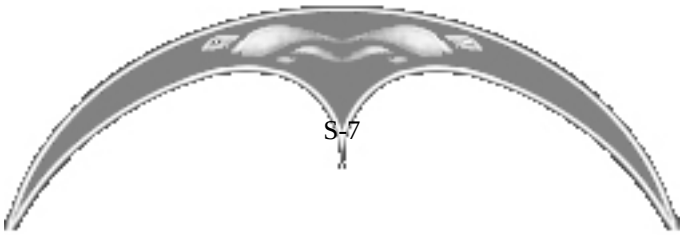
Chiropteran

Classification:	Medium Fighter
Power plant:	Instigator (size 3)
Engines:	Impeller x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	12500mm
Capacitor:	Spore for lasers, Jug or Seed for ammo (size 2)
Laser Config:	2 Heavy Lasers/2 ER lasers, 2 Warpers/2 Distorters
Ammo Config:	2 Cobras/2 Strakers
Missiles (# x size):	2x2, 2x3
MODx:	4
ECM:	2
Speed (nor/ab/ff):	448/511/884 MPS
Acceleration:	100.2 (lasers), 102.4 (pulse), 91.5 (ammo) kN/kg
Yaw/Pitch/Roll:	60/65/70 DPS
Cargo:	4 m^3

Notes:

The O10-I “Chiro” is, in essence, the Octavian response to the Quantar Typhoon: a highly maneuverable line fighter. The original O10 was meant primarily as a “stepping stone” to the Phoenix that could still combat other ships… sort of. However, Octavian High Command noted that their fleet lacked a ship that could perform the kind of maneuvers the Typhoon did while still carrying the amount of armament and armor it did. While the Raven was certainly a nimble little craft (especially after its upgrades), it lacked the raw firepower of the Typhoon. Thus, the O10-I was born. While it is exactly as maneuverable as the O2-X2 Phoenix, it accelerates much faster than its larger cousin and in maneuverability and acceleration it nearly matches the Typhoon, while carrying roughly 2/3rds of the combined armament (including **heavier** missile armament when correctly configured with 2 HellRazors or 2 Light Torpedoes in its oversize missile slots), on a slimmer and more accessible frame to boot. The OHC thought their efforts were, on the whole, successful.

In combat the Chiropteran is used as a wingman craft – it generally does not have the speed to chase down light or heavy fighters too well, but it can draw and dodge fire much better than a Phoenix or Dragon can, and ignoring a Chiro for even short amounts of time tends to be fatal. Small wings of Chiros are also excellent patrol forces, and are quite capable of dealing with most small forces thrown their way.



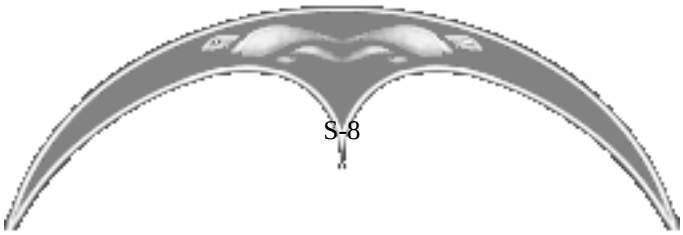
Phoenix

Classification:	Heavy Fighter
Power plant:	Centerfuge MK5 (do not use other powerplant, see below) (size 5)
Engines:	Dream x 1 (size 5)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	16200mm
Capacitor:	Varies greatly on loadout; Carrier (low weight) for Pulse laser loadout, Keytso for Thorns and Ion, Alembic for Injustices, Deepol for ammo (size 4)
Laser Config:	Heavy Laser x 4, VAPOR x 2/Warper x 2, Featherfire x 2/Spitfire x 2
Ammo Config:	Barrak x 2/Hitman x 2
Missiles (# x size):	2x4, 2x2
MODx:	4
ECM:	1
Speed: (nor/ab/ff):	441/503/871 MPS
Acceleration:	83.7 (laser), 78.2 (Ion), 73.3 (ammo) kN/kg
Yaw/Pitch/Roll:	60/65/70 DPS
Cargo:	8 m^3

Notes:

The O2-X2 Phoenix is the premier fighter craft of the Octavian Navy. The Phoenix has a long and storied history, some good and some quite awful. The current model is the most advanced model of the Phoenix yet. The ship was designed primarily around the idea of overwhelming firepower; while the Quantar Typhoon technically has the same kind of gun mounts, the Phoenix can power any kind of combination of weapons it can mount and still fire all guns at full throttle, without problem. Thus, an accurate pilot in a Phoenix can cause far more damage than their Solrain or Quantar counterparts. It also possesses the heaviest (and most) missile mounts of any Heavy Fighter. The “Nix” is a maneuverable craft for its size; however, its single-engine design means that its acceleration is not quite at good as its contemporaries. (It does mean that the craft can afterburn longer than others, though, so the effect is mitigated somewhat.) The Nix can also take somewhat more damage to its armor before going down. It is, on the whole, an excellent backbone to the Octavian fleet. It works best, however, when supported by a Raven or Chiropteran to cover its flanks.

An additional note about the ship: pilots will note that the Nix can mount a stronger power plant than the Centerfuge Mk.V. HOWEVER, the CentV was designed specifically with the Phoenix in mind, and the only weapon combination it cannot power is a plasma configuration. As plasma is not extremely useful in fighter-to-fighter combat, it is not covered here. To keep acceleration tolerable, do not use any other power plant on the Phoenix.



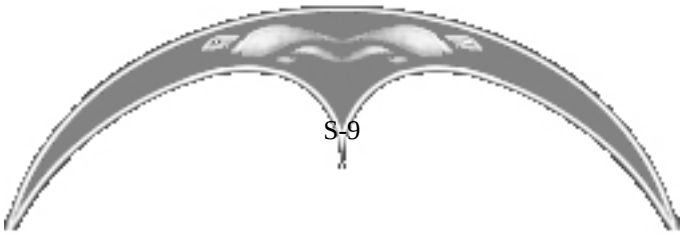
Dragon

Classification:	Assault Fighter
Power plant:	TRIP-1 for laser configuration, Sport Plus for mortar configuration, Intimidator for railgun configuration (size 5)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Makk (36000mm equivalent) (size 3)
Armor:	19800mm
Capacitor:	Keytso for lasers, Alembic for railguns, Seed/Jug for mortars (size 4)
Laser Config:	Shard x 3/VAPOR x 2, Heavy Laser x 5, Featherfire x5
Ammo Config:	Flail x3/Hitman x 2, Vantage x 3/Peeler x 2
Missiles (# x size):	1x6, 2x4, 2x2
MODx:	4
ECM:	2
Speed (nor/ab/ff):	436/497/862 MPS
Acceleration:	74.6 (laser), 72.8 (mortar), 60.1 (railgun) kN/kg
Yaw/Pitch/Roll:	42/42/35 DPS
Cargo:	12 m^3

Notes:

The Dragon is the ultimate personification of the Octavian ideal of combat: overwhelming firepower combined with the ability to absorb a great amount of pain as well. The Dragon's primary role is command vehicle and wing-leader: it is meant to lead a wing into battle and be the focus-point of that combat. It is capable of mounting more gun-based firepower than any ship in the five systems and mounts the same shield system as a heavy cargo vessel, while also being able to carry an impressive array of missiles (including a single tactical nuclear warhead or Morningstar Missile Cluster if the pilot so chooses.) The only weakness it possesses is the fact that it neither maneuvers nor accelerates well. Therefore, unsupported it is vulnerable to an attack from more than one craft. One on one, however, there is no better ship in all of the five systems. If you pilot one of these, prepare to take some heat: these fighters tend to get targeted first. But you can be confident in the fact that you have the firepower to devastate your enemies.

One should note that the railgun configuration is far less nimble than the other versions, due to the extreme weight of the Intimidator powerplant. While the railguns do provide superior range to any weapon system, pilots should take that into consideration.



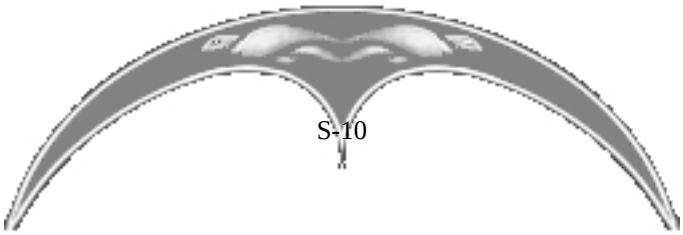
Raptor

Classification:	Bomber
Power plant:	Centerfuge MK5, TRIP-1 for railguns (size 5)
Engines:	Dream x 1 (size 5)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	20700mm
Capacitor:	Keytso (lasers), Alembic (railguns) (size 4)
Laser Config:	Heavy Laser x 5, FeatherFire x 4/Spitfire x 1
Ammo Config:	Hitman x 4/Barrak x 1
Missiles (# x size):	2x8, 2x6, 2x4, 2x2
MODx:	5
ECM:	2
Speed (nor/ab/ff):	402/458/793 MPS
Acceleration:	54.6 (lasers), 51.2 (ion), 49.3 (railguns) kN/kg
Yaw/Pitch/Roll:	50/60/50 DPS
Cargo:	12 m^3

Notes:

The Raptor is a ship designed with exclusively one purpose in mind: delivering massive amounts of ordinance to a specific target. It is barely able to combat one-on-one anything larger than a medium fighter (even though it does carry an appreciable amount of gun firepower.) However, in an attack on freighters, gate infestations and theorized larger targets (like the upcoming corvettes and the theorized conflux hive-bases) it is invaluable for the sheer amount of missile ordinance it can deliver to the battlefield. It is also useful in a support role as a missile artillery platform in fleet battles; this ship can carry the largest missile payload of any aerospace craft known to any nation (with four Morningstars, 2 HellRazors and 2 basic anti-fighter missiles it carries enough raw ordinance to kill a small wing of fighters with missiles alone.) In either role, however, it absolutely ***must*** be escorted by light or medium fighters to ensure the ordinance reaches its destination. The Raptor is a ponderous beast, and the superstructure required to safely carry and launch so many heavy missiles makes it a large target from any angle (and gives it the slowest acceleration of any combat ship on record – even a Vulture out-accelerates a Raptor). Pilots of Raptors must be vigilant for attacks from any vector, and work with their escorts to ensure their survival. If they are properly guarded however, the Raptor is an invaluable asset to fleet operations and is Octavius' only true option for destroying hardened targets. (And it isn't exactly unarmed in guns either – although it does chain-fire them, 5 Injustices will ruin anyone's day!)

As a final, recent note, Octavian High Command has confirmed that many of the design elements of the new Light and Medium Fighters are being tested on the Raptor in an attempt to make it move faster than a cargo vessel. We can only hope for success.



SCOUTS

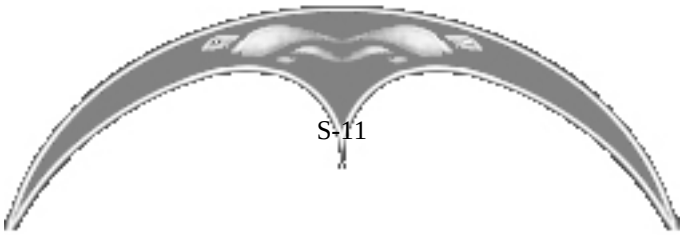
Scouts have always been a vital part of any military operation. In space, getting enemy positional data is just as vital. Fast ships are also needed for exploring sectors and mapping asteroid fields. The modern Scout vessel was developed with these missions in mind. They are generally designed to do one thing: go very, very fast. While armed, the general response of a scout is to bug out of a battle, not fight. Since the development of the Heavy Scout (AKA Ranger), very little has gone on in this class. The Falcon is rumored to go as fast as a Peregrine in intercept mode, though.

Peregrine

Classification:	Light Scout
Power plant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Shelter (6009mm equivalent) (size 1)
Armor:	10800mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy Laser or Spitfire Ion cannon
Ammo Config:	Barrak x 1
Missiles (# x size):	1x4
MODx:	4
ECM:	1
Speed (nor/ab/ff):	539/615/1065 MPS
Acceleration:	164.5 (laser), 161.3 (ion), 157.1 (gauss) kN/kg
Yaw:	18/36/38 DPS
Cargo:	1 m^3

Notes:

The Peregrine is the fastest light scout class ship in existence. This ship was once used as a skirmisher in the days before the modern Light Fighters (indeed, squad OEC is notorious among veterans for its "'Grine Packs" of old), but those aforementioned ships have now superseded the Peregrine in the support fighter role, due to the fact that they improve upon one thing: maneuverability. Even when not firing its prodigious engines, the Peregrine is a difficult bird to move around. Its yaw rate is particularly unforgivable, as on that axis it maneuvers almost like a freighter. The days of the 'Grine Packs are probably at an end, but this ship still excels at scouting ahead of a larger force or flipping beacons with impudence (especially since its acceleration rate is the absolute greatest in TRI space and is far higher than that of its larger brother). It should also be noted that, like many scout-class ships, the Peregrine has been cleared for carrying medium-sized missile ordinance.



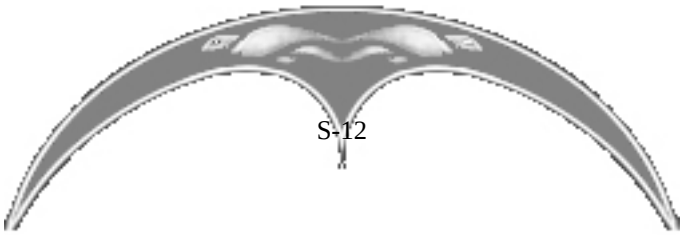
Griffin

Classification:	Heavy Scout
Power plant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Night Watchman (54000 meter range) (size 5)
Shield:	Shelter (6009mm equivalent) (size 1)
Armor:	9000mm
Capacitor:	Spore (size 2)
Laser Config:	Heavy Laser x 2, VAPOR/Warper, FeatherFire/Spitfire
Ammo Config:	Hitman/Barrak
Missiles (# x size):	2x4
MODx:	3
ECM:	1
Speed (nor/ab/ff):	550/627/1087 MPS
Acceleration:	133.3 (laser), 128.9 (ion), 124.8 (gauss) kN/kg
Yaw/Pitch/Roll:	18/33/50 DPS
Cargo:	10 m^3

Notes:

The Griffin is a faster, more dead-sexy-looking version of the basic Peregrine design. While it was meant to be a semi-replacement for the ‘Grine, it has not become this for several reasons. Firstly, even if the Griffin is unarmed the Peregrine can still out-accelerate and out-maneuver the craft (though the Griffin does roll better.) While the craft does possess more heavy weaponry than the Peregrine (almost as much firepower as a Chiropteran in fact) it suffers from the same fate of having difficulty utilizing it in combat. The best thing it has going for it is the fact that it mounts the largest sensor package in the five systems, the TRI-produced Night Watchman. The Griffin is capable of spotting approaching fleets before anything else can. In addition to being an excellent artifact hunting ship with its decent cargo bay, the Griffin is commonly deployed in sectors such as The Gurge to watch for any incoming ship traffic, including hostile attack wings. While such duty is hardly glamorous, it is necessary intelligence for the defense wings of Octavia, and the combat pilots are always grateful toward those who pull “watchman” duty.

Of recent note is the fact that, like the Peregrine and the scouts of the other factions, the Griffin has been cleared to carry fairly hefty missile ordinance for a craft of its size. It also possesses a size 3 gun mount, giving it substantially more firepower than other scout craft. While it still cannot maneuver like a fighter, any Griffin pilot can use such large weapons mounts as he sees fit…



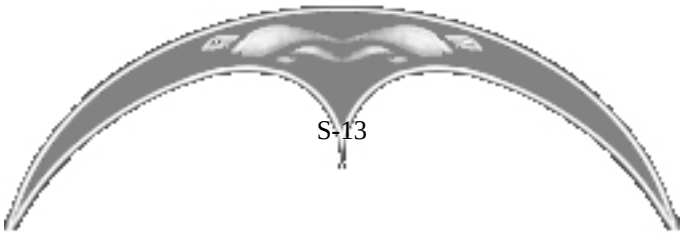
TRANSPORTS

Transports. They get things where they need to go. In Octavia the job of hauling isn't very highly valued (above the fighting anyway) but even the most thick-skulled aerojock does recognize that sometimes things just need to be hauled. Octavian ships have somewhat smallish holds, but these ships (usually) have some other special redeeming feature. And all you ace fighter jocks would do well to respect your cargo pilots – they're the ones who keep your birds supplied with feed.

Hawk

Classification:	Light Transport
Power plant:	Instigator, Antagonizer (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	9360mm
Capacitor:	Spore, Seed in pulse laser or ammo configurations (size 2)
Laser Config:	1 Heavy Laser/2 Medium or ER lasers, 1 Warper/2 Distorters
Ammo Config:	1 Cobra/2 Strakers
Missiles (# x size):	3x2
MODx:	3
ECM:	1
Speed (nor/ab/ff):	415/472/819 MPS
Acceleration:	111.4 (laser), 114.3 (pulse), 105.6 (ammo) kN/kg
Yaw/Pitch/Roll:	45/65/55 DPS
Cargo:	12 m^3

Notes:
The Hawk is an exceptional rookie transport vessel. With the same T/M ratio as a light fighter and almost comparable armament, it could be a fighter-craft if it wasn't so slow (comparatively). Even then, it is often capable of chasing off the lone pirate who is trying to jack your cargo or random Conflux. It is also an excellent low-rank mining platform, as it can mount a Banker and several defensive weapons, allowing the pilot to go into deep space without worrying about Conflux. Thanks to the way the engines are mounted, it has a little trouble with horizontal vectoring, but not to the degree the Buzzard has with vertical. An excellent ship for the rookie hauler, overall.



Wyvern

Classification:	Transport (OBSOLETE)
Power plant:	Sport (size 3)
Engines:	Dream (size 5)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	15600mm
Capacitor:	Pint for Heavy lasers, Spore for Pulse lasers, Jug for ammo (size 3)
Laser Config:	VAPOR/Warper x 2, Heavy Laser x 3
Ammo Config:	Hammer x 3 or Cobra x 3
Missiles (# x size):	4x2
MODx:	4
ECM:	2
Speed (nor/ab/ff):	334/380/660 MPS
Acceleration:	51.4 (lasers), 53.4 (pulse), 50.8 (ammo) kN/kg
Yaw/Pitch/Roll:	36/50/47 DPS
Cargo:	48 m^3

Notes:

The 'Turkey', as this ship is (not so) affectionately called is serviceable, nothing more. This is commonly known as one of OPL's great engineering disasters. It LOOKS rather excellent, but in function it is nearly useless. Its T/M ratios are disgusting, it handles poorly (although its pitch isn't atrocious), and its cargo capacity is pathetic compared to other nation's ships in the same class. Perhaps its only saving grace is its size 3 mount in the center, which allows it to equip a Financier mining laser. The Turkey does make for a fairly decent self-defended mining platform (1 Financier, 1 Banker and a Heavy laser or similar gun), but it is eclipsed in this function by the Simurgh (especially since the Simurgh mounts an Anti-Flux ECM). Not only that, but the Simurgh is now a better cargo vessel than the Turkey in every meaningful way, rendering the Wyvern completely and totally obsolete. There is currently no reason whatsoever to fly this ship – although OPL claims to be working on a Wyvern upgrade program furiously.

Simurgh

Classification:	Light Miner/Transport
Power plant:	Sport (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Doorbell (40000 meter range) (size 3)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	9000mm
Capacitor:	Jug (size 1)
Laser Config:	Financier x 2/Banker x 2 (guns mounted sometimes)
Ammo Config:	Financier x 2/Banker x 2 (guns mounted sometimes)
Missiles (# x size):	3x2
MODx:	4
ECM:	3
Speed (nor/ab/ff):	372/424/735 MPS
Acceleration:	64.2 (miner) kN/kg
Yaw/Pitch/Roll:	25/30/15 DPS
Cargo:	60 m^3

Notes:

The Simurgh is good at lifting ore from asteroids. That's it. While it is not the atrocity of a vessel it once was, it still lacks somewhat in combat capacity and speed. It was, however, designed for mining, and with the modifications made to match the upgraded Harmattan the Simurgh performs this duty well at last. When in full mining mode, it can overheat an asteroid quickly and it has good cargo capacity, enough for perhaps nine medium-sized asteroids. With a size 3 ECM slot, it can mount an Anti-Flux ECM as well. Many Octavian pilots, however, prefer to house weapons in at least one of the size 2 slots, allowing them to destroy any idle Conflux possibly left behind by other pilots passing though. The Simurgh is aggressively designed with this in mind as well; it possesses more MODx and missile slots than any other Light Miner design, and by far the most armor in its class. It is my no means a warship, but a Simurgh is more than capable than defending itself against light Conflux and possibly even Light Fighters.

Ironically, the upgrades to the Simurgh have made it a better overall transport vessel than its cousin the Wyvern; it is now the Octavian medium transport in addition to being the Light Miner of the fleet (although it lacks the capacitor capability for very heavy size 3 weapons like the Hitman.)

Condor

Classification:	Cargo Tow
Power plant:	Sport Plus (size 4)
Engines:	Dream x 2 (size 5 x 2)
Radar:	Sentinel (48500 meter range, less power need than a Nubbler) (size 4)
Shield:	Makk (36000mm equivalent) (size 4)
Armor:	96000mm
Capacitor:	Spore, Keysto for plasma (size 4)
Laser Config:	Heavy Laser x 2, Spitfire x 2, Serializer x 2
Ammo Config:	Barrak x 2
Missiles (# x size):	2x6, 2x2
MODx:	7 (camera Modx recommended)
ECM:	3
Speed (nor/ab/ff):	452/515/893 MPS
Acceleration:	64.8 (laser), 64.1 (ion), 63.0 (gauss), 63.1 (plasma) kN/kg
Yaw/Pitch/Roll:	28/39/28 DPS
Cargo:	500 m^3

Notes:

The Cargo Tow is the standard hauling vehicle of the five systems. All use standardized cargo pods, with the actual tow vehicle making up the rest of the vessel. These ships were designed with the assistance of TRI to ensure the smooth and plentiful flow of goods between and within the various member nations. The Condor is the most heavily armored Tow in the five systems, mounting enough armor to withstand exactly two tactical nuke hits (though a micrometeor could destroy the vessel afterward.) It also mounts a good shield, but it is not well armed (with the possible exception of two assault-class missile mounts, and the ability to utilize the hard-to-aim Serializer plasma cannons) and will require escort if it looks as though it will face more than Conflux on its run (thanks to the Anti-Flux ECM). It is also quite fast for a cargo vessel, with a serviceable T/M ratio. Hauling is not a glorious job, but this vessel will more than get the job done.

It is interesting to note that this vessel was used as something like a gunboat before the advent of the Vulture class Assault Gunboat. With its small guns and lack of power, however, it was a poor ship for the role. These days it is used exclusively for hauling, though it can be used in combat in the direst of emergencies. Also, it is recommended that cargo pilots keep a Camera in one of their MODx slots so they can view their destination gate from a distance and align accordingly.

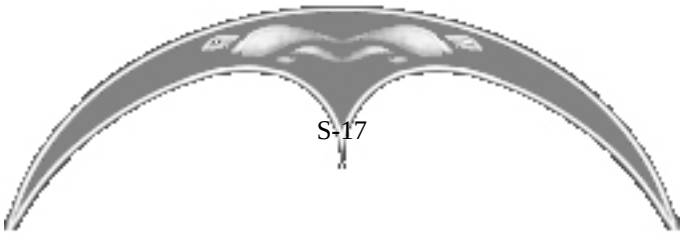
Roc

Classification:	Freighter
Power plant:	Intimidator (size 5)
Engines:	Tangent x 1 (size 7)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Guardian (99700mm equivalent) (size 6)
Armor:	195000mm
Capacitor:	Pint for Hitmen, Deepol for Nova Mk1, Seed for Peelers (size 3)
Energy Config:	Nova Mk1 x 2
Ammo Config:	Hitman x 2, Peeler x 2
Missiles (# x size):	2x6
MODx:	7 (camera recommended)
ECM:	3
Speed (nor/ab/ff):	377/430/745 MPS
Acceleration:	29.1 (plasma), 29.0 (railgun), 29.2 (mortar) kN/kg
Yaw/Pitch/Roll:	15/15/25 DPS
Cargo:	740 m^3

Notes:

The largest cargo vessel currently in service to the Octavian navy, the Roc is a massive beast. Its combined defensive assets are capable of withstanding **six** direct hits with tactical nuclear weapons. It can also mount decently sized defensive weapons (including two generously sized missiles), but in practice it requires an escort if serious opposition to the run is expected. It is also a ponderous bird to maneuver, but no other vessel in the Octavian navy can move as much cargo as the Roc. It also has the great advantage of having a single (massive) engine, thus can afterburn much longer than most large cargo vessels (which allows it to accelerate much faster than might be expected.) It is, on the whole, probably the best of the three Freighter designs plying the space lanes of the five systems.

Rumor speculates that this hull will be used as the basis for the upcoming Corvette class ships being developed by Octave Propulsion Labs. The hull could certainly accommodate a small crew with ease.



GUNBOATS

The “gunboat” class of vessels are fairly new to space combat, and only one example of the class is currently in service: the Vulture Assault Gunboat (AKA “Heavy Miner.”) Octavian High Command has confirmed though unofficial channels that they are working on heavier corvette class vessels that utilize turreted guns and several crew members. However, until we get reliable data on those ships, only the Vulture shall occupy this space.

As for what Gunboats are, they are in some ways “pain sponges.” They are meant to either wade into a large battle and attract attention or assault a position and possess enough armor and weaponry to eliminate all opposition without an overwhelming amount of fighter support. Some might term them a “replacement” for fighters… however, the cost of such ships (and for the projected larger models, the crew involved) ensure that the aerospace fighter craft will have a place on the battlefield for decades if not centuries to come. The value of a mobile firebase to take into battle cannot be underestimated, however. A vessel capable of causing damage to most targets it could conceivably face while being able to withstand any return fire is of great strategic and tactical value to the Imperial Navy, and research continues apace.

Vulture

Classification:	Assault Gunboat/Combat Transport/"Heavy Miner"
Power plant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Sentinel (48500 meter range, less power need than a Nubbler) (size 4)
Shield:	Mortar (60000mm equivalent), Warden (36500mm equivalent, four times faster recharge than Mortar; pilot/commander preference) (size 5)
Armor:	79800mm
Capacitor:	Pint for Flails, Jug for Vantages and Shards (size 3)
Laser Config:	Shard x 2
Ammo Config:	Flail x 2, Vantage x 2
Missiles (# x size):	1x5, 2x4
MODx:	7
ECM:	3
Speed (nor/ab/ff):	423/484/839 MPS
Acceleration:	67.0 (Shard), 65.6 (Vantage), 61.3 (Flail) kN/kg
Yaw/Pitch/Roll:	26/26/31 DPS
Cargo:	260 m^3

Notes:

Released under the guise of a "Heavy Miner" (and it is still a capable mining craft using 2 Prospector mining lasers), the Vulture is in actuality an entirely different kind of ship than anything seen before. It is the first Assault Gunboat any nation's fleet has ever seen. The craft mounts several heavy weapons, and also mounts a massive shield capable of taking a direct tactical nuke hit and still holding. It also mounts a great number of MODx, allowing it an astounding amount of tactical flexibility. Additionally, it carries a large radar system that allows it to see much farther than attending fighters. It is not particularly swift, but it is meant to perform somewhat the same function as the Dragon – wade into fleet battles and absorb incredible (in this case staggering) amounts of damage. It also possesses enough firepower to appreciably damage other combat craft, and it mounts several moderate-to-heavy warheads capable of heavily damaging fighters and lighter cargo vessels (although they lack the size for hardened targets like Infestations.) It is not very maneuverable, but it is a mobile firebase – it is not meant to be handled like a light fighter. Dragon and Raptor pilots will feel right at home in the cockpit of a battle-configured Vulture. It can also be used as a battle transport, conveying medium-sized loads though areas where commanders feel the transport could use some firepower on it as well. Astute pilots will note that the ship's gun mounts are actually size 5, while currently the most devastating ballistic weaponry available in the five systems is size 4. Rumors are circulating that these mounts were designed **specifically** for the exceptionally illegal Imperializer weapon system produced by Annihilitech. It is possible the Navy may move to have the weapon legalized and released in Octavian space. The weapons on the Vulture are already destructive; the power of a Vulture with Imperializers would be difficult to fathom.

Date Entry: 104.02.21 12:00 EKT
Subject: Imperial Octavian Navy Solrain Ship Report
Author: André “SpaceDrake” Ricard
Classification Level: General public

Imperial Octavian Navy Solrain Ship Report
Version: 1.1

UPDATER’S NOTE 104.02.21

Fellow pilots,
This last in our series of reports deals with the aerospace fighters and ships fielded by the various interstellar nations of TRI, this report focusing on the vessels fielded by the Commonwealth of Solrain. We hope to present a fair view of the vessels the Solrain Defense Force (SDF) fields; if it seems like we’re harsh on some ships, believe us, many Solrain pilots are just as unhappy.

The Solrain fleet recently underwent upgrades that were mostly result of outright theft of technical data from the Octavian Empire. That incident bore fruit, for better or worse; both the Solrain Light and Medium Fighter have been significantly redesigned along the lines of the Raven and Chiropteran. And of course, their main-line combat ships, the S2-X Intensity and S13-R Barracuda remain as deadly as they’ve been for years. The Intruder remains an odd bird, and Solrain cargo vessels still have the most expansive cargo holds in the five systems. Although they dominated the five systems in the recent past, Solrain has declined in power and prestige somewhat recently; as with the Octavians, it would still be foolish to underestimate the power of some of these vessels. Several of these designs rank among the best combat ships in recorded history.

As previously, these reports are arranged in the following manner: when components like engines are listed, the recommended part is given along with the size, except for guns, where all practical loadouts are covered. Missiles, MODx and ECM are all given in size alone, due to the variety of parts available in these areas. Speed is given in meters per second, with normal power, afternburn and Flashfire top speeds; Yaw/Pitch/Roll rates are given in degrees per second and indicate the turn rate of a ship not firing its engines. Acceleration is kilo-Newtons of thrust per kilogram. Armor is in millimeters, shields are rated compared to the equivalent protection in mm of armor they provide. Cargo is in cubic meters. Also, classification is slightly changed from the TRI standard to be more accurate (in the author’s opinion.)

At your service,
André “SpaceDrake” Ricard

SHUTTLES

The SDF hasn’t focused much attention on their shuttle program, on the whole – none of these vessels are very good compared to their counterparts in the Imperial Navy or the Holy Armada. Evidently the designers at Tens & Piney were and continue to be more focused on the larger (and arguably more useful) ship chassis that the more veteran pilots would use in actual combat.

Once again, note that the loadouts listed here are optimal loadouts. Absolute nugget pilots are likely to be flying ships far less well equipped than what is listed here.

Premia

Classification:	Shuttle
Power plant:	Contender XPR (size 1)
Engines:	Travant Plus x 2 (size 2)
Radar:	Chime (24000 meter range) (size 1)
Shields:	Himelea (7800mm equivalent; see below) (size 2)
Armor:	4500mm
Capacitor:	Jug (size 1)
Laser Config:	Medium Laser x 2, ER Laser x 2
Ammo Config:	Straker x 2
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	292/333/577 MPS
Acceleration:	88.9 (laser), 82.9 (ammo) kN/kg
Yaw/Pitch/Roll:	63/55/70 DPS
Cargo:	4 m^3

Notes:

The Premia is a merely adequate entry-level shuttle. While it possesses the same gun and missile mounts as the Apteryx, it is the only ship in the five systems that utilizes size 1 microfusion reactors exclusively – to its detriment. Even when using the extremely overpriced Contender XPR system (which costs as much as a Centerfuge MK3) it can barely power 2 Travant Plus engines with adequate power left for other systems. Mounting more powerful engines than Travant Plusses leaves the Premia with nearly no power at all. Thus, the Premia ends up being depressingly slow and unmaneuverable compared to the entry-level shuttles of other nations.

It does, however, present two of the SDF's combat doctrines to the new pilot: oversized shields and generous MODx slots. If a pilot is mad enough, he can actually install a Haven shield in the Premia, although it lacks the power for this with even Travant Plusses (making the Solrain-manufactured Himelea system the most desirable for Premias.) Also, it has as many MODx slots as most Light Fighters. These two factors introduce a Solrain pilot to his fleet's greatest strengths very early on, and reinforces combat doctrines that will serve him well in real combat craft.

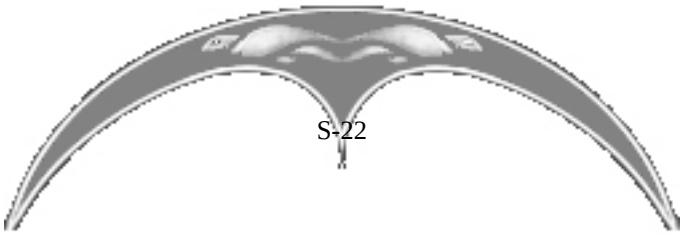
Premia XL

Classification:	Shuttle/Ultra-Light Scout
Power plant:	Sport LP (size 2)
Engines:	Respect x 2 (size 2 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent), Canopy (12240mm equivalent, the only reason to use the Canopy is that it is available at level 8 rather then 13) (size 2)
Armor:	3600mm
Capacitor:	Jug (size 1)
Laser Config:	Medium Laser x 1, ER Laser x 1
Ammo Config:	Straker x 1
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	439/500/866 MPS
Acceleration:	116.4 (laser), 113.0 (ammo) kN/kg
Yaw/Pitch/Roll:	50/45/55 DPS
Cargo:	1 m^3

Notes:

The Premia XL is a unique attempt at a new ship class – it is, however, not a very successful one. Whereas other factions possess an “Ultra-Light Fighter” for their nugget pilots to use in combat, engineers at Tens and Piney created the Premia XL with the idea of creating an “Ultra-Light Scout.” The results are… interesting, at best. The ship does mount the largest radar of any ship in its class – or indeed any ship available until into the second rank tier of any nation’s navy – but it lacks in nearly every other regard. It can mount a large shield but again lacks the power required to keep it working properly, its armor is like bacofoil, and it mounts a tiny weapon. Also, to properly outfit this craft requires the pilot to be at least rank 10 on the TRI standard rank scale – long after the nugget pilot has bought this ship and by then he can afford a far superior Light Fighter. Also, the ship is too slow to effectively escape from any pursuit by anything faster than a Bomber (and that’s assuming the Bomber lacks FlashFires.) While it is maneuverable for a scout, the Premia XL is, on the whole, something of a failure.

Interestingly enough, however, the ship was apparently recently upgraded with no fanfare at all. It now flies at almost 440v – still a hair too slow to be very useful in real combat given its firepower (it used to fly at 370v), but it is now by far the fastest ship available to a low-rank pilot of any faction, even without optimal gear. If a nugget is lucky enough to find a generous veteran, he’ll have a ship that can handle small Conflux with some difficulty and get away from anything large enough to kill him. With further upgrades it may even fall into the Ultra-Light Fighter category at last.

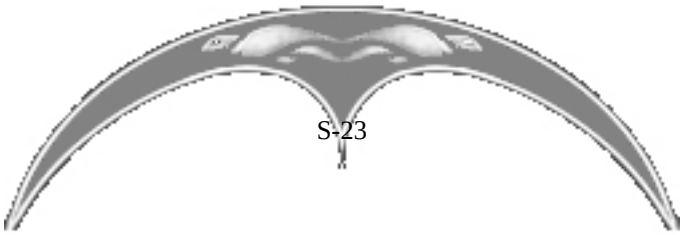


Premia SC

Classification:	Heavy Shuttle
Power plant:	Sport LP (size 2)
Engines:	Respect x 2 (size 2 x 2)
Radar:	Vine (23000 meters, low power useage) (size 2)
Shields:	Haven (15400mm equivalent), Canopy (12240mm equivalent, the only reason to use the Canopy is that it is available at level 8 rather then 13) (size 2)
Armor:	7200mm
Capacitor:	Jug (size 1)
Laser Config:	Medium Laser x 2, ER Laser x 2
Ammo Config:	Straker x 2
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	356/406/703 MPS
Acceleration:	103.2 (laser), 97.6 (ammo) kN/kg
Yaw/Pitch/Roll:	65/45/70 DPS
Cargo:	6 m^3

Notes:

The Premia SC is another merely average entry into its class by Tens & Piney. While it lacks the maneuvering problems of the Buzzard, it has the smallest cargo bay of the three heavy shuttles, merely average top speed, and 2 size 1 gun (and missile) mounts which severely hamper its mining capacity (which is one of the best ways for nugget pilots of any faction to make money). And once again, the optimal equipment for the ship requires a fair amount of rank (by which time the Light Fighter becomes available). While not bad in any way, the Premia SC isn't particularly spectacular, either.



FIGHTER CRAFT

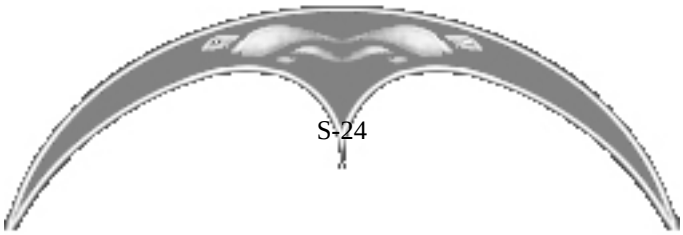
The Tens & Piney Aerospace Fighter division has, in the past few years, developed a reputation for randomness in the quality of their fighter design – the designs coming out of T&P have been either brilliant advances of fighter technology or they've been utter disasters. Solrain designs have also often shown off advanced Solrain technology – several times the fighters of the SDF have done things that nobody thought a ship of that class could do.

Initially, the Solrain military was fairly weak; their premier Heavy Fighter, the S2 Intensity, only had as an advantage the fact that it mounted an oversize shield. It was under-gunned, presents a large profile, and didn't maneuver very well. In the days of the original O2 Phoenix, this resulted in loss after loss for the SDF in their attempts to maintain the integrity of Solrain space. This continued for some time until right around 101.09… when out of the blue T&P released the S2-S. It was the same ship as the old Intensity, except for one difference: it mounted the same kind of power plant that the Phoenix did at the time. A Sport Plus.

The reversal was unprecedented – the SDF went from being the whipping boy of the five systems to nearly total and utter domination overnight. With the Nix being "nerfed" recently, and the Phoon being somewhat underpowered compared to today, there was little to stop Solrain from practically dictating TRI policy. The release of the superlative Barracuda Bomber – the original oversize shield version – only further cemented this military dominance, and the original Invader Medium Fighter (the pre-Impeler version) was also quite useful in combat. And so it was for over a year.

The first faltering steps came with the release of the Intruder, however. In comparison to the awe-inspiring Dragon and the (eventually) excellent Monsoon, the Truder seemed… underwhelming. Then, the recent theft of technical data from Octavius Core resulted in proper LFs and MFs being built by T&P… with another schizophrenic result. While the new Interceptor was astounding, on the whole they actually managed to make the Invader worse – especially compared to the new competition in town. As T&P continue their ship design efforts, the pilots of the SDF can only wonder if their next design will be a winner or another disaster that further limits their choices.

There is an interesting note concerning SDF ship development – weapons, specifically. T&P is certainly attempting to match their rivals in both the advanced tactical fighter and gunship/corvette areas (like Cromforge, T&P is apparently working on the gunship more, given an immediate threat of the Vulture and continued failure in the field of the AF like everyone else), but rumors are circulating that the SDF may be looking to dominate in another area. Recently, Particle Systems Inc. of Hyperial offered public shares for investment, and then for some reason could not repay the investment. The situation was eventually handled by the Soria Credit Union by refunding all investors while complaining loudly about having to do so. While it may seem innocent enough, rumors are circulating that the non-payment of PSI was planned. This was quite possibly a stealth payment by the Solrain government (using investor credits as a medium) to PSI for something. The rumors are also saying that the payment was for PSI's development of a new kind of weapon system – to be developed by PSI and manufactured in Solrain space by Tens & Piney. The weapon is rumored to be a "particle cannon" – a weapon that hurls unstable subatomic particles at high velocities and causes small atomic explosions on impact. The weapon is deadly, with good range thanks to its matter-based shot (like an Ion Cannon) and fast enough to be useful in combat while doing appreciable damage to boot. The weapon is also evidently workable in the size 2 and 3 range only. Given this, T&P's negligence of the Invader and Intruder suddenly seem to make sense. Only time will tell if the rumor pans out – but if it does, it could signal a return of Solrain dominance in space.



Interceptor

Classification:	Light Fighter
Power plant:	Instigator, Antagonizer sufficient (size 3)
Engines:	Impeler x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shields:	Haven (15400mm equivalent) (size 2)
Armor:	8600mm
Capacitor:	Spore for heavy lasers and ions, Jug for others (size 2)
Laser Config:	Heavy Lasers x 2, Warper x 2, Spitfire x 2
Ammo Config:	Barrak x 2, Cobra x 2, Hammer x 2
Missiles (# x size):	4x2
MODx:	4
ECM:	1
Speed (nor/ab/ff):	465/530/918 MPS
Acceleration:	107.4 (lasers), 110.5 (pulse), 103.9 (ion), 100.4 (gauss), 101.4 (ammo) kN/kg
Yaw/Pitch/Roll:	75/70/60 DPS
Cargo:	6 m^3

Notes:

Even when the Light Fighter class was a lesser type of fighter, the Interceptor was an excellent ship in its class. With the recent upgrades made to it, it has become arguably the most powerful Light Fighter in existence. While it is the slowest of the Light Fighters overall – in terms of speed, acceleration AND maneuverability – Solrain engineers made the brilliant move of giving the fighter two size 2 weapon mounts running right along side the cockpit. Not only does this make targeting easy, but the variety of weapons available at size 2 make the Interceptor exponentially more versatile than the other ships in its class. An Interceptor can be tailored to practically any kind of mission – fighter combat, conflux combat, cargo stealing (possible with its large cargo hold), even mining. Perhaps what clinches the deal, however, is the MODx loadout. It has as many MODx slots as most heavy fighters do – meaning it can mount as many FlashFires as these ships do, and **more** than other ships in its class. In other words, it is a nearly perfect pursuit vessel – a true “interceptor.”

The vessel’s only weaknesses are the aforementioned minor deficiencies in movement, and also slightly less armor than ships of comparable class. These are only fairly minor inconveniences, however, that are vastly overshadowed by the fighter’s excellent gun and MODx loadout. A dangerous vessel overall, and one that should be treated with respect even by Heavy and Assault Fighter pilots.

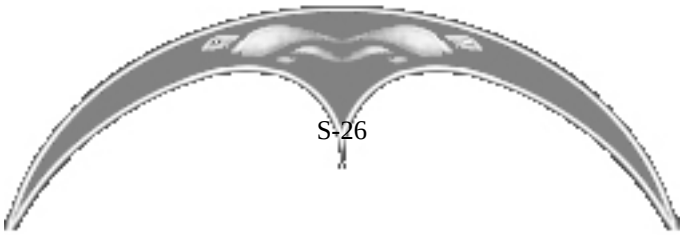
Invader

Classification:	Medium Fighter
Power plant:	Instigator (size 3)
Engines:	Impeler x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shields:	Alpaa (20400mm equivalent) (size 3)
Armor:	7600mm
Capacitor:	Spore, Jug for ammo (size 2)
Laser Config:	Heavy Laser x 2/ER Laser
Ammo Config:	Cobra x 2/Straker
Missiles (# x size):	1x4, 2x2
MODx:	4
ECM:	2
Speed (nor/ab/ff):	442/504/873 MPS
Acceleration:	88.8 (laser), 83.4 (ammo) kN/kg
Yaw/Pitch/Roll:	60/60/50 DPS
Cargo:	5 m^3

Notes:

The “improved” Invader is, in fact, one of T&P’s great design goofs and possibly the biggest waste of espionage resources in recorded history. It is not, perhaps, an utterly terrible fighter per se – it is simply outplayed by everything in its class (and sometimes lower). The original Invader, while being slow (sub-400v) like its contemporaries, handled well and accelerated surprisingly fast. Its biggest advantages were defensive – it could mount a massive shield for a craft of its size (a size 3 Alpaa), and… well, its **size.** The Invader is thin as paper – it presents the smallest head-on profile of any combat ship on record (barring, perhaps, the Gust). Even for ace gunners, hitting this ship can be a challenge at times.

When it came time to upgrade the Invader, engineers at T&P knew that pilots would be outraged if the fighter lost either of those advantages – however, the cost for keeping these two features on a modern frame was high. The ship lost a gun mount, gained internal structure weight, lost armor, and had its maneuverability restricted somewhat – all for a top speed that was **still** worse than the other medium fighters and just barely above that of a Phoenix. This might not be a problem if the Invader had more MODx slots than other fighters of its class as most Solrain designs do – but it does not. Thus, the only thing the Invader has over other MF designs is its oversize shield and its profile – and given the ability of its **larger** brother to run it down, most pilots opt for either the Intensity or the Interceptor. When flown exactly right, it can still be useful in combat, but given how much easier the Tens and Ceptor are to utilize in combat, the Invader will remain an outcast for the foreseeable future. Its ability to mount a Heavy Torpedo centrally does open up interesting possibilities, however.



Intensity

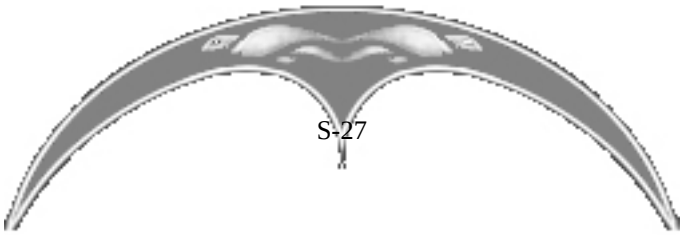
Classification:	Heavy Fighter
Power plant:	Sport Plus (size 4)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shields:	Alpaa (20400mm equivalent) (size 3)
Armor:	11400mm
Capacitor:	Pint for most, Deepol for Injustices, Jug for pulse lasers (size 3)
Laser Config:	Heavy Laser x 3, VAPOR x 1/Warper x 2, FeatherFire x 1/Spitfire x 2
Ammo Config:	Hitman x 1/Barrak x 2
Missiles (# x size):	1x4, 2x2
MODx:	5
ECM:	1
Speed (nor/ab/ff):	451/515/891 MPS
Acceleration:	90.1 (lasers), 86.4 (ion), 97.4 (pulse), 82.3 (railguns) kN/kg
Yaw/Pitch/Roll:	60/45/60 DPS
Cargo:	24 m^3

Notes:

The Flying Banana, The Mean Blue Murder Machine, The Most Insane Ship In The Galaxy… the Intensity has been and is all of these things. The S2-S Intensity is the ship that went from being a washout to becoming a legend, and even today is still quite possibly the greatest fighter craft in the five systems overall.

At first glance the Tens isn't that great of a fighter. Slow to maneuver, vastly undergunned, thin armor… there doesn't seem to be much to love here. Even from the beginning, however, the Intensity possessed a staggering number of MODx slots – giving it far greater hit-and-run capacities than any other fighter. It also possessed a shield unit that was originally created specifically for the Intensity – the TP52 Alpaa. Despite these strengths, the vessel was hampered by a small power plant while lacking the raw acceleration of the Typhoon. The updated version, however, stuffs a Sport Plus power plant into the frame, providing enough power for any weapons loadout sans plasma. Combined with a generous capacitor, the fighter became the premier hit-and-fade vessel of space and was capable for some time of dominating all before it.

These days the Intensity is something of a galactic average – it lacks the guns of other Heavy Fighters, but it has a number of advantages that still allow it to compete. The best way to fight a Tens is to exploit its lack of raw firepower – it can power those guns, but it still lacks sheer gun strength. It's acceptable to take a blow or two from a Tens to knock its shield down – most Tens pilots will retreat if their shield goes down, because the Tens is not thickly armored beneath the Alpaa. Beware, however – good Tens pilots can re-engage just as quickly as they can disengage.



Intruder

Classification:	Assault Fighter
Power plant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Knocker (35000 meter range)
Shields:	Alpaa (20400 mm equivalent)
Armor:	20
Capacitor:	Seed (size 4, see below)
Laser Config:	Not used
Ammo Config:	Vantage x 2/Peeler x 3
Missiles (# x size):	1x6, 2x4, 2x2
MODx:	4
ECM:	2
Speed (nor/ab/ff):	449/512/886 MPS
Acceleration:	75.8 kN/kg
Yaw/Pitch/Roll:	50/45/50 DPS
Cargo:	20 m^3

Notes:

No matter how you look at it, the Intruder is an engineering disaster. Much like the Invader, both of the other entries into the Assault Fighter class vastly outmatch the Intruder. It lacks the powerplant of the Dragon, yet it also lacks the speed and maneuverability (except perhaps in raw YPR capability) of the Monsoon. Perhaps most perplexingly, though, is that a ship clearly inspired by the Intensity and nearly half-again the size of that vessel does not possess a larger shield than that vessel (a feat which the Dragon accomplished) and has **fewer** MODx slots than its “little” brother. Granted, it does still mount five large guns and an Alpaa class shield, but in a fight against any other ship of its own class, the Intruder loses. Badly.

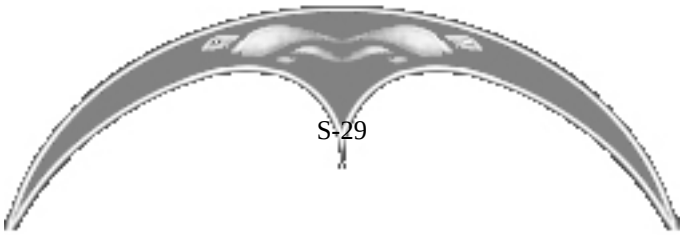
Mortars are the only workable weapons on this vessel, given its deficient power plant; however, due to the fact that it is outperformed by its predecessor, the Intruder is rarely, if ever, used. It is suspected that T&P is working on making the Intruder something vaguely resembling competent.

Barracuda

Classification:	Bomber
Power plant:	Sport Plus (size 4)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range)
Shields:	Haven (15400mm equivalent) (size 2)
Armor:	16800mm
Capacitor:	Keytso, Alembic for Hitmen, Carrier for pulse lasers, Seed for mortars (size 4)
Laser Config:	VAPOR x 4, Heavy Laser x 4, FeatherFire x 4
Ammo Config:	Hitman x 4, Peeler x 4
Missiles (# x size):	2x8, 2x6, 2x4
MODx:	5
ECM:	2
Speed (nor/ab/ff):	414/472/817 MPS
Acceleration:	70.4 (lasers), 70.9 (pulse), 66.1 (ion), 64.7 (railguns), 68.1 (mortars) kN/kg
Yaw/Pitch/Roll:	50/40/50 DPS
Cargo:	16 m^3

Notes:

Again a reversal in ship design, the Barracuda Bomber is an exceptional entry into its class. Much like the Invader, the Barracuda is extremely thin, especially for a ship of its class, giving it an edge in head-on confrontations. The original version also mounted a size 3 shield making it incredibly powerful, but that was eventually downgraded to a size 2 shield due to power flow concerns. Even so, the ship remains powerful, due to its good gun loadout (which is also mounted completely beneath the cockpit, making the craft a sniper's dream), decent acceleration and maneuverability for a Bomber, and good hardened target missile loadout. The Barracuda does lack slightly in the dedicated anti-fighter ordinance category (compared to the Tornado and Raptor, at least); however, its heavy ordinance slots can also be used for missile packs, ensuring that the Barracuda does not want for anti-fighter weaponry (although mixing both nukes and missile clusters in one mission can dramatically impact its ability to fight either hardened or soft targets due to the sheer lack of missile slots compared to other bombers.) On the whole, the Barracuda can arguably be called the best of the Bomber designs; it is capable of fulfilling either Bomber role with ease and has a fairly unique advantage to boot.



SCOUTS

Much like the Quantar fleet, the Solrains really possess only one useful scout-class vessel, the Vedette Heavy Scout. With many Solrain pilots content with the way things are in this classification, it seems highly unlikely that the Quicksilver will receive any attention from engineers at T&P in the near future.

Quicksilver

Classification:	Light Scout
Power plant:	Sport (size 3)
Engines:	Adventa x 2 (size 4 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shields:	Haven (15400mm equivalent) (size 2)
Armor:	6000mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy Laser, Spitfire Ion Cannon
Ammo Config:	Barrak
Missiles (# x size):	1x4
MODx:	2
ECM:	1
Speed (nor/ab/ff):	491/560/971 MPS
Acceleration:	135.8 (laser), 133.8 (ion), 130.2 (gauss) kN/kg
Yaw/Pitch/Roll:	45/15/45 DPS
Cargo:	1 m^3

Notes:

The Quicksilver is like the Simoom in that it is an outdated ship for its time. Not as fast as the Heavy Scouts, over-engined (unless you wish to put an Antagonizer or Instigator into the ship, which still doesn't power Rushes correctly and doesn't make the ship any faster), and under-MODxed, perhaps the most remarkable thing about the Quicksilver is its maneuverability. While its pitch is atrocious, it actually yaws and rolls tolerably. That still isn't enough to make up for its small radar, however; the Quicksilver is primarily the tool of those pilots who can't afford better.

Vedette

Classification:	Heavy Scout
Power plant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Night Watchman (54000 meter range) (size 5)
Shields:	Shelter (6009mm equivalent) (size 1)
Armor:	4800mm
Capacitor:	Spore (size 2)
Laser Config:	Heavy Laser x 2, Spitfire x 2
Ammo Config:	Barrak x 2
Missiles (# x size):	2x4
MODx:	4
ECM:	1
Speed (nor/ab/ff):	547/624/1080 MPS
Acceleration:	137.4 (laser), 134.2 (ion), 128.5 (gauss) kN/kg
Yaw/Pitch/Roll:	35/16/50 DPS
Cargo:	12 m^3

Notes:

While the slowest of the Heavy Scouts by 4 MPS, the Vedette is still an impressive craft in several regards. It possesses the most cargo space of the Heavy Scouts, making the ship excellent for artifact hunting. It also possesses 4 MODx slots and the most maneuverability of any Heavy Scout (thanks to its Quicksilver heritage), making it a semi-viable choice in fleet combat if it must fight alongside the fleet it is spotting for. The armor is a bit of a worry – a single volley from a Dragon or Monsoon can almost blow right though this fragile ship. With smart piloting, however, the Vedette makes for an excellent scout craft when utilizing the Night Watchman sensor package.

TRANSPORTS

The Commonwealth of Solrain is indisputably the economic king of the five systems; its planets came though the Great Collapse in far better shape than any of its neighbors, and the culture of the Commonwealth had always been geared toward capitalism. It comes as no surprise then that, while their transports may not always be the fastest ships in the five systems, they have the largest cargo holds of their class and in some cases in the known universe. These vessels are the lifeblood of the Solrain economy and the Solrain pilot – and they have had an appropriate amount of attention given to them by Tens & Piney.

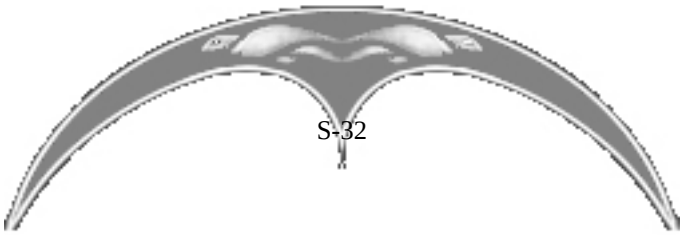
Phaeton

Classification:	Light Transport
Power plant:	Instigator, Antagonizer (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	8550mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy Laser or Warper x 2, Spitfire x 2
Ammo Config:	Barrak x 2, Cobra x 2, Hammer x 2
Missiles (# x size):	2x2
MODx:	3
ECM:	1
Speed (nor/ab/ff):	422/481/834 MPS
Acceleration:	110.4 (laser), 107.1 (ion), 101.9 (gauss), 102.9 (ammo) kN/kg
Yaw/Pitch/Roll:	60/55/50 DPS
Cargo:	15 m^3

Notes:

A very, very good entry into the Fast Transport classification, the Phaeton is every rookie trader's dream come true. Easy to handle, fairly quick to accelerate, and well-armed, perhaps the only thing the Phaeton might want for is more armor and a larger capacitor. Its twin underslung cargo pods give it unparalleled cargo capacity in its class, making it extremely useful to new traders. Especially once loaded out with an advanced power plant, it is also very capable of defending itself. Every Solrain owes it to himself to try this ship at least once.

There are some vague indications that this ship may get a speed boost using the same techniques used on the Interceptor. Solrain pilots are praying this doesn't end in disaster; regardless, however, if the ship becomes much faster it would make an excellent pirating and smuggling platform, something which would cause no end of headaches for the other space-borne navies.



Traveler

Classification:	Transport
Power plant:	Instigator (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shields:	Alpaa (20400mm equivalent) (size 3)
Armor:	13500mm
Capacitor:	Spore, Jug for Warpers
Laser Config:	Heavy Laser x 3, Warper x 3, Spitfire x 3
Ammo Config:	Barrak x 3
Missiles (# x size):	4x2
MODx:	5
ECM:	1
Speed (nor/ab/ff):	381/434/753 MPS
Acceleration:	65.6 (laser), 66.4 (pulse), 63.9 (ion), 61.1 (gauss) kN/kg
Yaw/Pitch/Roll:	45/45/45 DPS
Cargo:	60 m^3

Notes:

Another solid transport ship, the Traveler is an excellent mid-size cargo vessel. As with all dedicated Solrain transports, it possesses the largest cargo hold of any vessel in its class. It also moves and accelerates reasonably well – better than a Wyvern but not quite as nimble as the Hurricane. The design is fairly stylish as well, although the “rear spoiler” also has a practical aspect: it is the primary weapon and targeting system mount on the vessel (freeing up more room on the main chassis for cargo space.) Additionally, the craft is capable of mounting the powerful Alpaa shield system, giving it superior defensive capabilities compared to other craft of its class. Round it off with appreciable MODx and missile mounts, and you end up with a very worthy transport vessel. It’s still no match for an aerospace fighter one-on-one, but it is more than capable of defending itself against low-class Conflux marauders or assisting in its own defense against pirates.

Quarrier

Classification:	Light Miner
Power plant:	Sport (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Doorbell (40000 meter range) (size 3)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	7200mm
Capacitor:	Jug (size 1)
Laser Config:	Financier x 2/Banker x 2 (gun sometimes mounted)
Ammo Config:	Financier x 2/Banker x 2 (gun sometimes mounted)
Missiles (# x size):	2x2
MODx:	3
ECM:	3
Speed (nor/ab/ff):	379/432/748 MPS
Acceleration:	70.3 kN/kg
Yaw/Pitch/Roll:	26/31/16 DPS
Cargo:	62 m^3

Notes:

Following suit with Cromforge (indeed, perhaps the last remnant of the cooperative agreement between T&P and Cromforge before the Quant/Sol War of the Truth broke out), the Quarrier has recently been upgraded to a competent level. Unfortunately, much like the Lodestar the Quarrier falls somewhat short of both its contemporaries; it cannot mine as fast as the Harmattan and it does not possess the defensive capabilities of the Simurgh. Surprisingly, it does accelerate the best out of all three Light Miners (the Harmattan mounts heavier mining guns, but acceleration is acceleration.) It is still a much better mining craft than the Traveler and performs its duty adequately. The same basic facts as other Light Miners still apply; a size three ECM pod can keep Conflux spawns away, and some miners mount an offensive weapon or two in case passing pilots don't kill the Flux that attack them. And it is generally agreed that the Quarrier looks **far** too "cool" to be a mere mining craft.

Lodestar

Classification:	Heavy Miner
Powerplant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Mortar (60000mm equivalent)
Armor:	21000mm
Capacitor:	Jug (all you need, see below) (size 2)
Laser Config:	Financier MK2/ER laser x 2
Ammo Config:	Financier MK2/Straker x 2
Missiles (# x size):	2x2
MODx:	6
ECM:	3
Speed (nor/ab/ff):	399/455/788 MPS
Acceleration:	73.3 (laser), 71.7 (ammo) kN/kg
Yaw/Pitch/Roll:	27/25/31 DPS
Cargo:	265 m^3

Notes:

The Lodestar is fairly odd – there are some things it does right, and there are others that just make you stand up and say “What the hell were the engineers thinking?” It’s still a decent enough mining vessel, but it doesn’t lack problems. It was, first and foremost, an attempt by T&P to copy the Khamsin, resulting in the vessels even looking fairly similar. Contrary to what JOSSH says, the Lodestar has less armor than its Quantar cousin – although it does mount the massive Mortar shield system, giving it better defense overall. Two glaring problems, however, are the speed of the vessel and the secondary gun loadout. The vessel is the slowest, in terms of sheer velocity, of the heavy miners – even the Vulture can outpace it (although it accelerates reasonably well), making it very vulnerable to attack from any fighter craft, especially bombers. Also, unlike the Khamsin, its secondary guns are mere size ones – perhaps an attempt by T&P to sell its Excavator mining lasers. The only problem is that since the Financier Mark 2 so vastly outclasses the Excavator in both range and power (range to the point where circle-mining is dangerous), a pilot is better off using those mounts for defensive weapons. The Lodestar isn’t a disaster like some Solrain ships are – although it is decidedly the weakest of the heavy mining craft.

Pioneer

Classification:	Cargo Tow
Power plant:	Sport Plus (size 4)
Engines:	Dream x 2 (size 5 x 2)
Radar:	Sentinel (48500 meters, less power need than a Nubbler) (size 4)
Shields:	Mortar (60000mm equivalent)
Armor:	60000mm
Capacitor:	Spore, Keysto for plasma (size 4)
Energy Config:	Heavy Laser x 2, Spitfire x 2, Serialzier x 2
Ammo Config:	Barrak x 2
Missiles (# x size):	2x6, 2x2
MODx:	5
ECM:	3
Speed (nor/ab/ff):	459/523/906 MPS
Acceleration:	72.9 (laser), 72.1 (ion), 70.7 (gauss), 70.9 (plasma) kN/kg
Yaw/Pitch/Roll:	29/29/29 DPS
Cargo:	500 m^3

Notes:

The primary cargo vessel of the Solrain Defense Force and the greater Solrain pilot community, the Pioneer is a familiar sight on the space lanes of the five systems. It compares very favorably with the other cargo tow vessels of TRI. It almost matches the defensive capabilities of the Roc by using a monsterous Mortar shield, and accelerates the best out of all three tows (including the new version of the Thunder.) It does oddly lack for MODx slots compared to other tow designs, and it doesn't handle particularly well. Still, for raw efficiency in hauling the Pioneer is unmatched. An escort though very dangerous sectors is still recommended, however.

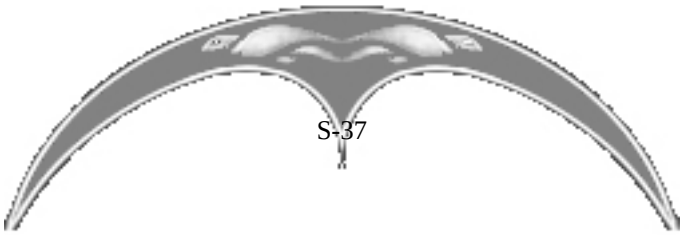
Viceroy

Classification:	Freighter
Powerplant:	Intimidator (size 5)
Engines:	Vector x 2 (size 6 x 2)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Guardian (99700mm equivalent) (size 6)
Armor:	1800000mm
Capacitor:	Pint for Hitmen, Deepol for Nova Mk1, Seed for Peelers (size 3)
Energy Config:	Nova Mk1 x 2
Ammo Config:	Hitman x 2, Peeler x 2
Missiles (# x size):	2x6
MODx:	7
ECM:	3
Speed (nor/ab/ff):	374/427/739 MPS
Acceleration:	27.2 (plasma), 27.1 (railgun), 27.3 (mortar) kN/kg
Yaw/Pitch/Roll:	15/15/25 DPS
Cargo:	750 m^3

Notes:

It may be somewhat underarmored compared to its Octavian and Quantar counterparts, and it may not accelerate as well as them…but nothing, **nothing** in the five systems that hauls as much raw cargo tonnage as the Viceroy. It is the last word in getting large cargos to and from Solrain. It absolutely requires an escort, but such runs can be very lucrative for both the cargo pilot and the escorts, with how much cargo the Viceroy can hold.

Like most heavy cargo vessels, we do include a plasma loadout here because some cargo pilots absolutely swear by them, especially for hostiles vectoring in directly on the ship. Plasma is so energy intensive, however, that it normally isn't practical for use on combat fighters except perhaps when facing nothing but Conflux drones.



GUNBOATS

Much like the Holy Armada, the SDF has been caught with its pants down somewhat at the release of the Vulture. Solrain currently fields nothing remotely resembling a gunboat, but like the other two major aerospace contractors Tens & Piney is working on developing a corvette class vessel that utilizes turrets, and is possibly working on a response to the Vulture as well. Until such ships reach general distribution, this section shall remain empty.

Date Entry: 104.02.21 12:00 EKT
Subject: Imperial Octavian Navy Quantar Ship Report
Author: André “SpaceDrake” Ricard
Classification Level: General public

Imperial Octavian Navy Quantar Ship Report
Version: 1.1

UPDATER'S NOTE 104.02.21

Fellow pilots,
We continue our series of reports on the craft fielded by each national fleet with a report on the Holy Armada of Quantar. As ever, this report is an attempt to show new (and returning out of retirement) pilots what each ship of a nation's fleet can and cannot accomplish.

The Holy Armada of Quantar is dedicated primarily to the defense of what they consider holy Quantar space, although they have sometimes gone gleefully on the assault (and, like the other national space forces, it would be a lie to say that the Holy Armada is completely unified; the fleets of TRI are very fractured compared to conventional armed forces.) The Quantar have usually possessed well-designed ships, and today only present a slight weakness in cargo vessel design. Their combat craft are among the most effective, deadly and some (including the author!) would say most aesthetic ever designed. Several are possessed of harsh learning curves, but especially the Typhoon is simply unstoppable in the hands of a master. It would do the pilots of Quantar well to learn these loadouts (and the enemies of Quantar equally well to learn what these ships can do!)

As before, these reports are arranged in the following manner: when components like engines are listed, the recommended part is given along with the size, except for guns, where all practical loadouts are covered. Missiles, MODx and ECM are all given in size alone, due to the variety of parts available in these areas. Speed is given in meters per second, with normal power, afternburn and Flashfire top speeds; Yaw/Pitch/Roll rates are given in degrees per second and indicate the turn rate of a ship not firing its engines. Acceleration is kilo-Newtons of thrust per kilogram. Armor is in millimeters, shields are rated compared to the equivalent protection in mm of armor they provide. Cargo is in cubic meters. Also, classification is slightly changed from the TRI standard to be more accurate (in the author's opinion.)

At your service,
André "SpaceDrake" Ricard

SHUTTLES

Quantar ships in the Shuttle classification are fairly evenly matched with the other factions – while the Storm is almost purely a rookie mining vessel due to the tiny engines the craft possesses, the Gust is pound-for-pound a match for the Apteryx, and the Breeze is on the whole a better entry-level cargo vessel than either the Buzzard (thanks to the fact that the former doesn't have restrictive engine mounts interfering with vertical movement on the latter). While none of these craft are really a threat for a fighter pilot (with the **possible** exception of an expertly-flown Gust), it is still a good idea to know what the average rookie ship of Quantar is capable of doing, and whether or not such a ship needs to be engaged in case the Holy Armada attempts to use nugget pilots in combat (or some noobler's ego gets a little too large for his cockpit).

Do note that what is described here is the optimal configuration for these ships. It is quite possible that you will run across nugget pilots with lesser gear than what is described here.

Storm

Classification:	Shuttle
Powerplant:	Harvester, Rake (anything more is overkill really) (size 2)
Engines:	Cardoria x2 (size 1 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Shelter (6009mm equivalent) (size 1)
Armor:	6000mm
Capacitor:	Jug (size 1)
Laser Config:	Mining Laser, Heavy Laser/Warper or Ion Cannon (non-miner rare)
Ammo Config:	Barrak, Cobra or Hammer (rare in general)
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	299/340/590 MPS
T/M:	86.5 (mining laser), 90.1 (laser), 87.5 (Ion), 84.0 (ammo) kN/kg
Yaw/Pitch/Roll:	90/60/90 DPS
Cargo:	2 m^3

Notes:

The Storm is the Holy Armada's standard craft for new pilots. It is, essentially, the cheapest thing they could give their nuggets to actually get them spaceborne and mining. Even when fully upgraded it is hardly an impressive craft. (One might ooh and aah at the YPR rates, but the Apteryx handles better on the whole.) It does mount a single size 2 gun slot, which means with some brokering it can carry a fair amount of heat, but not substantially more than any other entry-level craft. It is slow as well – the Ape beats it easily and even a fully-upgraded Premia can outpace a Storm. It is, thus, almost purely a trainer craft. It will let a new Quantar pilot learn the basics of aerospace maneuvers and get a bit of mining under his belt, but that's it. You'll rarely encounter a combat pilot in one of these – anyone with an ounce of sense will upgrade to the Gust as soon as possible.

Gust

Classification:	Shuttle/Ultra-Light Fighter
Powerplant:	Sport LP (size 2)
Engines:	Respect x2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Shelter (6009mm equivalent) (size 1)
Armor:	6600mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy laser/ER laser, Warper/Distorter
Ammo Config:	Cobra/Straker
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	383/437/756 MPS
Acceleration:	137.9 (laser), 125.0 (ammo) kN/kg
Yaw/Pitch/Roll:	90/60/90 DPS
Cargo:	1 m^3

Notes:

Very much unlike the Storm, the Gust is a combat ship in every sense of the word. Streamlined, faster, and with **exceptionally** better propulsion, it is designed to give the nugget pilots of the Holy Armada a decent fighting ship and succeeds much better than the original designers probably ever dreamed. The Gust is, pound for pound, a match for the Apteryx Ultra-Light Fighter and butchers any Solrain entry into the Shuttle or Ultra-Light Craft classes. It in fact carries a slightly heavier gun load than the Ape (though lighter missiles), although it requires a Sport LP power plant to properly power all of its optimal components. It also outpaces the Ape significantly (but not the Premia XL) and carries more MODx slots than the Ape does (as many as most Light Fighters, in fact.) Perhaps this ship's most frightening aspect is its acceleration. It quite literally accelerates comparatively with most scout-class vessels, and it is small enough to fit inside an Assault Fighter several times over. In short, fighting a Gust in a large ship can be like being nibbled to death by a gnat. No matter how much you swat at it, it just won't go away. Indeed, in the past TRI itself classified the ship as a "Light Fighter" and longtime veterans will remember the Holy Armada's 1st Ultra-Light Squadron "Swarm" with either fondness or fear and loathing (depending which side of the gun barrel they were on.)

With the advent of the modern Light and Medium Fighter, though, the Gust's heyday as a real combat craft has passed. It can still be used to annoy, though, and Light Fighter pilots should make it a priority to kill any of these craft they see buzzing around a heavier craft – they can take apart a heavier craft much faster than their size might otherwise suggest.

Breeze

Classification:	Shuttle
Powerplant:	Sport LP (size 2)
Engines:	Respect x2
Radar:	Vine (23000 meter range, extremely low power use) (size 2)
Shield:	Haven (15400mm equivalent), Canopy (12240mm equivalent, the only reason to use the Canopy is that it is available at level 8 rather then 13) (size 2)
Armor:	7650mm
Capacitor:	Jug (size 1)
Laser Config:	Mining Laser, Heavy Laser, Ion Cannon
Ammo Config:	Barrak, Cobra, Hammer
Missiles (# x size):	2x1
MODx:	3
ECM:	1
Speed (nor/ab/ff):	362/413/715 MPS
Acceleration:	105.7 (mining laser), 108.8 (laser), 103.5 (ammo) kN/kg
Yaw/Pitch/Roll:	80/60/60 DPS
Cargo:	7 m^3

Notes:

The Breeze is an exceptional entry-level mining and transport craft for Quantar pilots. Although it lacks in the way of weaponry, it is quite fast for a ship of its class and it handles superbly (especially compared to its opposite number the Buzzard.) It is literally an oversize Storm without the “cuteness.” And the slowness – it is the fastest of all the cargo shuttle craft. It also mounts a size 2 shield, giving it adequate defense against attack.

It should be noted that the ship mounts a size 2 radar, but many Quantar pilots will opt for the Vine because of its incredibly low power usage.

FIGHTER CRAFT

The Quantar have been in possession of fusion-powered, gravity-driven aerospace fighter craft technology slightly longer than Octavius but still not as long as Solrain. They were the co-founders of TRI with the Solrains, however, and so have been in possession of jump technology for nearly as long as Solrain has. Quantar has, on the whole, achieved parity with their rivals in fighter design.

The Quantar approach to fighter craft is speed and acceleration. All of their fighters, across the board, match or beat the speed and acceleration of either their Solrain **or** Octavian counterparts. One of the ways they keep weight down, however, is by utilizing small power plants in their heavier craft. Thus, despite fairly large gun mounts very heavy weapons are not practical on these vessels. Given how these ships maneuver, this is probably a blessing. On the whole, the Quantar fleets are fairly evenly matched with their competitors, with the Quantar perhaps having a slight advantage in the ability to disengage from combat more readily than Octavian craft can (although they can't flee nearly as well as the Intensity can.)

It should be noted that, like Octave Propulsion Labs and Tens & Piney, Cromforge Enterprises (the main government aerospace contractor of the Fa'hil Memta) is working on an advanced tactical fighter similar in concept to the "Falcon". However, the Holy Armada has had about as much success making the concept work as the Imperial Navy has (read: zero.) The project has become a bit of an embarrassment for Cromforge and after hearing of the work OPL and the Imperial Navy have begun in the area of gunships heavier than the Vulture, they began scrambling funds into a similar venture. Also, unlike the Navy (which is rumored to be pushing for a release of the Imperializer since the gun mounts on the Vulture seem to be made for that gun right down to the **hardpoint shaping**) and the Solrain Defense Force (which is rumored to be working on some form of particle weapon) the Holy Armada does not have an outstanding weapons program, by all indications. Given that they have already released the Spitfire size 2 Ion cannon, however, they may feel that they are well armed enough as is.

Cyclone

Classification:	Light Fighter
Powerplant:	Instigator, Antagonizer works well (size 2)
Engines:	Impeler x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	9300mm
Capacitor:	Spore, Seed for ammo or pulse lasers (size 2)
Laser Config:	ER Laser x 2/Heavy Laser, Distorters x 2/Warper
Ammo Config:	Straker x 2/Cobra
Missiles (# x size):	4x2
MODx:	3
ECM:	1
Speed (nor/ab/ff):	469/535/926 MPS
Acceleration:	117.6 (laser), 121.4 (pulse), 110.3 (ammo) kN/kg
Yaw/Pitch/Roll:	75/80/80 DPS
Cargo:	5 m^3

Notes:

The modern Q4-X Cyclone is, bar none, the most maneuverable aerospace fighter craft ever produced. It is capable, when not thrusting, of flipping around 360 degrees in just over 2 seconds regardless of the direction in which it turns, and it rolls just as well. It also accelerates better than any fighter craft (not counting scouts) available to any nation. It carries as much firepower as a Raven or laser-based Interceptor, and all of the guns are clustered right under the cockpit – in fact, the heavy laser mount sits on a direct line with the center of the HUD's targeting reticule. Precise pilots can land all their shots easily in a Cyclone.

The only weakness the craft has is that it is slightly slower in top speed than the Raven – although it is still quite capable of running any heavier craft down with ease. It shares the Raven's lack of MODx, though, making its chase capacities slightly limited (which is perhaps the only thing preventing it from dominating heavier craft.) It also presents a somewhat large profile compared to the Light Fighters of the other two nations (though most vets will remember the "Death Moth" of old and think the modern Cyclone slim as paper in comparison.) The Cyclone is still, on the whole, an exceptionally dangerous craft even for a heavier fighter. Do not let the "Light" designation fool you – this craft is deadly to any ship.

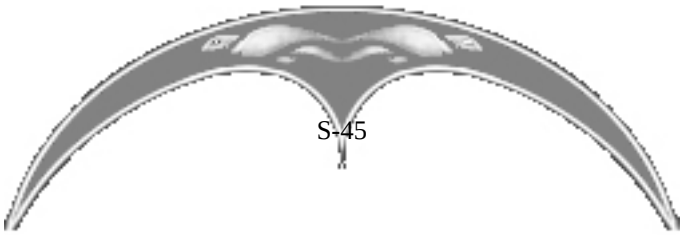
Tempest

Classification:	Medium Fighter
Powerplant:	Instigator (size 3)
Engines:	Impeler x 2 (size 2 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	12000mm
Capacitor:	Spore (size 2)
Laser Config:	Heavy Laser x 3, Warper x 3, Spitfire x 3
Ammo Config:	Barrak x 3, Cobra x 3, Hammer x 3
Missiles (# x size):	4x2
MODx:	4
ECM:	2
Speed (nor/ab/ff):	454/517/896 MPS
Acceleration:	100.0 (laser), 95.9 (ion), 88.9 (Barrak), 90.2 (ammo) kN/kg
Yaw/Pitch/Roll:	70/65/70 DPS
Cargo:	6 m^3

Notes:

As does the Imperial Navy, so does the Holy Armada. While the Navy faced the question of how to match the Typhoon and released the updated Chiropteran, the Tahirs of the Fa'hil Memta had long worried about the Phoenix. Even in some of its less impressive incarnations, the leaders of the Quantar had always been in fearful awe of the sheer amount of pain the Phoenix could project. When upgrades made the O2-X2 a very viable spacecraft, the Quantar knew they needed a similar vessel. Yet, the idea of a ship that emphasized firepower over speed seemed a betrayal of Quantar ideals… until the engineers at Cromforge looked at their old Medium Fighter, the Tempest, and realized that in it they had what they needed.

The Q10-I Tempest is the realization of that idea, and is the Quantar response to the Phoenix just like the Chiropteran is the Octavian response to the Typhoon. It is a craft that is capable of outgunning any craft in its own class or lower, and can oftentimes even match up favorably in terms of firepower against craft heavier than itself. However, it combines this with a good number of MODx, a top speed that allows it to catch most non-Quantar craft, more nimbleness than any craft of its class, and a T/M ratio only slightly less than that of the Chiropteran – all with the slim profile of a Medium Fighter. In short, the Tempest is an incredibly dangerous craft, capable of getting away from most of the things it can't easily outgun. Caution should be used when engaging this craft in anything less than a Heavy Fighter. Especially with its Ion Cannon loadout (which is produced in Quantar space, note) it can probably outshoot anything lighter than a Phoenix. If there is one hole in its offensive capacity, it's in the missile mounts – the Chiropteran and Invader both possess larger missile capacity (in various ways) than the 'Pest.



Typhoon

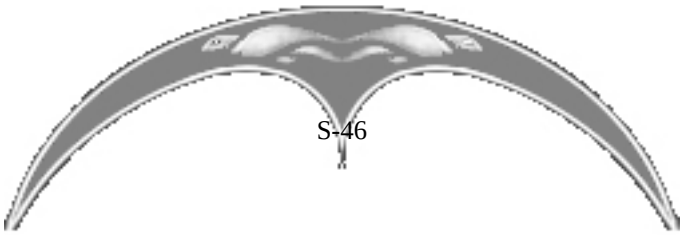
Classification:	Heavy Fighter
Powerplant:	Instigator (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	14490mm
Capacitor:	Often a Spore; see below (size 3)
Laser Config:	Heavy Laser x 4 (non-Octavian), Spitfire x 4, VAPOR x 2/Warper x 2
Ammo Config:	Hitman x 2/Barrak x 2, Hammer x 4, Cobra x 4 (all rarely used)
Missiles (# x size):	1x4, 2x2
MODx:	4
ECM:	1
Speed (nor/ab/ff):	464/530/917 MPS
Acceleration:	105.2 (laser), 99.9 (ion), 88.1 (railgun/Deepol), 94.8 (ammo/Seed) kN/kg
Yaw/Pitch/Roll:	50/75/60 DPS
Cargo:	16 m^3

Notes:

TRI isn't kidding when it states on JOSSH that "Master Typhoon pilots are some of the most feared in the galaxy." When properly flown, the Typhoon is one of the most powerful aerospace fighters ever created. As the Phoenix epitomizes the Octavian ideal of fighter design, so the Typhoon is the embodiment of the Quantar ideal: it does things that by rights nothing called a "Heavy Fighter" should be capable of doing. It can out-accelerate a Medium Fighter, pitch like a Light Fighter, and run down almost anything in space. It does this at the expense of one thing: power. To properly fire its guns a Typhoon often has to cut throttle to 50% or lower or face massive fire delays. To a master Typhoon pilot, though, this is not an impediment. They will sacrifice fire rate just to get on top of a pilot or lock him into a hopeless circle – and it won't seem like they're firing less as your shields melt away into nothing.

The main weakness the craft has is the fact that it requires a veteran pilot, however. Green Phoon pilots have another name: target practice. There are so many ways to mess up combat in this ship or overestimate what it can do that a single mistake can cost a pilot his ship. Green or inexpert Phoon pilots can most easily be dealt with by exploiting the ship's large profile and to keep it accelerating – the less firepower it throws at you, the better. Against master pilots, however, your best chances are guts, prayers and with luck a wingman. And even a combination of all three won't save you all the time.

As a final note, many vet Phoon pilots use the Spore; the Phoon originally mounted this capacitor, and so most veterans are used to their Phoons chain-firing (and being lighter.)



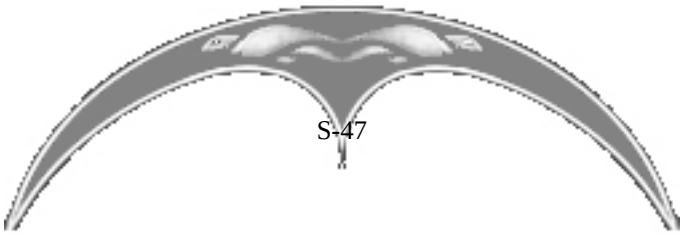
Monsoon

Classification:	Assault Fighter
Powerplant:	Sport Plus (size 4)
Engines:	Dream x 2 (size 5 x 2)
Radar:	Doorbell (40000 meter range) (size 3)
Shield:	Alpaa (20600mm equivalent) (size 3)
Armor:	24300mm
Capacitor:	Seed (size 4; see below)
Laser Config:	Generally not used
Ammo Config:	Vantage x 2/Peeler x 2
Missiles (# x size):	1x6, 2x4, 2x2
MODx:	5
ECM:	2
Speed (nor/ab/ff):	459/523/905 MPS
Acceleration:	81.8 kN/kg
Yaw/Pitch/Roll:	45/55/55 DPS
Cargo:	16 m^3

Notes:

When first released, the Q17 Monsoon was considered an engineering disaster. Not sporting nearly enough of a power plant for the scale of the weapons it mounted and possessing a “beach-ball” like profile, it was totally rejected by the pilots of the Armada. Then Tens and Piney released their updated Peeler mortar to match their Vantage system. A pilot named Grimwald Gonzales mounted these on his Monsoon, as well as a Duelist and many Flashfires. He realized that he was essentially flying a “Fat Intensity” with enough firepower to take a Phoenix down to nearly no shields in two salvos and an Intensity in 3 – with a longer range radar to boot. All of a sudden, the Monsoon didn’t seem so useless anymore.

Monsoons are used in somewhat the same manner as the Dragon Assault Fighter. They are command vessels and attempt to be the focus of combat. While they do not have the endurance that the Dragon does by any means, they are possessed of the same MODx arrangement as an Intensity, and combined with their top speed and high acceleration (for an assault fighter, thanks to its massive engines) it is very easy for a Monsoon to disengage and re-engage when the fight favors the pilot. These ships are used as bait, sometimes, to lure enemy ships into desired locations. Thankfully, though, their reliance on low-power mortar weaponry and their nigh-on obese profile makes them utterly predictable and very easy to target. Do not underestimate these ships, though. They still pack a lot of heat (both missile and gun-wise) and they can do enough damage to blow though either a Phoenix or an Intensity in five salvos (AKA 6 seconds.) If they disengage, let them run and focus on a wingman of his until he tries to re-enter the fight. Never let a Monsoon pilot fight on his own terms!



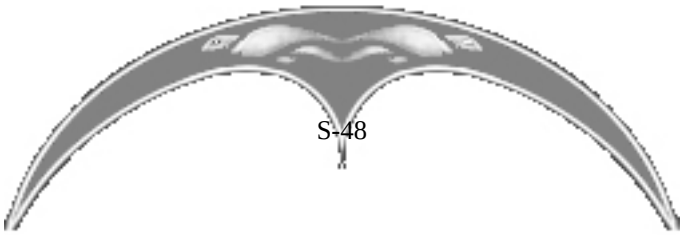
Tornado

Classification:	Bomber
Powerplant:	Sport Plus (size 4)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	18000mm
Capacitor:	Keytso, Alembic for Hitmen, Carrier for pulse lasers, Seed for mortars (size 4)
Laser Config:	VAPOR x 4, Heavy Laser x 4, FeatherFire x 4
Ammo Config:	Hitman x 4, Peeler x 4
Missiles (# x size):	2x2, 2x4, 2x6, 1x8
MODx:	6
ECM:	2
Speed (nor/ab/ff):	415/474/820 MPS
Acceleration:	72.2 (laser), 72.8 (pulse), 67.8 (ion), 66.2 (railguns), 69.8 (mortars) kN/kg
Yaw/Pitch/Roll:	45/70/55 DPS
Cargo:	10 m^3

Notes:

The Tornado continues the Quantar tradition of breaking the “rules” in a particular fighter class. In many ways this ship is just as much a heavy anti-fighter platform as it is a bomber. Its pitch and roll rates are comparable to most of the heavier fighters, and it outpaces the Raptor significantly. It carries similar armament to most bombers, although the guns are mounted far on the wings, making targeting a little more difficult than most fighters. Perhaps it’s most frightening aspect is its MODx capacity – those large wings means that the vessel is capable of carrying extensive FlashFire loads. Disengaging (or quickly **en**gaging) in a Tornado is not as difficult as it should be in a bomber.

It does have one obvious problem, however: a lack of truly heavy ordinance slots. While it is more than suited for anti-fighter work, it is capable of carrying – at best – 3 heavy weapons. Given an additional lack of heavy ordinance slots on other Quantar vessels, once more “hardened” targets and vessels come into play (as events seem to be indicating), the Quantar may begin to want for a vessel capable of carrying larger ordinance. The ship’s excellence in an anti-fighter role, however, will likely mean that those hard targets lack any of their soft cover. (In particular, Tornados have been known to be deployed as “Dragon-slayers”, bringing much of their heavy ordinance to bear on Dragon assault fighters, which have great difficulty in dodging such massed ordinance.)



SCOUTS

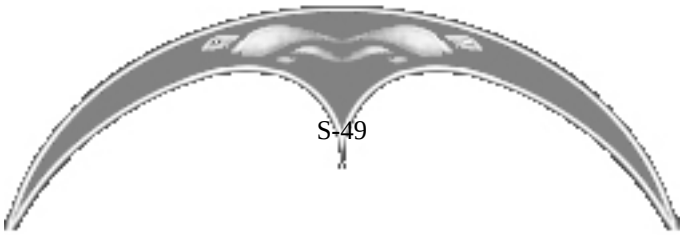
Scout craft in the Holy Armada fulfill more or less the same role they do in other factional fleets. Surprisingly, only one of these ships is really viable militarily. The Simoom is vastly outmoded by the Peregrine and its larger brother the Squall (which was the first Heavy Scout class vessel to undergo development.) It is possible that Cromforge may attempt to put the Simoom through an upgrade program similar to the treatment the lighter fighters did; however, there is little demand for such upgrades, and such a project is likely on the back burner compared to the Advanced Tactical Fighter project and Cromforge's own Corvette/Gunship project (which is a desperate attempt at matching Octavian dominance in the class.)

Simoom

Classification:	Light Scout
Powerplant:	Sport (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	8400mm
Capacitor:	Seed (size 1)
Laser Config:	Heavy Laser, Spitfire Ion Cannon
Ammo Config:	Barrak Gauss Cannon
Missiles (# x size):	1x4
MODx:	2
ECM:	1
Speed (nor/ab/ff):	504/575/996 MPS
Acceleration:	132.2 (laser), 130.2 (ion), 126.3 (gauss) kN/kg
Yaw/Pitch/Roll:	24/40/20 DPS
Cargo:	1 m^3

Notes:

The Simoom is a Light Scout craft that is fairly obsolete. The Peregrine outperforms it in nearly every way except for better defense and slightly better maneuverability. The Simoom is rarely used beyond lower-ranked pilots who can't afford better. Its shielding does give it a fair degree of survivability, but for long-range detection is it far outperformed by the Squall. It does carry medium ordinance like all scouts, however.



Squall

Classification:	Heavy Scout
Powerplant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2_
Radar:	Night Watchman (54000 meter range) (size 5)
Shield:	Shelter (6009mm equivalent) (size 1)
Armor:	6600mm
Capacitor:	Spore (size 2)
Laser Config:	Heavy Laser x 2, Spitfire x 2
Ammo Config:	Barrak x 2
Missiles (# x size):	2x4
MODx:	3
ECM:	1
Speed (nor/ab/ff):	566/645/1117 MPS
Acceleration:	140.4 (laser), 136.8 (ion), 130.9 (gauss) kN/kg
Yaw/Pitch/Roll:	18/32/50 DPS
Cargo:	11 m^3

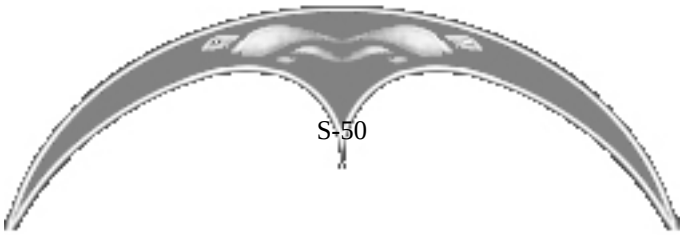
Notes:

The Squall was the first of the Heavy Scouts developed, with the Griffin and Vedette following **very** soon after (since the other governments had gotten wind of what Cromforge was working on.) The Squall was meant to be a one-up toward the Peregrine – it can do everything that ship can do and do it better. It pitches not quite as well, and accelerates a little slower, but the Squall is **the** fastest ship, velocity-wise, constructed by a human nation. It fulfills much the same roles as the Griffin – long-range detection and artifact hunting; it also is a prime “beacon flipper”. And it does so with ruthless efficiency. Due to its obscene speed it is also sometimes utilized in combat as a hit-and-fade craft – buzzing around the battlefield being an annoyance. Its profile is less than ideal, however, and a few swats from large guns will bring this fly down. Killing one can cripple a fleet’s long range detection capacities, as well.

Ship Classification

TRANSPORTS

Many of the transport ships of the Holy Armada are designed to be mining craft in addition to combat craft. All are fitted with Bussard mining scoops and all have large gun hard points suitable for large-scale mining lasers. Thankfully, in many of these ships this does not translate into possible gun firepower as well…



Hurricane

Classification:	Transport
Powerplant:	Sport for mining, Instigator for combat (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Knocker (35000 meter range) (size 2)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	14100 mm
Capacitor:	Pint for Hitmen, Jug for VAPORs, Seed for others (size 3)
Laser Config:	Financier x 2, VAPOR x 2
Ammo Config:	Hitman x 2, Peeler x 2
Missiles (# x size):	6x2
MODx:	5
ECM:	1
Speed (nor/ab/ff):	410/467/809 MPS
Acceleration:	69.1 (miner), 70.4 (laser), 67.9 (mortar), 63.9 (railguns) kN/kg
Yaw/Pitch/Roll:	37/45/50 DPS
Cargo:	52 m^3

Notes:

The Hurricane is another example of the Quantar school of thought concerning transports: big slots for mining guns. Its two size 3 gun mounts allow it to mount Financier mining lasers, giving it excellent mining capacity… of course, those same mounts can house 2 Hitmen, 2 VAPORs, and 2 Peelers just as easily. Combined with 6 anti-fighter missile mounts, engaging a Hurricane solo in even a Dragon can be a tricky proposition at best.

In the past, this ship was actually deployed in some cases as something like a Gunboat (leading a few Quantar to claim that their navy was the one that invented the class). However, the Hurricane is one reason that the Quantar recently imposed missile size restrictions on their craft. The designers, while knowing the gun mounts would be appreciated, never **dreamed** that pilots would attempt to mount anything larger than an anti-fighter missile on the missile mounts (which are all located at the front of the craft!); thus, there were many incidents where a Hurricane fully loaded with tac-nukes or cluster missiles would end up with its entire forward section sheared off by the gravitic drag force on the oversize warheads! Combined with merely adequate protection and a smallish power plant, the Hurricane falls short of a true gunboat. However, if the Holy Armada fields a direct answer to the Vulture, such a ship would very likely be based off of the Hurricane's design.

Harmattan

Classification:	Light Miner
Powerplant:	Sport (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Doorbell (40000 meter range) (size 3)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	6600 mm
Capacitor:	Jug (size 1)
Laser Config:	Financier x 4 (heavy or pulse laser added sometimes for defense)
Ammo Config:	Financier x 4 (occasionally gun added for defense)
Missiles (# x size):	2x2
MODx:	3
ECM:	3
Speed (nor/ab/ff):	388/442/765 MPS
Acceleration:	66.3 kN/kg
Yaw/Pitch/Roll:	27/34/18 DPS
Cargo:	65 m^3

Notes:

Very recently, Cromforge released an updated version of the Harmattan Light Miner, with OPL and T&P following suit soon after with their own updates. The result has been much rejoicing; these ships are now far more competent in their roles. The Harmattan itself is a fairly mixed bag; while it isn't as prepared defensively as the Simurgh is, it is the best pure miner of the ships in its class with a bullet. Four Financier-class mining lasers can render a medium-sized asteroid unminable in two minutes with active mining used. Groups of Harmattans can clear clusers of asteroids in under an hour, easily.

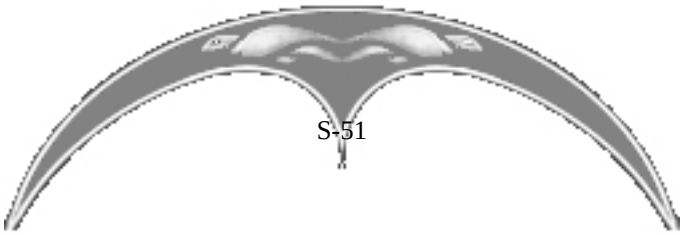
The ship is not often armed with anything beyond Financiers – it mounts a size 3 ECM, allowing it to evade Conflux spawns. Some Quants arm themselves with a single Hitman or something similar in case of careless Flux dumping, but many simply put the fourth Financier on so they can be done faster. It is the fastest of the three Light Miners, so it can vacate an area faster than its fellows.

Whirlwind

Classification:	Light Transport
Powerplant:	Sport (size 3)
Engines:	Guzzler x 2 (size 3 x 2)
Radar:	Chime (24000 meter range) (size 1)
Shield:	Haven (15400mm equivalent) (size 2)
Armor:	9060mm
Capacitor:	Jug (size 1)
Laser Config:	Heavy Laser or Warper x 2, Spitfire x 2, Mining Laser x 2
Ammo Config:	Barrak x 2, Cobra x 2, Hammer x 2
Missiles (# x size):	3x2
MODx:	2
ECM:	1
Speed (nor/ab/ff):	427/487/844 MPS
Acceleration:	108.4 (laser), 105.5 (ion), 100.5 (gauss), 101.4 (ammo) kN/kg
Yaw/Pitch/Roll:	64/64/42 DPS
Cargo:	14 m^3

Notes:

An exceptional Light Transport, the Whirlwind is a favorite of rookie Quantar tradesmen and miners who have just graduated from their Breezes. It is a great improvement on that vessel – faster (fastest in class, unsurprisingly, although its lack of acceleration compared to other Fast Transport designs is fairly shocking in a Quantar design), maneuverable, and capable of lifting great amounts of ore with its twin size 2 gun hard points. If the pilot feels like upgrading to an Antagonizer or even Instigator power plant, those same hard points can also mean he is very capable of chasing away any offending craft. While heavier Quantar transports are superior on the whole (especially in the MODx department, where the Whirlwind shows an almost shocking weakness), the ability of a Whirlwind to quickly move supplies and ore to the Holy Armada's war effort should not be overlooked – nor should its ability to defend itself.



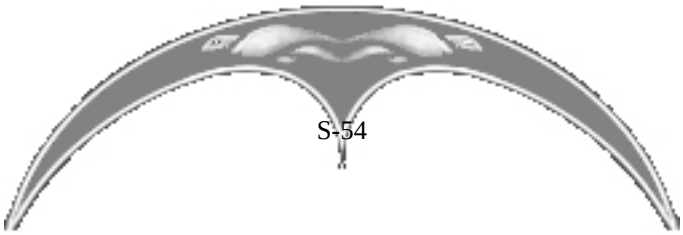
Khamsin

Classification:	Heavy Miner
Powerplant:	Sport Plus (size 4)
Engines:	Rush x 2 (size 4 x 2)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Makk (36000mm equivalent) (size 4)
Armor:	39000mm
Capacitor:	Jug for pure mining, Spore for defensive loadouts (size 2)
Laser Config:	Financier MK2 x 1/Banker x 2 or Heavy Laser or Spitfire x 2
Ammo Config:	Financier MK2 x 1/Banker x 2 or Barrak x 2
Missiles (# x size):	2x2
MODx:	6
ECM:	3
Speed (nor/ab/ff):	428/488/845 MPS
Acceleration:	78.5 (mining), 79.3 (laser), 78.2 (ion), 76.3 (gauss) kN/kg
Yaw/Pitch/Roll:	28/26/32 DPS
Cargo:	280 m^3

Notes:

Completely unlike the Vulture, the Khamsin was designed with actual mining in mind. At this it succeeds brilliantly; it is, bar none, the single most effective mining craft ever created. It can strip even the largest asteroid bare in a few minutes, and whereas groups of Harmattans can clear clusters in an hour, Khamsins with Chinook backup can clear entire **FIELDS** in short order. In a full war, downing (or for the Quantar, protecting) these ships would a priority; they can supply a base with enough raw material for a war fleet in a single day with ease.

As noted, however, the Khamsin is unlike the Vulture in that it is almost totally unsuited for combat. Although it can sacrifice some mining capacity to mount decent defensive weapons or an Anti-Flux ECM, it has half the defensive capacity of a Vulture and the missile capacity of a rookie shuttle. Khamsins are easy prey if unescorted – although their heavy Flashfire load could prove an obstacle to pursuing one. It is also likely that Khamsins will continue to be unsuited for combat – barring Tens and Piney developing a size 6 mortar weapon (God help us all in that case), it seems likely that the Khamsin will not be able to use the sort of superscale weaponry that is doubtlessly being developed for the larger combat ship types and that would fit in that sort of craft due to capacitor and power plant issues.

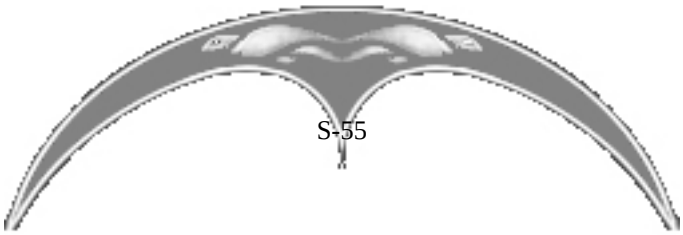


Thunder

Classification:	Cargo Tow
Powerplant:	Sport Plus (size 4)
Engines:	Dream x 2 (size 5 x 2)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Makk (36000mm equivalent) (size 4)
Armor:	72000mm
Capacitor:	Spore, Keysto for plasma (size 4)
Energy Config:	Heavy Laser x 2, Spitfire x 2, Serializer x 2
Ammo Config:	Barrak x 2
Missiles (# x size):	2x6, 2x2
MODx:	6
ECM:	3
Speed (nor/ab/ff):	462/527/912 MPS
Acceleration:	71.8 (laser), 70.9 (ion), 69.5 (gauss), 69.7 (plasma) kN/kg
Yaw/Pitch/Roll:	30/29/39 DPS
Cargo:	500 units

Notes:
Until fairly recently, the Thunder was the stepchild of the Cargo Tow class – the Quantar engineers had used size 4 engine mounts on the vessel to conserve power. Unfortunately, that also meant conserving thrust, which is something a cargo pilot can never really have enough of. Along with the recent combat fleet upgrades, the Thunder was finally upgraded to size 5 engines (with rumored help from the Solrain government), giving it plenty of thrust and speed to boot.

Other than that, it is **very** similar to the Octavian Condor – somewhat faster overall, slightly less MODx, same armament, about as maneuverable, same ECM. Perhaps the only major oversight is that the vessel possesses a full 20 fewer meters of overall protection as compared to its counterparts in the Octavian and Solrain fleets – making it still, on the whole, the “worst” of the three heavy cargo tows.

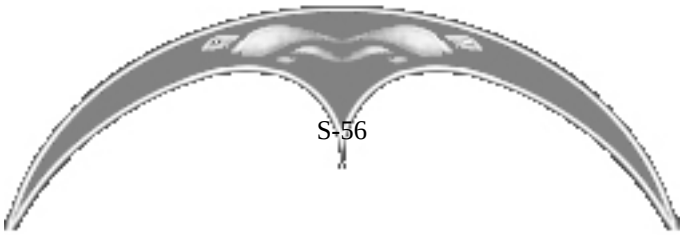


Chinook

Classification:	Freighter
Powerplant:	Intimidator (size 5)
Engines:	Vector x 2 (size 6 x 2)
Radar:	Nubbler (50000 meter range) (size 4)
Shield:	Guardian (99700mm equivalent) (size 6)
Armor:	187500mm
Capacitor:	Pint for Hitmen, Deepol for Nova Mk1, Seed for Peelers (size 3)
Energy Config:	Nova Mk1 x 2
Ammo Config:	Hitman x 2, Peeler x 2
Missiles (# x size):	2x6
MODx:	7
ECM:	3
Speed (nor/ab/ff):	382/436/755 MPS
Acceleration:	27.7 (plasma), 27.6 (railgun), 27.8 (mortar) kN/kg
Yaw/Pitch/Roll:	17/17/25 DPS
Cargo:	735 units

Notes:

Since the Freighter designs were constructed with TRI consultation (like the Cargo Tows), it is little surprise that the vessels resemble one another so greatly. However, once again the Octavian design comes out slightly ahead. The Chinook is a dual-engine design, meaning it cannot be as free and loose with the afterburn as the Roc can. It possesses the same weaponry… but again, it lacks 7500mm of defense that the Roc has. This means that the 6th nuke that the Roc could barely withstand would be enough to destroy the Chinook outright. The tradeoffs for slight speed and maneuver gains do not seem particularly prudent, and the vessel actually accelerates slower than the Roc, while carrying slightly less cargo to boot due to its hull design. For all that, it is still a Freighter and it can still move about more cargo than anything in the Holy Armada, and is quite likely to be defended in wartime. And despite the slight deficit in defense, they are by no means easy ships to bring down.



GUNBOATS

For the Holy Armada, this section is currently empty. Our Imperial Navy is the only military force in the five systems that currently fields anything like the Vulture Assault Gunboat (unless you count the Conflux and their larger “designs.”) However, ever since the release and combat utilization of the Vulture and the leaking that OPL is working on a much, much larger combat vessel in this classification, Cromforge is scrambling to field something. It is also possible that the Hurricane may be used as a baseline for a direct response to the Vulture. If or when such vessels are released, this section will contain information on them.

A Story by Ike Profari

Ikeprof sighed inwardly while pretending to listen sympathetically to the transport pilot complain about the new docking strut's length from the stations core. Nodding sagely and muttering appropriate "uh-huh's" at the correct interval Ikeprof thought about how old he was becoming.

The new docking system was a bit different than the old way but it was improving every day and sure as heck beat the mess that resulted when TRI expanded the recruiting effort without taking into account current station docking capacities. That fiasco resulted in 6 months of waiting for days at a time for a chance to dock while sitting in space exposed to the universe and attempting to sleep with one eye fixated on the radar scope and hundreds of ship losses due to poor docking pattern management. Before the struts, pilots had to coordinate the traffic themselves as they entered the single tube that allowed a ship to dock. Many a heavy laden tow was lost in collisions with the blundering attempts of a new pilot rotating on all three axis with engines flaring sporadically as they attempted to learn the trade of docking. In many respects Ikeprof preferred the new strut system. As soon as he entered a station sector, he could see at a glance what ships were docked, what ships were powered up and ready for flight, what squads were present and what the rough faction make-up of forces were in the sector.

Back in his early days as a TRI pilot, one was blind to who was in the station and when he docked, one became blind to who was in the sector. Under the new strut system, he simply could glance out his side window and see his friends and enemies ships all neatly in a line on all 4 faces of one of the struts. The familiar station transaction interface activated as soon as the docking clamps closed on the hatch ring in the nose of his ship, but could be toggled off if he needed to access his ships radar system to monitor incoming and outgoing vessels. Had the Quantars not perfected the station force field technology, the whole concept would have never been accepted by the general pilot population, but after proving that 16 morning stars and a fully loaded tow of plutonium could not dent the force field bubbles that protected each ship, the alternative of sitting in space waiting for an internal station bay quickly paled in it's appeal.

A pink flash of light signifying a collapsing force field bubble from his left viewport caught Ikeprofs attention.. Glancing left out the viewport, Ikeprof could make out the Solrain medium transport slowly departing a docking port 30 spots closer to the station. Realizing that Splooshie was waiting for a reply, Ikeprof muttered a "I couldn't agree with you more" response and quickly closed the comm link. Depressing the launch button on his station interface, Ikeprof watched the force field become visible as the shimmering energy of the force field bubble rushed from the rear of his ship towards the strut itself as it collapsed. Mere seconds later felt the gentle nudge as the docking clamps released his craft and pushed him away from the strut at roughly 100v backwards. In a practiced and deft motion, Ikeprof swung the nose of his ship parallel to the strut and roughly towards the station proper without negating his original rearward motion. Drifting sideways, he accelerated gently towards the now vacant shield bubble recently made available by the Solrain craft whose twin engine glow was still visible as it headed outward. Just prior to coming parallel to the docking clamps, he swung his ship on all three axis's at the same

time until his inertial vector indicator was pointing directly to the rear of his ship. With a quick glance out the side viewport he timed a pulse of engine power and stopped the Venture class command vessel perfectly. The familiar green cone of the closest available docking port activated as he targeted the station but Ikeprof was beyond needing such docking aids. Rotating again, he lined the nose of his ship up and accelerated towards the docking clamps. One thing he was glad that didn't change was that the new strut system still allowed one to dock at 100v or less. The force field generators which protected the docked ships also served to brake a ship as it approached the clamps. The clang of the clamps engaging rang through his hull and the slight change in cockpit pressure indicated that he was back on station life support systems. A slower glow of pink light swirled around all of the ships viewports as the stations field generators formed a bubble around his ship. The glow cleared as the bubble stabilized and became completely transparent. The station interface appeared again on his HUD. From this spot he had a perfect view of almost the full length of this strut. Knowing that other squad command members were docked on 4 of the 6 other struts emerging on all 3 axis of the station he felt comfortable that minimal activity could occur here without the squad being aware of it.

A quick glance to the right showed one of the station port bots clamping on to an apparently abandoned Quantar mining vessel. When a pilot became disabled for over 24 hours, his ship was removed from the docking ports on the struts and placed in the now valuable interior station storage in order to make room for pilots who would be arriving and departing in 24 hours or less. The flare from the port bots engines illuminated the struts surfaces allowing him to truly appreciate the engineering marvel that it was. At over 2K in length on each axis, the strut allowed for hundreds of ships to dock at the same time on all 4 faces of the strut. The interior of the strut was a dizzying blur of high speed shuttles and bots ferrying the commodities, weapons, repair AI units and pilot support materials to the individual ships docked on the struts, but the smooth outside surfaces perfection was broken only by the docking clamps themselves.

It was evident that many of the pilots were enjoying the decrease in combat activities as at least half of the ships on this strut had darkened navigation lights signifying that the pilots were not manning their ships. A quick count showed that a few cargo transport vessels, 1 Quantar fast transport craft and 3 Octavian medium fighters were manned with the rest of the assorted craft showing as powered down.

Knowing that he was due to go on duty in less than 4 hours, Ikeprof tapped the control that adjusted his command chair for sleep settings. "Not enough time to head to the officers quarters" he thought to himself as he drifted off to a restless sleep.

A distorted beeping and the bright blue text of a squad communication message appeared on Ikeprofs HUD at the very top. Wakening from a restless sleep and sitting up in his seat he noted that it was the expected automated reminder telling him it was time to go on combat coordinator duty. Stretching tiredly he de-activated the station interface, glanced out both side cockpit windows and toggled his radar range to maximum. Setting the radar to "in-flight' only mode, he checked the scope for hostiles and bountied pilots. Satisfied the scope

was clear, Ikeprof re-activated the station interface and quickly purchased one of the new MK II Morning star missles. Almost immediately he felt the faint tremor as the equipping bot attached the missle to his ships pylon. While the Venture class ship was not directly a combat capable ship given it’s single gun and minimal shielding, it could still mount a missle as a last ditch self defense measure.

Tapping the launch button on the station interface, Ikeprof flipped the ship smoothly over onto it’s back and accelerated quickly towards the Arkans cloud jumpgate after clearing the docking strut and the other ships. Establishing communications with on duty combat coordinator, he confirmed that the battle had lessened to some degree but the conflict in Dark Gateway between Octavian and Solrain forces still raged.

Knowing that he had time before he was required in sector, Ikeprof aimed for The Blasted Corner jumpgate rather than Arkans Cloud. The swirl of blue and white energy cleared his viewport as he jumped, and he slowly rotated towards the anomaly while scanning his radar for anything unusual. A dozen OEC pilots where working side by side with other Octavian ships in constructing the new jumpgate around the anomaly. As TRI budgets shrank, the secret Zirgmirg construction laser were released to the general pilot population. Prior to this, TRI construction drones were responsible for all new station and jumpgate construction, but the exponential rate of growth of the rapidly discovered universe quickly outpaced the ability of TRI to keep up with construction demands. The day’s of dropping off construction materials to a staging station and allowing the TRI drones to do the work were over. Now faction pilots not only had to accumulate the construction materials for new projects, they also had to load these materials into their holds and fly to the construction location with a Zirgmirg laser equipped and take an active part in building whatever the focus of the day was. The Zirgmirg laser slowly used the commodities as it contributed to the construction of a project. A wire frame holoimage told the pilots where to aim the conlaser and if one watched closely, you could see the solid construct form before your eyes.

Ikeprof chucked at the thought of the time that Capt DJMTPocket got his ship trapped between two walls of a supply depot while proclaiming loudly that “he knew damn well which way the wall was going to form”.

“Some people are fighters and some are construction workers” Ikeprof thought to himself.

It looked as if the new jumpgate was ½ done. Data probes had revealed that this gate should lead to the newly discovered “outer loop”. This loop so far had consumed each probe in heavy conflux fire by yet to be identified conflux class frigates, but the promise of discovery and reward had energized most of TRI. Probe data had been intermittent, but vast patches of pure roid fields and some artifact signatures had been mixed in with the data prior to the probes demise. The name Outer Loop was a rough name as it only circled 2/3rds of TRI space at this time, but the general consensus was that it would eventually form a complete circle. Armchairs Wound was the first sector discovered in the outer loop connected to the Path of Hordes sector. It was unanimously decided that the honor should go to Pilot Armchair especially after he suffered his disfigurement during his pod malfunction while studying the original anomaly.

Satisfied that all was well in the sector, Ikeprof, jumped back into Outpost Station sector and went full burn towards Arkans Cloud. Jumping without incident, he traversed Arkans Cloud and Primus Point sectors quickly. Tensing his thumb over the flashfire button, he quickly inquired about gate camp issues at the gate into Dark Gateway. The combat coordinator on duty informed him that no vessels were within 10K of the gate. Ikeprof tensed slightly as he always did when jumping into a known combat sector and was relieved at the lack of shield flaring that indicated incoming fire.

Pitching quickly away from the mess of red and blue dots appearing on his scope Ikeprof aimed his ship away from the battle and into deep space in the sector. At 100K from the Primus Point gate, Ikeprof pitched 90 degrees upward and continued on another 100K in case any enemy ships noticed his original vector and was patiently waiting off scope to follow him out. Thoughtlessly he flipped his ship and braked it in a practiced motion. His hands moved quickly across his control panel as he systematically shut most of his ships subsystems down. Shields, ships radar, weapons systems all went dark as he activated his cloaking modx. Satisfied he would present minimal energy emissions, he notified the combat coordinator on duty that he was in position and ready to assume control of the squads forces. The departing CC officer had little to say, most likely due to his being under qualified for the position. Ikeprof was fine with that as most of the time he found his tactics clashed with those of other CC’s and he knew the men would respond as they always did when he took control.

Activating his ships CC modx system, his entire hud exploded into one huge 3d radar scope of brilliant colors and motion. The three on duty squad scout craft with their powerful radars and electronic systems fed massive torrents of information to his ship real time, allowing him to have a perfect tactical view of the entire battlefield within the 50K radar range of each scout in addition to the information provided by the lesser radars of the other squad combat and cargo craft in the sector. Ikeprof was pleased that at least the departing CC had placed the Griffens in a nice triangle surrounding the bulk of the battle action. Having gotten used to operating with only 2 scout craft, Ikeprof was even more comfortable with the additional information provided by the third scout. Each enemy blue dot on the scope carried a pilot name, squad tags, ship type, shield and armor status, velocity, and current vector indicated by the pointy end of the arrow attached to each dot. Each friendly squad pilots red dot also showed him current number of missiles and afterburner and flashfire counters. The fact that this display filled the screen prevented him from flying at all, but he knew that his job was as important as any other pilots job in this battle.

Having proven long ago that voice communications were inefficient in the milliseconds between life and death battles of the time, the Venture class command coordinator craft were developed by Octavian engineers. Only in conjunction with a scout craft did the ship realize it’s potential. The oversized radars of the scouts were useful in their own, but having the ability to transmit that information to a command ship allowed the larger squads to truly coordinate their efforts as a team. For years the scout craft was dismissed as an ineffective and useless craft in combat, but after the Venture class ship went into

production, the scout craft became an integral part of most combat encounters and allowed the newer pilots the ability to take part in some massive battles. Without the scout craft Ikeprof would not be blind, but he knew he would be lacking the important vector and velocity information that only the scouts could provide.

Ikeprof quickly scanned the action on the CC scope, rotating it dynamically while taking stock of friendly and foe forces. Apparently the typical strengths and weaknesses of the factional craft were showing through again. The bulk of the Octavian bombers and heavy fighters were concentrated mid sector in an almost perfect sphere with guns pointing outwards. 3 Condor class tows were parked in the center of the sphere loaded out with PWD100’s in order to negate missile threats. A scattering of light fighters equipped with relic gear harassed the enemy bombers and heavy fighters with minimal success at the top of the display. Watching as the vectors of 4 of the enemy bombers converged at the top, Ikeprof readied himself to counter what was obviously the preparation for some form of assualt.

Using the Mechanical Organic Unified Sensory Enhancer (Mouse), Ikeprof simply had to click on a friendly dot, drag the dot onto an enemy dot to create a target for his pilots to concentrate fire upon. Using a variety of key presses on his ships data entry keyboard, he could elevate a target’s level of urgency, create fire teams to work together on a target, create flight groups that he could communicate to directly. The huge radar scope was capable of rotating on any axis using his ships flight control hotas in order to get the best angle to view the battle.

Dragging a box around the 4 bombers, Ikeprof tagged them as a group. Dragging a box around the sphere of his main forces, he deftly tapped the key strokes signifying the primary targets and ordering them to maintain current position and attitude while awaiting the next move.

Quick acknowledgements from his pilots filled his comms screen as the enemy bombers began their run. Mentally extending their vector forwards, he could see they intended to pass tangentially to the sphere and focus on one or two of his bombers rather than attempting to pass through the middle of it and exposing themselves to the bulk of his pilots devastating firepower.

Having seen this type of run before, Ikeprof knew the lightness of the Solrain bomber made vector extrapolation deceptive. If these pilots were under the command of a competent CC, it may be a ruse to which any attempt to counter position his forces could result in more damage than simply bearing the brunt of the run as it stood. He decided that patience was the only option.

Watching the progress of the bombers, Ikeprof realized the opposing CC was not new at this. At roughly 10K distance the first enemy bomber released a single morning star. Bomber pilot Quick indicated missile lock but calmly held his position. At 1K intervals each of the other enemy bombers released a single Morning Star missile also. This type of run was very textbook in terms of forcing exhaustion of PWD100’s. With 15 PWD’s left in the Condor group, Ikeprof was not worried.

Watching the 4 enemy bombers pass by the defensive sphere Ikeprof grew

frustrated at the stalemate situation that had developed as seemed par for course these days. Both sides had grown so adept at utilizing the strengths of their crafts that an almost unnatural balance had been achieved. The brutish firepower of the Octavian craft, combined with their heavy armor compensated for the lack of speed and in flight trajectory modification ability. The hard to hit Solrain bombers with their agility and speed suffered from their own deficiencies. Captain McInnus was responsible for the innovative and rather brave concept of the sphere turret defense formation with the PWD tows. Ikeprof suspected it actually evolved from an attempt at salvaging a losing battle, but regardless, it had become standard practice when outnumbered in battle as seemed to be the case the majority of the time. Prior to the development of that formation, Octavian forces had been taking a beating by the Solrain craft who could hit and fade easily at will while the Octavian craft never had that option.

Ikeprof’s continued to issue commands in an almost automatic fashion while pondering the situation. The Solrain bombers flew lazy 8 patterns to exhaust the missiles fired routinely by the fade side of his sphere group. As the missiles disappeared from his scope, the solrain bombers formed up for another pass with each side having inflicted minimal damage. A quick scan of remaining ammunition quantities showed that at least an hour or more of battle at this rate remained before replacement craft would be necessary. One of the Condor’s was almost out of PWD’s but had 4 morning stars equipped. Ikeprof tapped out a quick command instructing that pilot to maneuver to the side of the sphere opposite of the bombers and launch 2 MS’s on a single bomber after they had passed.

The 4 bombers began yet another run, appearing to try a split fork approach this time against the sphere. Two Solrain Intensities appeared in the Greater Locks gate and began an approach approximately 90 degrees from the bombers in an attempt to confuse his forces. Ikeprof assigned two of the bombers to target one of the heavies, while ignoring the other.

As the bombers and fighters arrived at the sphere at almost the same time Ikeprof was pleased to see one of the Intensities blink out of existence. Apparently the heavy had gotten a tad too close to the firepower of his bombers. The remaining intensity afterburned away as the condors PWD’d the incoming missiles. The almost empty Condor assigned to launch his missiles at the departing solrain bomber group did so perfectly as they passed by.

Suddenly at 12K from the sphere the enemy bomber group flipped and flashfired backwards towards the sphere while unloading a missile each. Caught unawares, Ikeprof had only time to issue an alert order and hoped his pilots were awake and sharp. The enemy bombers again vectored in an expanding V to pass on both sides of the sphere. Missiles disappeared as the condors did their job perfectly. Ikeprof relaxed as the surprise tactic by the enemy failed to achieve any measure of success. The enemy bomber group sharply vectored in a mirroring closure to their approach pattern flying again as one group. Rotating the display casually to get a clear view Ikeprof sat up on horror as he realized why the bombers had vectored so harshly to close their V pattern. The two morning star clusters launched by his Condor were attempting to track the original targeted enemy bomber. By flashfiring

back at his sphere, the morning stars were left behind to follow. Only by closing the V would the enemy insure that the missiles would fly right back through the sphere. Ikeprof made no attempt to communicate with his pilots as he knew it would be too late to have any effect. A quick wrist motion rotated the display to an angle directly behind the missiles. The first morning star disappeared with the resultant drop in shields to one of his condor’s. The condor itself disappeared from the display as the second morning star impacted it’s hull after narrowly missing one of the bombers.

Ikeprof quickly surveyed his assets. 5 bombers with less than half full missile racks, one condor with 3 PWD’s and one condor with 2 missiles and no pwd’s. The condors had no flashfires and would be quickly overtaken by the enemy bombers. His 3 scouts were maintaining a circular flight pattern around the main battle area while keeping away from the enemy scout craft doing the same thing. Somewhere out there was his counterpart also motionless in space, cloaked and defenseless, coordinating the enemy forces.

Zalty's Combat Guide

"The guide to keeping your ship intact during a firefight"

Zalty's Combat Guide

Introduction

This is a guide that aims to give an all-round appraisal of the abilities required to be a good combat pilot. Where possible, it will attempt to teach those abilities. The tutorial primarily focuses on laser/ion combat, but will delve into other areas as well.

Bear in mind that there is much that cannot be taught by text, only by action. Nothing is going to turn you into an ace overnight. It's long, hard work, but if you're motivated enough, you can be among the best there is.

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- Duelling
  - Aim
  - Manuevering
- Realspace Combat
  - Understanding Your Ship
  - Choosing Armament
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  - Situation Awareness
  - Mentality
  - What to do under Fire/Evasives
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Duelling - Aim

Aim cannot be taught particularly easily. It is largely a skill that can only be learned through practise, but there are a few things to bear in mind. Firstly, remember to always have your deadzone set to 0 - Your ship's implementation of deadzones is poor at best. Make sure that your technicians have installed a high quality stick to enable precise control.

Try to make sure that any buttons that will be pressed all/much of the time (excepting the trigger) are not on the shaft of the stick. If you are constantly pressing a thumb button while aiming you may find that it detracts from your aim. My button setup on my FF2 goes like this (NB the hat is 8 way, but I find that I cannot use all 8 functions precisely enough to prevent errors):

Hat left: Nearest target
Hat right: Last aggressor
Hat up: Target cycle up
Hat down: Target cycle down
1: (Trigger) Fire main weapons.
2: (Big thumb button) Jump
3: (Left thumb button) Brakes
4: (Right thumb button) Teamspeak transmit
5: AB
6: Missile
7: Flashfire
8: Target under reticle

Capacitors: Cap choice can affect aim to a significant degree. Most pilots find it harder to get a near-perfect aim using gatling fire. Volley fire, as well as enhancing aim, offers the benefit of increased damage. This is due to the damage of the initial volley. At any point except the moment at which all guns in the gatling have fired, gatling fire will have done less damage. Note that as the number of shots taken in a single engagement increase, the significance of this advantage (percentage-wise) decreases. If you are taking lots of break-shots, where contact time is very short, the advantage is significant, however. As a further point, this advantage is enhanced by low RoF weapons such as Vantages and Injustices.

Duelling - Maneuvering

This topic focuses on approaches used in a duel, and manoeuvring during the duel. It is suggested that you read the following subsections:

File List

>Turning
>Approaches
>Choosing Approaches/Turning Method

Laser/Ion vs Laser/Ion: Because the percentage of hits in laser/ion combat is so high, the most important thing is to keep hitting your enemy. This means that unless you do it on the flashfire, do not turn away from your enemy where possible.

Laser/Ion vs Ammo/Mortars/Novas: Against the higher damage slow weapons, it is important to put the enemy in a position such that they will have trouble hitting you. This means that you may find it beneficial, once you have made the initial contact, to adjust your vector while in the effective range of the enemy's weapons. If possible, try to do it while they are turning and not hitting you to decrease the amount of time you spend with your easier to hit faces under their guns.

Duelling - Maneuvering - Turning

There are three methods for turning during a duel.

Pitch: The most common. Use the up-down motion of your mouse/stick. It doesn't provide the speed of turning of diag-turning, but generally presents a small profile to the enemy, along with ease of aiming.

Yaw: In most circumstances, do not use yaw (left/right) turning. This will, with most ship profiles, allow your target a huge margin of error for hitting you.

Diag-Turning: Diag-Turning involves using both axis of the stick to rotate. This makes it harder to aim, but increases your speed of rotation. Commonly used by turn-rate impaired ships such as the Dragon, Intensity, and Barracuda.

Duelling - Maneuvering - Approaches

There are various approaches used to a duel. The common ones are discussed here.

Joust: Very straightforward, and the approach everyone started out with. Simply head straight towards your enemy.

Circle: The standard circle. Assuming a starting distance of 5+k from your oppenent, point your nose at an angle to your opponent (holding them at the top of your screen is a reasonable guideline), accelerate, and bring your nose up up to face them between 3 and 4k range. If necessary, cut throttle to bring the nose up rapidly; this will give you time to draw a bead on your target prior to commencing firing. If your opponent does the same in the opposite direction, you will usually end up in a gradually tightening circle (spiral), between 800 and 1.4k range.

Tight Circle: This is usually accomplished with the aid of flashfires, in the combat of ships with poor turn rates. My method for doing this involves approaching at a slightly steeper angle than that used for a normal circle, moving to point towards the enemy at 4k. At 2.5k, I turn to point at 90 degrees to the target, and flashfire. Then, using diag-turning, I pull into the direction of the enemies travel just before they go past me. This will usually result in an extremely close range (50-200d) circle when correctly pulled off. Obviously the numbers are variable dependent upon enemy approach vector and speed - do it by feel once you get the hang of it. The lighter your ship is (and the better it's turn rate), the better it will be at holding a tight circle. Be careful with this technique in realspace, as it will deplete your FF reserves.

Deep Circle: Similar to the standard circle, but held at a longer range (1.5k +). The only real difference is that your approach angle must be much wider. Don't lose patience if you close range slowly. Pull up slowly to meet your enemy at the desired range (usually the max range of your guns). Deep circles are typically used by: Ships with good profiles, ships with poor turn rates, ships with long range weaponry (such as ions). Heavy ships are generally better at holding deep circles.

Circle Break: The circle break is most easily accomplished by imagining a point along your enemy's vector where you will both meet. Fly towards that point, and what will generally result is a series of short mini-jousts. The circle break is useful for a large variety of situations - if you are flying no duelist, if your aim isn't so hot, if your profile is large relative to your enemy's, if your turn rate is good, if you have low RoF weapons. Be very careful using this technique in realspace, as it leaves you vulnerable to divebombs.

Duelling - Maneuvering - Choosing Approaches/Turning Method

Which approach and turning method should you pick? There are a large variety of items to take into consideration.

Profile: If your profile is large relative to your enemy's, they will have an easier time hitting than you will. You thus want to lean more towards approaches that lead to easier vectors, or being close in. Consider tight circles and circle breaks. Useful, for example, when the Typhoon is fighting a medium fighter. Your profile is relatively large, so you want to minimise the effect of this. Get in close enough to the MF that its profile is less relevant, with both combatants hitting well, and your superior firepower/absorption will probably win out.

Turn Rate: If your turn rate is slow, you face the possibility of being out-turned by your enemy, and not being able to keep hitting them while they can hit you. Lean towards approaches that don't require fast turn rates - deep circles in particular. Most notably used to great effect by the Intensity. Conversely, if your turn rate is good, you may wish to go for a tighter circle - often used by the Typhoon.

Aim: See profile. If your aim is bad, consider getting in close, or using a circle break for an easy vector. If it's good, you may wish to stay out wide to maximise your advantage.

Rate of Fire: To some degree, low rate of fire weapons lend themselves towards circle breaks, because your weapons can reset themselves during the turn-around period, maximising the advantage that you get from the massive damage your low RoF weapons do in the initial volley. Try to time the mini-jousts such that you fire just before having to turn, to enhance this advantage.

Weaponry: Slow weapons (novas, ammo, and to a degree mortars) are enhanced in ability when aimed along easy vectors, and at close range. A tight circle will lead to a hard vector, but the range is so close that you should get a good hit rate. A circle break will generally give an easy vector

Realspace Combat

The topic of realspace combat is hideously complex, and it's unlikely that anyone knows all there is to know about it. The advice in this section is probably best applied to fast and/or agile ships, but I will make an effort to cover the full spectrum of ships. Note that the duelling abilities I described above *will* help you in realspace combat significantly. I assume functional voice communications on your ship.

Realspace Combat - Understanding Your Ship

It is extremely important to understand your ship's abilities, and those of others.

Speed: Controls the ability to run and chase over long distances. A fast ship, assuming it doesn't get killed before it accelerates, will always be able to escape, and will be able to chase down ships running in a straight line. Fast ships will generally perform well in large fights, but the speed may not be as useful in smaller ones.

Thrust/Mass (T/M) ratio: Controls the ability to evade, and the ability to run and chase over short distances. A ship with a good T/M ratio will out-accelerate less agile ships, and can use this to escape being under fire, and to catch up with running enemies. A good T/M ratio will also allow you to dodge in such a way that you cause the enemy to miss. A good T/M ratio is useful in all fights, but particularly as you tend towards the larger ones. High T/M ships will, in general, be good at evading ammo.

Damage/Second (DPS): Self explanatory - the damage your ship can do per second. DPS tends to decrease in importance in larger fights.

Shield: The larger the shield, the better. Every hitpoint taken off your shield can be regenerated. A ship with the same total damage absorption (DA) as another, but more of it in shield has an advantage - particularly in larger fights. Recharge rate is an important factor - the faster your shield recharges, the quicker any attack on you is nullified. Recharge increases in importance as battle size increases. Bigger shields are more of a benefit to fast ships - they are more likely to be able to escape to recharge.

Armour: Contributes to your total DA, but is non-regenerative. Armour increases in value as fight size decreases, but is, of course, never more worthwhile than shielding.

Profile: Profile is important for all aspects of combat. The more you get hit, the faster you have to run/die. Ships with bad profiles, as when as losing out in duels, will also get him more in snap shots (i.e. hitting a target travelling at a large relative vector to you during a brief contact period).

AB supply: Most two engine ships have enough AB to last the vast majority of fights, as long as they don't waste it too much. Having double the AB supply in a single engined ship is an undeniable advantage, but it is mostly only over the long chase that it really comes to light. Be careful about going deep space if you are in a twin engine ship, as you may get caught. You'll also be able to run better in a single engine ship.

ModX count: ModX are useful in any fight, but their import increases in larger fights. The flashfire is of course the most commonly used. It is the ultimate get out of jail free, chaser, or offensive tool. Dragon pilots may now wish to seriously consider the PWD. I've seen several pilots using it to great effect.

Realspace Combat - Choosing Armament

I will, in general, talk about ions and lasers as laser-esque weapons, and ammo/mortars as ammo-esque weapons.

Lasers/Ions: Lasers and ions should, in general, be considered the main weapon for group PvP. While ammo weapons sometimes do well in small combat situations, laser-esque weapons scale much better to group fights, because they are relatively easy to hit ships that aren't engaging you with. This allows you to cover your friends well, which is key to victory in a group engagement.

If you have a good aim with ions, it is often a good choice to pick them over lasers. They have good efficiency (which allows ships like the Tempest to fire at close to full throttle), and great range. They much harder to hit flashfiring ships with, however, and they also cause your ship to be heavier, reducing your chasing abilities and making you more vulnerable to attack.

Ammo/Mortars: In general, ammo does not have the versatility of lasers and ions. This is largely because ammo is not great at covering your friends with as it is relatively hard to hit off angle shots with it. That said, in smaller engagements its damage can throw the balance in its favour. In general, I would not consider mounting ammo on any ship other than the Dragon, as the weight penalty in addition to the difficulty of hitting ships not engaging you is fairly painful.

Mortars (i.e vantage and peeler, all others are worthless as it stands) are excellent weapons. They are somewhat easier to aim with than ammo, and their low rate of fire gives them fearsome damage over short contact periods. Any ship that can carry them is a massive danger.

I strongly recommend that you read the following section if you wish to understand why particular weapons are effective.

Realspace Combat - Choosing Armament - Weapon Effectiveness

This section details what factors control how a weapon behaves.

Velocity: The faster a weapon is, the easier it is to hit with. Faster weapons are likely to improve in effectiveness as fight size goes up, as they are better for covering your friends.

Range: Lifetime*Velocity. In general, longer range allows you to hit weapons at a higher range, but a more important case to be considered is effective range - the range at which you are likely to hit a significant proportion of your shots. Ions, despite having a shorter range than Novas, have a much higher effective range. Effective range is important in both duels and group fights, but increases in import in group fights - again for friend covering purposes - it's not hard to close the range in a duel situation.

Damage Per Second (DPS): Fairly self explanatory - the damage a weapon does per second.

Efficiency: Damage/Energy Used. Efficiency is not of import for a ship with lots of power. For underpowered ships, better efficiency gives a higher top speed at which your weapons give full damage. This gives better chase potential, and also leaves you less of a sitting duck when you're firing. You're more likely to be concerned with DPS than efficiency in a duel, but efficiency is important in group fights.

Rate of Fire (ROF): Rate of fire is of great importance, for two reasons. Firstly, weapons with a low ROF are in general easier to aim for most pilots than fast ROF ones (you get time to aim between volleys), and secondly because a low ROF increases damage

Realspace Combat - Choosing a Ship

As of the recent ship modifications by each of the factions, there are massive varieties of ships that are viable in realspace. Which one you choose depends upon the way you fly, and what skills you want to learn. In general, for pure effectiveness, you obviously want to pick the ships that match your skill set. For pilots with relatively poor aim and good evasives/combat mentality, pick light ships (LFs, MFs). Good all-rounders will probably prefer Fs or MFs. For the hit-em-hard people, who aren't necessarily the best tactical thinkers/evaders, you will do best in Fs, HFs, or bombers, which maximise the effectiveness of your aiming skill.

For the purposes of self education on how to PvP, I would recommend:

Quants: Typhoon. The best educational ship in the game. Hell on beginners, deadly in the hands of an expert. It's unforgiving, but it teaches you all the right moves.

Octs: Chiroptean. The Nix/Dragon encourage a few too many bad habits, and the raven under-emphasises aim. It flies like a mini-phoon, but it is a little more forgiving.

Sols: Interceptor, Intensity. I'd recommend a mix of these two ships. The ceptor under-emphasises the importance of aim, but the tensy can encourage a few bad habits (the so-called "spam and flee").

Realspace Combat - Situational Awareness

One of the most important abilities in RS combat is situational awareness. This involves keeping as accurate a picture of where enemies are, where friends are, where objects are, and how the battle is progressing in your head. You should always have time to think during a battle - as more skills become automatic, you will probably find that your situational awareness picks up.

Radar: The ability to read the radar and track enemies on it, and their position relative to you and your friends is very useful. I'd suggest cycling your radar down to something below 10k, to make it easier to read. If you're a fleet leader you may well wish to keep the range up to retain a better overall picture of the battle.

Target Cycling: Whenever you get the chance, cycle targets. Take a look and see if you're a long way from the rest of the fleet, see if any enemies are pointing right towards you (indicating that they may be coming for you). See if there are any good targets around. I tend to cycle targets whenever I am chasing someone that I am not in range of, when I'm out of range while going evasive, and often when I am shooting at something large that isn't shooting back (top side of a phoon, for example).

Targeting: Many factors control targets that you select (in no particular order).

- Proximity: You will reach a closer target faster, and hence be causing damage quicker and reducing 'useless' flight time.
- Damage: Already damaged targets are more likely to already be down on flashfires, and are closer to death - increasing the chance that you will down them before they make it away.
- Friends: Your target may be causing your friends trouble. If you pull an enemy off a friendly pilot, you obviously help your fleet. Best targets are often those that are busy engaging one of your friends - particularly if your friend is firing back. When you shoot at them, not only will you be helping your friend take less damage, but the enemy may not realise, at least initially, that they are taking damage from multiple sources - and will probably take significant damage before running.
- Enemy ship type: You will want to engage, in general, ships that are capable of dealing a lot of damage before others. This is not a hard and fast rule - because the Dragon, for example, is so poor at chasing and has such high DA that it is often not the best first target.

- Enemy pilot type: Some pilots are easier to down than others, some pilots are more dangerous than others. Generally, I try to force the really good pilots into running a bit first, then hit the pilots that are good offensively but die easily, then the all-round poor pilots while keeping the really good pilots at bay, then concentrate on the remaining pilots who are good defensively, and the good all rounders. This is discussed a little further in the 'Mentality' section.
- Are they targeting me?: If an enemy is not targeting you, you can often do a very large amount of shield damaged before they turn round and start shooting back. The initiative in a fight is one of the most valuable properties of fast ships.

Tracking Flashfire use: Try to track how many FFs each enemy has used. While you can't notice them all on your own, make it a general policy, where it won't interfere with other voice comms traffic, to say when a pilot uses a flashfire.

Target Under Reticule: This is a very useful radar feature. If you see pink trails following other engine trails, use the target under reticule function to see who the FFing pilot is, and who they are chasing. If one of your friends is under attack by an FFing pilot, let them know - it could save them. This button is useful for a multitude of other things, so keep it handy.

Nearest target: I frequently hit this button to get a good idea of what is near me.

Last Aggressor: I also frequently use this button to track the motions of those particularly interested in killing me.

Realspace Combat - Mentality

The mentality with which you approach PvP is very important to your success. Firstly, try to fly for your fleet, not just yourself. Secondly, the level of aggression you fight with is crucial. There are multiple types of pilots, and I try to detail them below.

1. The hideously over aggressive. Pilots such as these are likely to go for the first enemy pilot they find, and flashfire until that pilot is dead. They won't care that much if they are getting badly hurt while doing it. Unlikely to disengage from their target. This type of pilot will often take one down with them, but are of little help to a fleet due to the rate at which they die.
2. The slightly over-aggressive. This type of pilot generally makes sensible decisions, but when engaged in a 1v1 situation in a large RS battle will often stay in that situation well after it's become clear that they are not going to win, or will die shortly after winning.
3. 'Just Right'. Generally makes good targeting decisions, and knows when to disengage and re-engage.
4. The mildly cowardly. Generally a decent all-round pilot, but likely to disengage from battle for longer than necessary when hurt (For example, will wait for shields to get to 50% or more before recommitting to the fight).
5. The hideously cowardly. Travels behind the main body of the fleet. Runs as soon as they get hurt. Even more useless than type 1 pilots.

As this list implies, type 3 is generally the place to be. Type 1 pilots will sometimes pull their weight, but don't count on them to be alive to cover your back. They will also have big problems fighting high-firepower ships such as Dragons - they just don't get that you can't go head to head with them. Types 2-4 will usually be useful fighters, and you might as well tell type 5s to go away - they're only interested in their kill ratio.

Don't over commit when engaged with an enemy. If it looks like you're going to get too badly damaged, you can always go evasive; you're pulling at least one pilot out of the fight when they follow you. In addition, they're distracted, and often a good target for the rest of your fleet. Equally, don't run at the first sign of a little trouble - try to stay in the overall fight, but don't get too bogged down in individual engagements. Try to avoid death, but don't be so concerned about it that you won't take a risk to help your friends - don't throw your life away for the chance of a kill, risk your life on the chance of getting multiple people killed.

Kill Stealing: This one deserves its own little sub-topic. In general, don't be worried about kill stealing unless you are actually only engaging with the intent of getting the kill shot. Don't factor the possibility of you personally getting the kill shot into whether you target someone or not. If you happen to get the kill shot on a target you selected for legitimate reasons, there's no reason to feel guilty.

Realspace Combat - Evasives/Under Fire

NB, when I refer to slow ships I generally mean slow and non-agile.

Fast-ish Ships: If I get hit, the first thing I do is hit last aggressor, and whack on the AB. I then assess the threat the target presents. If I am 1.6k away from a laser ship and travelling perpendicular to it (use the vector indicator in the yellow circle below your aiming reticule, as well as the speed at which you are escaping), I can comfortably presume that I will be out of the way soon enough - I just juke a bit, and get out of range.

If the enemy is flashfiring on me, or is on the same vector as me and in reasonable range, the best thing to do is generally to turn and head back towards the enemy ship. The most effective way to ensure that you will escape from its weapons range is to fly right through the ship. This is inadvisable from the point of view that you will present them with an easy target, and possibly get divebombed, so fly towards them at an angle. This should get you out of range - although if they persistently flashfire after you may be forced to FF yourself. In this case, turn towards them before flashfiring, as you will gain a lot of ground on them.

While evading, always add a little juking, barrel rolling, or anything a bit unpredictable that you can think of. It will give your target a much harder time hitting you. It's up to you at what shield point you will flashfire at. In a fast ship I will try to make sure to waste at the very least one of my enemy's flashfires before doing so myself. I'll generally not hit the FF before about 20 shield, unless the ship following me has extremely high damage weapons and I don't think I can evade it.

Slow-ish Ships: Slower ships obviously have fewer evasive options than the fast ones. One of the biggest factors is that you are usually engaged by other ships, rather than the other way around. This isn't too bad a problem in most cases, but when you are engaged by a faster ship with significant firepower (Typhoon, Monsoon, etc.), they have the initiative (the time you spend reacting and turning to engage), and the ability to hit you hard. For this reason, I am generally freer with my FFs in a slow ship - if I get hit by a ship with significant firepower I will often FF out, and use the rest of the FF to come back in and engage. This will often save 50 shields or more, and can be very much worth it.

Last Aggressor/Nearest Target: While going evasive, make extensive use of these features. It will let you keep track of what the pilot who attacked you is doing, and also possibly if he has any friends with him.

Evasive Mentality: Don't be afraid to go full evasive if you have lots of enemies on you. If you pull three enemies away from the biggest action, you're giving your fleet a big numbers advantage - they only lose one, your enemies lose 3. Equally, don't get too far away - if you get into real trouble you're going to need help to be close by.

Secondly, if you're going evasive on just one or two people, and they aren't being too aggressive, try to shoot at people in passing. The distraction is a bonus to your fleet, and you may end up with an even bigger trail of enemies following you.

Profile: Be very aware of your profile, and how you are presenting it to your enemies. For example, when in a Typhoon (or to some extent the Chiroptean) you want to show the huge topside as little as possible, as you become very vulnerable to being hit. Try to keep thin edges pointing toward your enemies at all times.

To stay ahead of an enemy, even if it's slightly faster than you, fly in arcs. If they start predicting your arc, switch to a different direction arc and you will make up even more ground.

Realspace Combat - Flashfire Conservation

This topic is extremely important. It is critical that wherever possible you conserve your flashfires. This means that, particularly in the early stages of a battle, you should not be using your FFs to run people in down unless you are 100% positive you can do it in a single FF. When attacked, consider if you can go evasive to the extent that you will escape without taking armour damage - if so, try not to use your flashfires. Save them for when you _really_ need them - to stop yourself or your friends from dying. If your evasives and mentality are good, you shouldn't find conserving flashfires too much of a problem. If you have flashes left at the very end of a battle, you can always use them to finish off the remaining enemies.

Realspace Combat - Know Your Enemy

Keep track of how your enemies behave towards you and others over the course of many fights. If you know that a particular enemy is very prone to try and kill you, be on the watch for them. If you know that an enemy has good aim but poor evasives, take them down early. Try to remember how your enemies fly - it can be used very much to your advantage.

Realspace Combat - Other Tricks

Veteran pilots will have a whole host of tricks which they can use to gain an advantage. The files below describe just a few of them.

Realspace Combat - Other Tricks - No Duelist

Running no duelist usually takes an extreme amount of practise, but it can often be worth it if you are a highly targeted pilot. Aside from those very few who can aim as well without as they can with, I wouldn't recommend this for the average pilot. If you wish to use no duelist, this is what I've picked up from the experts to help you practise.

Do: Practise forever in the sim. Get involved in sim wars when you can to practise off-angle shots. If you really want to do it, expect many hours simming.

Don't: Expect to aim quite as well as you will with duelist. It may well never happen. You just have to judge whether it's worth it.

Don't: Rely on jousting/mini jousts. Most of the no duelist pilots I've seen try to go for circle breaks, to minimise the vector. This is really, really dangerous in any ship with a large missile hitbox. Practise to the point that you can hit on large deflection angles - in realspace fights you will have to do this anyway. If you can't there's no point going no duelist.

Don't: FF-[bleep] when simming no duelist. If you do, you're only providing a crutch for yourself that you won't perform as well in RS.

Realspace Combat - Other Tricks - Quick Docking

An invaluable skill. The quick dock is performed by flashfiring in, and usually involves stopping as close to the docking tube as possible (the closer you get, the harder it is to perform), and a quick burst of speed to perform the dock. I'd suggest this as useful to any combat pilot who likes to fight the gank. It takes a lot of boring practise, but it's worth it. Particularly with TRI's new POS initiative, it's hard to under-emphasise the importance of this skill.

Realspace Combat - Other Tricks - Dive Bombing

The ability to hit other pilots with nukes or torps. Not a skill I've ever mastered, so I'm not really in a position to teach, but it is clearly useful to those who know it. The basic technique is: Line up the enemy extremely carefully. Turn towards them, and fly straight for them. Release the torps or nukes at (your speed + enemy speed + (200 to 500) range. If you release before that, they will evade them, if you release after they will not arm and do only kinetic damage (missiles have a 1 second arming period).

Other techniques include nuke 'mining'. If you're running gate to gate from someone, target the gate you're heading to. Preferably as the enemy flashfires towards your ship, release the nuke. It will, due to its lack of thrust, slowly fall behind your ship. If the ship behind you is not paying attention (they get no missile warning), they will get hit and blow up in a very pretty fashion. Even if they are paying attention, they have to juke to avoid the missile - which may give you just the edge you need to escape.

CONFLUX

New Dawn’s Definitive Guide to the pink menace.

Introduction

This is an excerpt from the New Dawn Guide to Hunting Conflux which has only recently been declassified due to the alarming number of nugget pilots who are being sent home in pods. Equally disturbing are reports of pilots in light fighters and even medium fighters who are unable to successfully eliminate a c6 manta and its snail escorts without the use of missiles. TRI has posted some limited information in the JOSSH Database about the history and nature of our conflict with the Conflux. That's a good starting point, but does too little to prepare pilots for the inevitable conflict ahead.

This report is divided into sections, each of which build upon the last and should be read in order:

Conflux General Information
Tourism Kills: Leaving a Sector
Ammo vs. Lasers: The Duelist
Squid
Snails
c6 Manta
c7 Manta
Kraken
Eels
Phocaena
Multiple Targets
Sentient Conflux
Infestations
Jellyfish
The Weapons of War - a discussion about gun preference
Octopus
Krill
Shrimp
Stingray
Shark
Advantage/Disadvantage Definitions

New Dawn is the premier Conflux hunting squad in The Reconstruction Initiative. We monitor F5:flux and other major channels for reports of Conflux activity. If you need a sector cleared of conflux and we have a pilot in the area, we will always do our best to come to the aid of all TRI pilots free of charge. When you're ready to leave the rat race of rip/ripped/reequip, look us up.

New Dawn: all flux, all the time.

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Ramblings

Let me tell you. It gets hot in a stock 'Nix. Those who've flown one - you know what I mean. On a long flight, the extra 500 creds for the climate control addon and a few minor additions? Well worth it. Coming up in the ranks you get a crap pod, too. It sucks. Add in the stereo, the custom heads up display, the plush seat, the comm upgrades, the squadron comp interfaces, the library system, the integrated combat control system, and personally, I install the Tracker system on my tow. All kinds of goodies. But, youngster, you have to realize. You *can* just buy one pod. You can. Just trade it between ships. But what do you get when you do that, if you switch ships a lot? A lot of useless crap in each ship. I went artifact hunting for a while. Made a cool chunk of change. Helped finance the squad Command and Control Center. Cool hardware there. Ties everything together nicely. But the other thing I did; I outfitted 12 pods. No joke, kids. When you go out, who knows what you'll be flying - or where you just came from, right? I log the occasional /home at a faction station. I have to switch ships sometimes. So if I come in hot and need to swap out fast, I got the custom pod waiting, right? Right. Costs me extra to store em, but hey, if you got money, may as well use em, eh? 3 versions.

The big ugly monster pod in my Phoenix, well, he's a brute. He pisses me off. Why do I anthropomorphize my pods? Some people would chalk it up to superstition, or pilot tradition, or something of that caliber. Me? Umm, yeah. Well, see, there's this thing. A while back I went on an ill-advised jaunt to unknown space, because I thought I was hot stuff. Well, for my trouble, I got beat up on and got my head caved in by some big ugly flux. Killed the pinkos. A lot of them actually. It's like, my job, y'know? But they got me good. Well, my friend, at least I think she's a friend; Aelagi. She wrote a lil tale about my outing, called "Ellipse". She has a pretty turn of phrase, I think. Almost as prosaic as I am, prolly - but anyway. She tells all about it. I'm rambling again, aren't I? Squaddies still swear I'm touched in the head. But they're not far from the truth, really. I have a small computer in my head. A cyborg interface. By Amananth standards, it's not too fancy. Doesn't give me an "edge" or anything. Well, maybe a little. Sim with me one time and see... but anyway. I hate rambling. Drives me crazy. But as my mom used to say... It's isn't that long of a drive, is it? Bah. Regardless. It did weird things to my ship computers. I have these tiny silicon transfer points in my fingertips that let me "talk" directly to the ship's computer. I ... umm ... "developed" the ability to do it without touching, now, too. How? Damned if I know. I don't really want to know. It's weird. You know how some people talk about voices in their head? Heh. I can tell you some whoppers, my man. TALL tales. Except, well, they aren't. Kinda sucks.

Anyhoo. Again. I *do* ramble, don't I? Chalk it up to one too many pod rides and shaddup, k? Aight, thanks. SO. When I "talk" to these computers. It started going both ways. They picked up on things. Parts of my personality. You ever talked to yourself? There's some things about yourself that just tick you off occasionally, right? Heh, well, umm. All 3 piss me off. Badly. Take Galileo, for example. He's my brutish, slightly snobby, can do no wrong Fighter computer. He's a pain in my ass. Sounds kinda like me when I get cocky, actually. I HATE cocky people. I don't like the damn mirror at times, by the way. But yeah, moving on. He's good, though. He anticipates things - he learns. Ever wish you had a co-pilot? It's cool. Except when he pisses me off and tells me what to do - as I'm doing it. Snobby bast... nevermind. You get the picture. Aristotle! Oh my lord what a bookworm. Smart as a whip, too. Except he's *always* got to right, damn him. I hate the mirror. God I hate the mirror. He mostly get's used for arty hunting, which is beneath his oh so high and elevated station and... sorry. It makes him mad. Poor baby. It's one way to stave off the boredom though. Every so often I take him out for a spin and play with phocs, though. That's fun. Fast lil bugger, I'll give him that. Heh, Harvey. I swear to you, I do *not* pick their names. I would never be a "Harvey". Oh Lord. But god help me, I like the bastard. He's a cursing, loudmouthed curmudgeon who's stingy as hell. But I love him. He likes arty hunting too. Screw you Aristole! Ha. Sorry. I

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almost like him. Until he acts like a stingy Sol with only 50 credits to rub together. Jerk. So! Welcome to my lovely digital family. Heh. Yay.

So, basically, I have a top-of the line AI in every ship I fly, with a central database that updates every version to each other every 30 seconds. Cool stuff. I never get hacked either. HA! A shot in the arm for security. What are the odds of getting hacked with 12 advanced AI's and an artifact Amananth contruct riding herd on my system defense? Not bloody likely, says I. God, I need to stop rambling. You try writing with people talking to you inside your head. Bloody distracting. I get a real-time spell-checker for my trouble though. Bloody whoopee. I think I'm rambling again. I suspect by this point, I'm doing it solely to piss off Aristotle, too. So humor me? He's funny when he gets upset. He splutters. I'm sure you have never heard an AI splutter - but trust me - it's hilarious.

So. Here I am, trying to ride herd on a 3 toed monkey of a programmer that's updating the command center, right? I get that straightened out. I tell him - "you need to pull the data from *this* database, not the bloody personnel files. Not everyone wants to read bogomips' duty log, k? We all know she can kill hordes of flux with two hands tied behind her back, and that the triple phocs are just, oh, so boring, anymore. That's nice. But you know what, Mr. 3 toed monkey programmer? That does *not* go on the front page of the feed. Know what I mean?" Programmers. Can't do a damn thing with them. So, that emergency taken care of, I go back to work on paperwork. Tons of paperwork. I need a clone, Jeeves. Send him right over, and be a good chap, what? I wish. Paperwork. I have to fly, too. Cool beans. So, having shrunk the Cinatai mountain peak of paperwork down to mere hillock size, I go over my personal nest egg. Investments, supplies, procurement, systems functionality checks, financial briefs. The works. Ah, the wonders of joining the "high-speed" world of interstellar commerce. I own a Solrain shipping firm supplying the stations - not one of the big jobbies - just a small independent outfit that was looking for an out-faction backer. Seems they ran into some problems with overhead and the vaunted Solrain beauracracy was about to dump them on their ear. I bailed them out, and they get to wave the flag of "neutral, un-aligned shipping". I make bloody well sure they *stay* neutral, too. Factionalism is a headache I have no desire to tangle with. Patriotic? Sure. Blindly serving your fction's interests at the expense of the Reconstrruction? Nah. Don't get me wrong. I have nothing against Factionalism. But to each his own. There's plenty of em going around. Somebody has to be bloody neutral, or inter-factional commerce would grind to a halt, eventually. Your eyes are glazing over, Ensign. Ah, an Oct. Good man. Carry on.

Where was I? Oh yes. Finances taken care of. Now for a little personal time. Tend to my artifact hoard, sell the pieces I'm not intending on using. Assemble the pieces I need for a truly badass ship. All I'm missing is an AB-4, now. Eh, it'll come. That's a side business, if a lucrative one. I'm not flashy. I don't hang out my shingle. Not a bit. I get everything I want - and sell whatever's left over. Or I buy cheap, sell high. Whatever. I made enough to get comfortable on. That's about it. The rest is going towards my next project. A station. An eight-module hummer. Want to hear about it? Too bad. Cause I don't know a damn thing about the buggers yet. I know what everyone else knows - except the people that field tested em. Bastards. Oh well. Bugger em. I'll get mine too. I'm just tired of living on the fly. GBS is as close to a home as I have. Even that isn't the same though. I'm stealing my flight crew from there, though. Bwahahaha. I might hire away that junior dispatcher, too. He's got a good handle on traffic, from what I've seen. He bought me a drink after the Battle of GBS, too. Good guy. Night bartender might move, also. We are seriously going to rape GBS of staff. Oh well. Let ISU hire some new ones. They've about taken over the bloody place by now anyway. Our whole old guard will ship over to our POS network when it comes online. Hope ISU realizes that, and is starting to look for new hires. Hell, I might help em. I still want to stop by the old stomping ground occasionally.

So, now that I've introduced myself, and gave you a little taste of the life. Well, my life isn't exactly the "standard". I'll tell you that up front. I'm ummm... flamboyant? But hey, welcome to the life of your eccentric Air Group Commander - in our parlance? The CAG. That rambling introduction was a bit of briefing, a bit of

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humorous background. I'll try not to go off on so many tangents from here on in. Let me strtaighten up and become an officer. Welcome to New Dawn, ladies and gents. The biggest, boldest, and brightest squadron in TRI. We fight Conflux, my friends. You know that. Some of you have done it already, and I sincerely hope you'll keep on doing it. Because you are now on the front lines of the most important war humanity's fought. We've made contact with two non-human races - the first was the Amananthii. Some will tell you they're not to be trusted. In this squadron, I'm here to tell you - Amananth and New Dawn have quite a history now. Probably more history with us then any other squadron in existence. We were *there* at the first Sentient incursion in Amananth space, and we've been at more than we can count, now. Dr. Qson? The one you see in the news every other week? That's our closest friend in TRI. No joke, no lie. She's an honorary member of this squadron, ,we protect her like she's one of our own, and she's the best ally to have. She hunts Conflux with us, for us, and we return the favor. It's what we do.

A short history lesson. We started out out in a group called TRA. The Ripstar Alliance. We started as a pro-Octavian Squad, but eventually became embroiled in the great Civil war with Cruentius Legio and OEC. Bitter times, massive battles, and we were decidedly aggressive then. If someone calls you a "carebear" because you fly with New Dawn? Laugh. That's all. Laugh. We're fighter pilots. We just fight a different war now. The most important one. Remember that. Always remember that. We may tow, we may mine, we may hunt artifacts. But we're fighter pilots. We're not the bloody military. We're better. But I digress. Yeah yeah, I know. I said I wasn't going to. Oh well. So back to the reason I told you this. Sometimes we may have to fight to preserve our battle lines. The occasional ne'erdowell, pirate, rogue, thrill seeker... we get all kinds. Don't be surprised when we do. Every so often we have to rattle the saber when someone decides to force our hand. Yeah, it sucks. But you gotta protect your squadmates.

So what do all of our ranks mean? Well, there's a brief outline of them in the Rank Matrix. The link is on the forums, (and on the squad page....) if you're curious. Here's the "unofficial" version. Falcon is "The Boss". He started this thing, and he's been around forever. Honestly? I joined New Dawn shortly after TRA broke up and Falcon decided to make New Dawn an "all-flux" squad. I've never been anything but a fluxer. I think I'm #2 on the seniority list, closely followed by ZeroZ95. Havik, AvengeND, Vengy, and Darkcloud get runners up. (There's more to the origins of New Dawn itself - we were around before TRI - but that's another story - and a bit long to tell here. But as far as actual time of service in ND, overall, James, Falcon, and Vengy were there at the beginning, and I was not too far after - Havik was a few months behind me. So in case you were wondering, there ya go. I'll tell that story later.) I'm digressing again. Neato. The CAG stands for Commander, Air Group, like I said above. In TRI, there's nothing but air, so that implies that we have other interests - frankly? TRI has nothing to do with that, so we'll leave that out. (I'll tell that in the other story, too.) It's an old rank - Falcon used to have that rank, actually. New Dawn's original founder's name is DeathGiver. He was the first Commander, I was the second, but I never felt quite comfortable outranking Falcon. He deserves the job. So, he is New Dawn's 3rd Commander. At present, I'm loosely the "2nd in command". In TRI terms, that means not a thing. I actually recently resigned my "Fleet Command" spot to actually do my job I've been neglecting. But I'll leave that for storytime #2 as well. Fleet Command. That is a TRI specific ranking, and as TRI is the only portion of space we are currently active in, officially, they're the head honchos. Their word is law, ladies and gents. They make policy, break it, adjust it, and give the orders. They're there to keep New Dawn running smoothly, and within it's charter as the premier Conflux fighting force in TRI space. Falcon's orders are on top, then Fleet Command. Your Fleet Commanders are ZeroZ95, Havik, and Kelvar.

Next up are the =Huntmasters=. We haven't gone on a proper hunt in a while. Way back when, we'd get in large groups and hunt as a team. With a quick nod to our appreciably improved skills and reputation from those times, we seldom find a need for such an endeavor. Your Huntmasters serve several roles, though. Firstly - They are all good trainers. They can teach anyone to hunt anything. They know all the "tricks of the trade" backwards and forwards. They can lead one of the aforementioned hunts smoothly, and with extreme predjudice. Secondly - They are also

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officers. In the absence of Fleet Commanders, they are the ranking officer when on duty. They know what they're doing, so if they tell you something, likely they havea good reason for it, y'know? Thirdly - They are diplomats. They have the authority to speak for New Dawn in regards to NAPs, Problems that occur with other pilots, misunderstandings, and the like. We appreciate their help - a lot. Fourthly - they are much like our Colonels, in wartime. We're quite a large group sometimes, and Generals/Admirals (Fleet Commanders) need to delegate things to people with proven track records of getting things done. They have lots of experience, and have been with New Dawn quite a while.

Now for =Specialists=. A relatively new rank. If you're familiar with Warrant Officers, you know that they aren't *quite* officers, but not enlisted, either. They're our core of "go-to" guys. Special Forces, in a way. They're good hunters, quick thinkers, and good at finding solutions to tricky situations. When we need a name off the top of our heads to do something important, that's who we call first, usually. It's still largely a definition in progress at this point. Partially a reward for dedicated service, and partially to give us a pool of seasoned vets to pull from in time-critical situations. They may be in charge of you for certain operations, usually on a temporary basis.

If you notice on the forums, you're ranked as Hunters and Jr. Hunters. Those our our equivalent of enlisted ranks. Flux Assassins can kill anything. They're experts at what we do best. If you get that rank, you deserve it, and we're proud of you. We rank you based upon your skill at killing Flux. Anything above Flux Assassin means extra duties and responsibilites to and for the squad. Master Hunters can kill anything pink in thesingle digits. They're good, but still working at joining the Elite. They'll get there. Practice makes perfect. Hunters are our Journeyman pilots. They got their wings by killing their first manta, but they're not up to Kraken yet. Keep workin. You're gettin close. Junior Hunters are learning the trade. They can kill the scout-caliber flux, and might be able to take the bombers too. They usually get mad at c6's right about now.... heh. Shortly thereafter, the uncomfortable pod ride gives them the incentive to learn to kill them. Did for me! Well, I had other reasons, too. But yeah, anyway. I hate mantas.

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General Information

Flux seem to spontaneously appear in certain sectors of the galaxy whenever the jumpgates are used. Newly spawned flux target the pilot using the jumpgate to enter the sector.* Flux do not always spawn, though. The number of conflux, their size, and the frequency they spawn seems to depend on the individual sector and the size of ship using the jumpgate (higher level pilots spawn more and larger flux usually). If you are wondering where Conflux of certain sizes can potentially spawn, check our Conflux Spawn Maps.

Strangely, on the same day TRI found the new storage depots (and most other game server reboots since), c7-c10 conflux began to spawn in both Inner and Outer Gyre, and we began to see c7-c10 in combinations with c1-c6 conflux much more often than previously. One veteran pilot reported spawning only c4, c4, c3 in Four Fingers. However, after about a few hours, spawns returned to normal.

Also, on the same day the new jumpgates to the Conflux Galaxy appeared, the maximum spawn of Conflux in current sectors increased from 3 to 5; the maximum spawn type of a few sectors was increased; the minimum spawn type was decreased on some sectors; the likelihood of any Conflux spawning increased; Conflux seem to now occasionally spawn without jumpgate activation; and several new Conflux varieties were discovered both in our own space and in the Conflux Galaxy. This truely is a new Attack of the Conflux.

Once a sector is cleared, if another pilot jumps into the sector (or the same pilot jumps out and back in, a procedure known as "flipping the gate"), new flux may spawn. We do not know what method of transportation conflux use to get to a sector, however once in a sector, they seem to travel in real space in a manner and at speeds similar to our own ships. They do not use jumpgates, so when attempting to fight conflux, the newer pilots should remain close to a gate for a quick escape if needed.

One important factor to remember when fighting conflux is that they all stop firing and turn (or "slide") when you score hits on them. This keeps them from scoring hits on you. It may sound overly simplistic, "shoot them and don't let them shoot you back," but your accuracy really is the key to quick victorious battles. Turreting a little to follow them when they turn (only slightly if jousting) will often let you score more hits per pass.

Every pilot should be mindful of their current cargo when considering whether to engage conflux or not. Few things are harder than trying to fight when heavy, and few things are more frustrating than dying with expensive cargo in the hold.

*The pilot who the flux are shooting at (or will if they are targeted on and heading toward) has dibs on the kill. It is always amusing to have another pilot "call" a conflux immediately after jumping in sector even though another pilot has already engaged it in battle. "Called" flux do not exist. If it is or will be shooting at you, it is yours; if it is not, ask before you pounce. One easy way to determine if a flux is "on you" or not is to roll. Flux will always roll to remain "level" with the ship they have targeted.

Tourism Kills: Leaving a Sector

"I wonder what is in *this* sector? Just a peek won't hurt." Tourism kills too many good pilots.

If a pilot leaves a sector with conflux targeting him, those flux will usually target the next closest pilot. On rare occasions, they will vanish unexplainably. Should you ever be forced to retreat from a battle, it is customary to warn every pilot in the sector via comm channel F3 that they may have incoming flux. This is especially important if you are traveling in a sector known to spawn c7 or greater as you spawning then leaving may very well kill a pilot hunting in sector who may not even be on your radar. Your flux could catch him off guard if he is busy with another flux.

Do not enter any sector if you are unable to kill or tow (run from flux without leaving the sector) anything you spawn for a reasonable amount of time, and always F3 the sector if leaving your flux behind. Many pilots program a simple F3 macro of "dumping flux" to make it easier.

Ammo vs Lasers: The Duelist

"The skill of the pilot pulling the trigger is more important than their weapon load out." That said, projectile guns (ammo and plasma, hereafter referred to as ammo) and laser guns behave differently and lend themselves to different fighting styles. It is generally accepted that ammo guns make killing flux (fluxing) easier, while lasers make pilot vs. pilot combat (PvPing)

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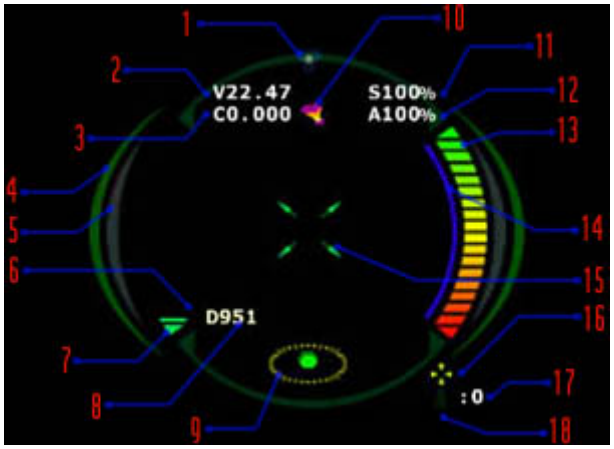
easier. There are quite dramatic exceptions to both of these ideas, though. It simply depends on the pilot's skill. Using targeting computers (either the TRI combo or the duelist, hereafter referred to as duelist) help both types of weapon user, but is essential for a successful ammo user.

Ammo
With ammo, it is easier to joust a target, using the longer range of ammo to your advantage. You joust best when you make your attack run as straight as possible and continue on past your target until they turn and follow you for a couple of seconds. This makes for a straighter return joust when you flip 180° and afterburn back toward your opponent. A pair of tools that all pilots have but not many utilize are the "Target Location Arrow" (9) and "Current Drift Vector" (10) cones on your HUD.



The TLA (9) cone shaped vectoring display shows the direction your current target is facing relative to your ship. Once you joust straight past a target, you can either keep flying straight a few seconds to give the target time to straighten itself out compared to your course, or you can use this tool paired with the CDV (10) cone to help you adjust your course to help straighten out the joust plane quicker.

When you turn, be sure to line up the target squarely before you accelerate, or you will have drift in your jousting run. This drift joust technique can be useful against targets that use long ranged ammo weapons. Ammo using conflux are not very accurate and a good pilot can compensate for drift while conflux cannot. Plasma and multiple ammo using conflux require drift jousting as you can easily die in a single pass if you fly right into their fire. Once your target is in line, rolling can help you avoid ammo using flux's shots depending on the shape of your ship, but this also makes scoring hits more difficult for you as well especially if you have drift in your joust run.

The more a target (or you) drifts, changes speed, and changes direction, the more difficult the shot will become. The most important aspect of using the duelist is to realize that it is a tool to help you vector your shots and to remember to "shoot the manta, not the duelist." Keep your eyes on the target and where your shots are landing and shoot at the target, rather than concentrating on getting the two circles perfectly aligned. Also, make use of the tiny dot inside the duelist; if your duelist is nice and tight, put that dot right on the flux.

To help keep the target lined up, roll your ship until the attack angle is flat horizontally. This makes it so that when you compensate for the duelist's error, you only have to do so along one axis (X axis for instance). Afterburning on the approaching joust will help tighten up your duelist and will help lengthen your joust after passing the target. Some ammo weapons require that you manually either lead (shoot ahead) of the duelist or trail (shoot behind) it. Knowledge and manuals such as this are a fine starting place, but experience is the best teacher: practice, practice, and more practice.

Lasers
Laser users do not necessarily need to use a duelist for weaker flux, but it certainly does help. A laser configuration and a duelist is the most effective choice in sentient and PvP combat.

Laser users can joust, but due to their shorter range, laser jousting can be a slower method of fighting. Against weaker opponents, a laser user can come to a complete stop and simply use their ship as a gun turret. Against stronger opponents, or multiple opponents, laser users may need to circle fight, keeping moving at all times as in a dogfight or may need to charge toward the target to bring it inside laser range quicker.

To set up a circle fight, do not aim right at the opponent. Put your target a few inches above/below or to the right/left of your reticle (depending if your ship pitches or yaws faster). Pulling the control stick down (toward you) seems most natural to many pilots. At around 3000m distance, pull the target back into your reticle. Throttle down as needed based on your ship's power constraints and maneuverability (ships at lower throttle pivot much quicker) but remember to keep your speed up.

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Specifics
Weapon load outs depend on your current ship configuration, financial situation, piloting style, and personal preference, and as such will not be discussed in this report. If you want to know "What guns should I use?" then just listen in popular F5 channels as there is usually a debate fought with what must be preprogrammed ammo/laser debate macros as it rarely differs from day to day.

Which ever you choose to use, read the sections that apply to the other style as well because many of the same techniques are applicable to both weapon types.

Conflux Aim
The first shot a Conflux take will fly straight ahead of it's path. As long as you are not in a perfect joust, it will always miss on the initial volley. For every shot following, though, most evidence indicates that the aiming ability of Conflux is best likened to a TRI pilot using a Duelist perfectly lined up.
This is why laser firing Conflux always hit, why ion firing Conflux usually hit but will miss at sharp angles, and why ammo/plasma firing Conflux have a much harder time scoring hits. The Conflux do not compensate for the Duelist's error the way human pilots can. This theory also explains why the heavier, slower accelerating eel will will appear to have a "worse" aim than the lighter, quicker phoc.

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The Enemy!

Jellyfish	**Jellyfish:**	C-0
	Bounty:	10 for lev 6+ 1600 for lev 5-
	Experience:	10 for lev 6+ 1000 for lev 5-
	Speed:	120
	Shield/Armor:	1000k/210k
	Gun #/dmg/rng:	1/180k/1000m
	Noob laser = 235k/1000m; Noob shield = 5400k-6000k	

Jellyfish are an interesting evolution in Conflux design. They give up profile, firepower, maneuverability, speed, shielding, and armor in favor of a complex sensor array.

Jellyfish cannot be considered a threat to any TRI ship. Often, many pilots will leave them alive for new pilots to kill because of the experience variance.

It is widely believed that TRI Research will attempt to capture a live Jellyfish in the future.

Squid	**Squid:**	C-1	C-2	C-3
	Bounty:	1,200	1,300	1,500
	Experience:	300	320	350
	Speed:	250	287	300
	Shield/Armor:	4500k/220k	4500k/220k	5000k/220k
	Gun #/dmg/rng:	1/180k/1000m	1/240k/1000m	1/300k/1200m
	Noob laser = 235k/1000m; Noob shield = 5400k-6000k			

General
The basic conflux biological probe, the c1-c3 Squid is a common sight in regulated space lanes. They usually make trouble only for junior pilots and mining vessels. Although junior pilots are adequately equipped to deal with squid, it does take some time for them to develop the skills to master squid killing. Practicing against squid in the flux sim is recommended for low level pilots.

Advantages
Excellent accuracy
Small profile

Disadvantages
Weak firepower
Weak shields and armor
Poor acceleration and top speed

Tactics
The good news for shuttle pilots is squid are fairly slow, and even a shuttle with basic equipment can usually outrun a squid, if necessary. A pilot equipped with flashfire(s) (FFs) can easily disengage a squid at will, if it is necessary.

When attacking a squid with lasers, it is important to remember that when you are in its weapon range, it will hit you with 100% accuracy. Don't bother with evasive maneuvers, as it will only make it harder for you to hit the squid in retaliation. The "trick" to killing a squid is simply hitting it enough to force it to turn. (When flux are hit below about 70% shields, they will "turn" (or

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"slide") meaning that they try and evade your fire by turning and applying afterburner. Although this can make them harder to hit, they also are not firing on you in the meantime.) Learning to shoot accurately and consistently is all that it takes to beat a lone squid.

Attacking a squid with ammunition based weapons is easier than lasers, because ammo has far greater range than the squid's gun. Because of this, it is possible to make the squid start to slide before it even fires a shot at you! The trick to using ammunition based weapons is jousting. This means approaching the target dead on (as seen here), and after hitting the target, continuing to fly straight for a small distance, and then turning around and repeating. This makes aiming ammo weapons easier, and lessens your time of exposure to the squid's laser weapon.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple squid with a shuttle is possible, but considerably more difficult. See Multiple Targets for more info.

Missile Usage
1 Purgatory or 1 Sledge or 3 Cutlasses per squid

Snails	**Snail:**	C-4	C-5
	Bounty:	1,250	1,500
	Experience:	325	360
	Speed:	326	350
	Shield/Armor:	7000k/700k	7000k/700k
	Gun #/dmg/rng:	3/524k/3400m	3/524k/3400m
	LandLord = 740k/3120m; Shelter = 6009k		

General
The snail bomber (c4-c5), to pilots that have never fought it before, seems fearsome. It travels faster than the squid, is much larger, and appears less frequently in regulated space lanes. Despite this, most would agree that a snail is an easier target than a squid, because despite its large upgrade in firepower, the snail's aim is so poor it can hardly hit anything. Even a junior pilot fighting a snail smartly can win the day, and without taking much if any damage.

Advantages
Moderate firepower
Moderate shield and armor

Disadvantages
Moderate profile
Poor aim
Poor acceleration
Poor top speed

Tactics
Fighting a snail with lasers is very easy, once you get the hang of it. Never fly right at the snail (i.e. don't joust), and always keep your speed up. If you do these two things, the snail will rarely hit you. When first approaching the snail, fly at an angle to it until you are inside your weapons range. Then turn and shoot at it while keeping your throttle up (like this). As long as you keep an eye on your velocity and don't let it drop to under v75 or so, you will be fine. Don't let a snail catch you at v0. The snail can absorb a bit more punishment than the squid, but as long as it keeps sliding when you hit it, it will not be able to fire back with any effectiveness.

Although it is not difficult to kill a snail with ammo, it does require a bit more caution than attacking a squid. Since a snail has comparative ammunition weapons to those available to a lower level pilot, it can rip you up as much as you rip it up if you straight joust it. Thus, you need to drift joust a snail to kill it. By drift jousting, you simply angle a small amount for a short time when making the joust attack (like this). This will throw off both your's and the snail's aim, but with practice you can compensate for that, while the snail never will. Although it is possible to circle fight a snail with ammo, it is not recommended, because many of the circle fight situations where you hit the snail will also be the same time the snail hits you.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple snails with a shuttle is possible, but more difficult. Against multiples, it is imperative to keep your speed up. See

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Multiple Targets for more info.

Missile Usage
2 Purgatorys or 4 Cutlasses per snail

c6 Manta	**Manta:**	C-6	C-7
	Bounty:	2,500	3,000
	Experience:	1000	1500
	Speed:	450	456
	Shield/Armor:	7000k/1350	9000k/1700k
	Gun #/dmg/rng:	2/540k/2200m	2/420k/4400m
	Thorn = 635k/1800m; Barrak = 450k/4400m Shelter = 6009k; Canopy = 12240k		

General
With only a few out of the way sectors as exceptions, the c6 manta is the most powerful conflux that spawns in regulated space. Usually appearing off most major trade routes, it is often the hunter that has to seek out the manta. The manta is a giant leap up in flux capabilities over c1-c5s. The manta combines the snail's heavy punch and the squid's perfect accuracy. It is rolled up into a package that has substantially more armor and cruises at a blazing fast v450.

Advantages
Very good top speed
Excellent accuracy
Moderate firepower
Thin profile
Moderate shields and armor

Disadvantages
Moderate acceleration
Wide profile

Tactics
Shuttle pilots should not attempt to engage manta. Pilots with low level shields and low speed cannot engage a manta with any degree of safety. With flashfires, however, shuttles can usually run from gate to gate if any mantas do spawn in their path. Once a pilot acquires a light fighter, equipped with ammo weapons, he has a tool that can take on even multiple mantas, with practice.

The single most important thing that a pilot has to learn when first facing a manta is that he/she must use jousting. While techniques like this were optional when dealing with squid and snails, a manta simply requires jousting to beat.

Engaging a c6 with ammo is simple in principle, but harder in practice. Right out of the jumpgate, you need to head for the manta that you want to attack. As a c6 manta uses laser weapons, as long as you are in its range (2200m) it will hit you with every shot. Thus, it is not helpful to drift joust a manta or try to dodge, as it will only throw off your aim and not the manta's. Start firing at about 6000-5500m. Regardless of how well you do, continue straight on until the manta is behind you and has accelerated up to your top speed. If you hit the manta substantially, it will have slid some distance. This will put drift into your joust, but you will have more distance on it than if you missed it or only did a little damage. On the second (third, fourth, etc) joust, the initial distance will be shorter than the first joust, so using AB to boost your speed is advisable. This also has the effect of tightening the duelist for a better shot.

Although engaging a c6 with lasers is possible (especially with a medium fighter or above) it is not recommended unless you already know how to handle a c6 with ammo guns. A c6 is hard enough to learn to kill with ammo, and lasers (especially with the power problems of the LF/FT) make it much harder still. However, regardless of weapons used, it is not recommended to circle fight a c6 manta until your own aim is honed. It will simply rip you to shreds unless you can force it to slide and stop shooting you. For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.
Fighting multiple mantas is possible, but more difficult. See Multiple Targets for more info.

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Missile Usage
2 Purgatory or 1 Hellrazor or 1 Morning Star per c6 manta

Kraken	**Kraken:**	C-8	C-9
	Bounty:	5,000	6,000
	Experience:	2000	2500
	Speed:	420	436
	Shield/Armor:	9000k/1300k	9000k/1300k
	Gun #/dmg/rng:	1/780k/3000m	1/780k/3000m
	FeatherFire = 810k/2400m; Haven = 15400k		

General
Kraken are the antithesis of the modestly accelerating, ammo-based c7 manta. Kraken have a single, long ranged ion gun, which, although not quite as accurate, has far greater reach than the c6's laser. Although they hurt much less than a c7 in a straight joust, they make up for it with tiny profile and extremely high acceleration. If you do not force a krak to slide, it is quite possible that it will turn around and hit you as you accelerate away from it on your joust. However, even the phoenix heavy fighter's cruise is faster than a kraken at cruise speed, so it is not difficult to outrun them once you get some distance.

Advantages
Very good acceleration
Excellent turn rate
Excellent accuracy
Excellent weapon range
Tiny profile
Moderate shields and armor

Disadvantages
Moderate top speed
Moderate firepower

Tactics
Fighting a kraken takes a similar jousting style to that of a manta, but longer jousts are recommended, to help keep the kraken going straight, making it much easier to hit. Regardless of your gun type, circle fighting a kraken is never advised. With its extremely high circle speed and tiny profile, it is very hard to score consistent hits on a circling kraken, and it is almost impossible to escape a failed circle without using flashfires or taking very heavy damage.

The trick to killing kraken with ammo weapons is just scoring consistent hits on them, which is hard, because unlike other c1-c7s, when kraken evade, they really evade. They essentially turn on rails, making it far harder to score multiple hits on them than mantas or snails.

When using novas (or serializers) the trick to totally destroying kraken is to wait until they are very close to you. If you wait until at least 2000-3000m to open fire, it is possible to score multiple hits on them, even when they evade, because they are so close. With novas, only a few hits are needed. It is very easy to one pass kraks this way.

Although it is possible to laser kraken, it is usually a fair bit harder than using ammo, because a laser's short range and long shot delay mean that you only have a few shots to hit the kraken on your joust, so good accuracy is needed. Successfully circle fighting a kraken requires very good aim. Kraken will miss you from very long range or at a steep angle.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple kraken is possible, but more difficult. See Multiple Targets for more info.

Missile Usage
2 Purgatory or 1 Morning Star per kraken

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Eels	**Eel:**	C-10
	Bounty:	10,000
	Experience:	2500
	Speed:	500
	Shield/Armor:	21500k/21500k
	Gun #/dmg/rng:	2/2950k/4500 m
	NovaMkI = 2800k/2555m; Alpaa = 20400k	

General
Eels are very different from c1-c9 conflux, in many ways. Cruising at v500, they easily exhaust a fighter's afterburner fuel while simply trying to maintain distance, and unlike other flux, they have very tough shields and armor. But the thing that truly separates Eels from any lower flux is their massive firepower. With two or three shots they can strip a fighter's shields, and a few more will take out your hull. If you screw up with any other conflux, you can go "oh s***" and fire off a flashfire, and most of the time, you are safe. Screw up fighting an eel, and sometime between the "oh" and "s***", you are dead. Simply put, unless you have a very twitchy FF finger, you are dead by the time you decide to use one. However, besides the eel's ability to obliterate a ship in only a few shots, it is not that dangerous if handled carefully due to its numerous weaknesses, notably its extremely poor gun accuracy.

Advantages
Excellent top speed
Excellent weapon range
Excellent shields and armor

Disadvantages
Moderate acceleration
Poor accuracy
Large profile

Tactics
When first dealing with an eel, think of it as a very large, fast, and somewhat more potent snail. The same basic techniques are used for fighting eels. The only guns that can rival the range an eel's dual plasma weapons are the hitman and barrak. So unless you have a hitman/barrak and don't mind taking a shot or two on the chin, drift jousting or circle fighting an eel is the only option (i.e. don't joust).

On your drift jousts, you need to score a hit on each pass, or the eel can close the distance on you and make things very uncomfortable very quickly. One technique of extending your range is to roll your ship after you've just jousted past the eel. This will put the eel in a "perpetual turn" behind you. While he's turning trying to "right" himself to your ship's orientation, you are gaining precious kilometers on him.

When using lasers, circle fighting a lone eel is the best option. Make sure to give yourself a long, wide circle so you can bail out if things go badly. If you let yourself drift in too close and screw up, you can be dead before your flashfire can save you. As long as you get its shields below 70% and keep hitting it, it will turn and miss you consistently. However, just as when fighting a snail in a shuttle, be very, very careful of getting slow with an eel. If you miss a few times you will be dead. A useful technique to killing an eel quickly with lasers can be realized by using a very deep circle(ie, a large degree of pitch down away from the eel). If you let the eel come into the circle and cancel its forward velocity before you shoot it, when it dodges away from youit will not get out of range of your guns, and you can kill it very quickly without it escaping and recharging.

Scoring reliable hits on an eel with ammo in a circle fight is somewhat more difficult, however. Although it can be done, drift jousting tends to be a more efficient and safer way to get the job done. Just be careful to never be caught at v0 while in an eel's gun range. Both long drift joust runs and quick turning short joust runs with a lot of drift are effective.

Fighting multiple eel, or an eel with kraken escorts, was one of the harder combos until phocs came along. When dealing with either multi eel or eel and friends, long, slightly drifting jousts are critical. If you do a wide drift joust or a circle, the kraken/other eel will chew you up. Remember that when you can only shoot one flux, shoot the eel. Although an ignored kraken or manta can do some damage to you, whatever it will do is much less than what an eel would. These a situations are where ammo or novas tend to be very useful. With lasers it is hard to do sufficient damage to the eel in the required long joust, so these fights tend to take quite a long as a result.
Missile Usage
4 Morning Stars per eel

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Nautaloid	**Octopus:**	C-13	C-14	C-15
	Bounty:	31,000	33,000	35,000
	Experience:	5000	5250	5500
	Speed:	433	433	433
	Shield/Armor:	8000k/16000k	8000k/16000k	8000k/16000k
	Gun #/dmg/rng:	2/540k/2200m	2/420k/4400m	2/780k/3000m
	Thorn = 635k/1800m; Barrak = 450k/4400m; FeatherFire = 810k/2400m; Haven = 15400k			

General
The Nautaloid is not a very exotic conflux, especially compared to the other conflux that it will often appear along side. It's flight charactaristics are similar to that of a kraken, but unlike the kraken it has both excellent protection and a reasonable amount of firepower. Despite this, as long as a pilot is both patient and careful, it is not difficult to bring this conflux down, given a reasonable amount of time.

Advantages
Moderate shields
Excellent armor
Excellent accuracy (Moderate for c14)
Excellent weapons range (Moderate for c13)
Very good firepower (c15)
Very good acceleration
Very good top speed

Disadvantages
Moderate firepower (c13, c14)
Large profile

Tactics
As mentioned, as long as caution is applied when fighting this flux, it is not excessively difficult to take one down.

Lasers: Both jousting and circle fighting will work with this flux, although some caution in circle fighting is advised when fighting the laser and ion variants, as they can hurt if you miss a few times in a row. Make sure to get its shields down below 70%, which will require a few direct hits to accomplish. Also, bear in mind that this flux can hit you from farther out than current TRI lasers can, so do not allow it to slip out of range for very long. Jousting, with some drift to accomidate the ammo variants of this flux may take longer, but it is as usual the safest way to engage.

Ammo/Novas: This is a fairly easy flux to kill with ammo. Long jousts will work best and quickly devastate even its heavy armor. Be wary of immediately turning on the laser and feather variants of this flux, because it can often get in a few shots and damage your shields before you hit them and make them turn. In addition, this is a very heavy flux, so after it turns, it will drift signifigantly, making is somewhat harder to land a shot with a slower weapon. If you extend your joust, however, this should not be a problem.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple octopi is possible, but very difficult. See Multiple Targets for more info.

Missile Usage
Purgatories, although fast enough, failed to hit. Currently testing other types.

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Krill	**Krill:**	C-19	C-20	C-21
	Bounty:	43,000	44,000	45,000
	Experience:	7000	7250	7500
	Speed:	619	630	645
	Shield/Armor:	5000k/1000k	5000k/1000k	5000k/1000k
	Gun #/dmg/rng:	1/780k/3000m	1/780k/3000m	1/2950k/4500m
	FeatherFire = 810k/2400m; Nova = 2800k/2555m; Shelter = 6009k			

General
The Krill resembles no other conflux class out there. The Krill is weaker and has a much larger profile than the Prawn. It is the jaw dropping maneuverability and acceleration that the Krill can draw upon when hit that makes this flux unique. When hit, it will veer off at incredible angles, and if missed it will literally circle around a ship before blowing it apart.

Advantages
Extraordinary speed
Extraordinary maneuvrability
Excellent shield recharge rate

Disadvantages
Weak shields and armor
Low firepower (excepted c21)
Moderate profile

Tactics
Lasers: Lasers are the only safe weapons to attack a Krill with, because they can shoot a Krill from the funny angles that it often attacks from, while taking advantage of the moderately large profile of the Krill. Also, missing in a joust with lasers will not be fatal since the pilot can just turn around and whack the Krill even if it coming in a hi-velocity slide. When engaging multiple Krill, try to either hit both Krill in a pass, or go into a fairly low velocity slide and deal with one krill at a time, driving one off, engaging the other, driving it off, engaging the returning Krill, and driving it off, repeating until both are dead.

Ammo: Ammunition weapons can take on Krill, but multiple Krill are not advised, because mistakes are harder to deal with when using ammo, and multiple flux compound those mistakes. Try to keep jousts as long as possible, so that you can engage krill at favorable angles and ensure that you don't miss and turn the fight into a hi-v circle, however, do be wary of the c21 plasma krill. Be prepared to only hit once or twice per joust, since a Krill really dodges when hit.

Novas: Novas should not be used to hunt Krill. Although it is possible to kill a Krill with novas (and if you do it tends to come quickly), it leaves you extremely vulnerable to error. A Krill, like a Prawn, will very quickly dodge novas that come near it, and in doing so will transform the fight from a jousting situation into a hi-v circle (for the Krill, anyway. A standard TRI ship has to turret just to keep a bead on a Krill at close ranges) which makes it all but impossible to hit the Krill with Novas. The hunter in this case becomes the hunted, because he is completely out of options short of disengaging using multiple flashfires, or landing a lucky shot. If you absolutely must use novas, get as straight a joust as you can, and open fire only when you know you can hit.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple krill is possible, but very difficult. See Multiple Targets for more info.

Missile Usage
Outruns all classes of missiles, although dive-bombing is possible, especially due to its large frontal profile.

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Prawn	**Prawn:**	C-22	C-23	C-24
	Bounty:	47,000	47,500	48,000
	Experience:	8000	8250	8500
	Speed:	612	622	632
	Shield/Armor:	9000k/?k	9000k/?k	9000k/?k
	Gun #/dmg/rng:	2/540k/2200m	2/780k/3000m	2/780k/3000m
	Thorn = 635k/1800m; FeatherFire = 810k/2400m; Haven = 15400k			

General
The Prawn is very much like a powered up c8 or c9 Kraken. It is a little bit smaller, but like many of the other new Conflux, the Prawn is extremely fast, making mistakes hard to recover from. Due to this speed and this flux's very small profile, caution is recommended when engaging.

Advantages
Extraordinary speed
Excellent acceleration
Tiny profile
Excellent maneuvrability

Disadvantages
Weak shields and armor
Poor/Moderate firepower (type A/B)

Tactics
Lasers: Lasers are the safest bet for engaging this flux. Because of its high speed, it can be hard to get a sufficiently straight joust to hit with slower guns, but thorns allow you to "reach out and touch" this flux from any angle with a reasonable degree of safety. Fortunately, you only need one shot from quad thorns to make this flux evade, giving you a few extra precious seconds. When fighting this flux, especially in multiples, the same tactics of kraken fighting apply, but hitting every flux on every pass is absolutely critical, because of their tendency to run a fighter or bomber down in a matter of seconds.

Ammo: Ammunition based guns can be used with success on this Conflux, but doing your utmost to making a long joust and not missing on any pass is a key: Remember, if you miss on a joust you will be forced to turn and engage, even if the shot angle is extremely poor, because you can not run from this flux. That said, if you do get a good run, you can obliterate this flux in one pass due to its poor shielding and armor.

Novas: Novas are not a safe bet to tackle this flux with. It has an uncanny knack to dodging novas when they get close, making it very hard to land a shot. Unless you are fast on the perpetual turn, it will mean the flux latching on to you, and you will either be faced with running (and dying) or turning and firing on a gust-sized 630v flux circling you with lasers from funny angles (that usually means dying as well)

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple shrimp is possible, but very difficult. See Multiple Targets for more info.

Missile Usage
Outruns all classes of missiles, although dive-bombing is possible.

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Stingray	**Stingray:**	C-16	C-17	C-18
	Bounty:	38,000	39,000	40,000
	Experience:	6000	6250	6500
	Speed:	678	692	707
	Shield/Armor:	12100k/9800k	12100k/9800k	12100k/9800k
	Gun #/dmg/rng:	2/420k/4400m	2/540k/2200m	2/780k/3000m
	Barrak = 450k/4400m; Thorn = 635k/1800m; FeatherFire = 810k/2400m; Haven = 15400k			

General
The Stingray, although it has a wide variety of good aspects, is clearly built (or grown) to do one thing: go extraordinarily fast. With the fastest type cruising at v707, it can run down any TRI ship, artifacts or not, eventually. When fighting a Stingray, you need to be able to deal with it without running away very far, because you simply won't be able to. Engage a Stingray only with extreme caution, because even with liberal flashfiring, it is very hard to disengage.

Advantages
Extraordinary top speed
Excellent accuracy (Moderate for c18)
Excellent weapons range (Moderate for c16)
Very good acceleration
Very good armor and shields
Thin profile

Disadvantages
Wide profile
Moderate firepower

Tactics
Lasers: Like with most other of the new flux, lasers are your safest bet for engaging a Stingray. As always, if you slip up you can always just turn immediately and still be able to engage it. Avoid this, however, because stingray are very fast and have a very thin profile to hit, so circling a laser or feather variant can be risky if your aim is not excellent. Multiple Stingray can be engaged with lasers successfully, if the pilot is good, by either hitting both Stingray in one joust or alternating fire while moving slowly.

Ammo: Ammunition-based guns work fine when engaging Stingray largely because they are so fast they do not tend to drift a great deal, even if you miss them on a joust. Be prepared to use a large amount of ammo, though, because a Stingray can dodge effectively but can still absorb a decent amount of punishment.

Novas: As mentioned in the ammo section, Stingray tend to engage at flat angles, so missing with novas is not fatal. However, due to the Sting's good ability to dodge, and powerful shields, it takes a fair amount of time to kill one with novas, because you usually only get in one shot per joust, but as long as you makes the jousts as long as you can, you will be able to get the shot in fairly easily.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Fighting multiple stingray is possible, but very difficult. See Multiple Targets for more info.

Missile Usage
Outruns all classes of missiles, although dive-bombing is possible.

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Shark	**Shark:**	C-25	C-26	C-27
	Bounty:	?	?	?
	Experience:	10000	10000	10000
	Speed:	652	652	671
	Shield/Armor:	97500k/?k	97500k/?k	97500k/?k
	Gun #/dmg/rng:	3/540k/2200m	3/780k/3000m	3/2950k/4500m
	FeatherFire = 810k/2400m; Nova= 2800k/2555m; Guardian = 99700k			

General
The Shark is a behemoth. Although not radically larger than other flux, this flux is very heavy and very strong. Trying to shoot down a Shark with conventional guns is similar to attempting to stop an incoming asteriod with a hand-held pellet gun. With massive shields and a recharge rate that it estimated at over 1500k per second, bringing down a Shark takes a great deal of work, probably more than the 10,000 exp payout is worth.

Advantages
Extraordinary speed
Extraordinary shield and armor
Excellent firepower

Disadvantages
Moderate acceleration
Large profile

Tactics
Lasers: Lasers do not have sufficient power or range to wear down a Shark's shields. Even if you make a Shark turn away, it tends to come back with signifigantly recharged shields.

Ammo: Although ammunition based weapons do pack the punch and range to defeat a Shark in long, straight joust, a Hitman rail gun does not have sufficient ammunition to kill a Shark, and Barraks do not have sufficent punch.

Novas: Novas are the only gun known that has the punch and unlimited ammo that gives it the ability to defeat a Shark's shield and incredible recharge rate. Be sure to make very long runs, despite its shield recharge rate, because getting multiple good shots in is absolutely critical to even making this flux turn.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

Missile Usage
Outruns all classes of missiles, although dive-bombing is possible

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Sentient Conflux

General:
Concerning the sentients, we must throw out everything we have previously known and been taught about the behavior and fighting methods of conflux.

Sentients behave erratically, have greatly improved speed and shielding, but lack the weapons accuracy of their drone predecessors. Sentients can appear as any class of conflux from c0 to c12. Also, it seems their weapons load out has been changed from standard drone level weapons to various configurations as the sentients evolve.

Fighting techniques related to the drone conflux do not apply to the sentients. You should approach fighting a sentient as you would approach fighting another TRI pilot. They have been known to run when damaged, change targets in the middle of combat, and even spare some TRI craft they should be able to dispatch with ease.

Sentients can use our jumpgates to give chase or retreat whether the jumpgate is infested or not. They can "spawn" from non-jumpgate anomalies as well as from empty space. Additionally, while c7-c12 conflux are limited to certain sectors that are easily avoided, sentients appear seemingly at will in any sector of their choosing, even station sectors where we have never seen a single conflux drone.

Classifications:
Sentients have shown different abilities at different times and are given different classifications by TRIR which can be found here.

Tactics:
Effective battle tactics developed by the most experienced sent fighting pilots can be found here.

Tactical Summary:
Being a smart target in a sent fight is actually more valuable than being able to get kills. When they target you, they ALL target you. So, if you can burn your FFs in a circle fight or drift joust instead of running from them in a straight line, then 1) you are a hard target to hit so it's nearly as effective as being totally out of range and 2) you are keeping the sents at low velocity in a small area so others can GANK them.

Heavy reliance on FF for defensive (and occasionally for the kill shot) purposes makes makes the Tensy and bombers pretty effective. Great firepower and armor makes the Nix pretty effective as well. The quick circle fighting/dodging of the Phoon helps it to be somewhat effective. Very high sentient velocity makes scouts and rangers largely ineffective.

Often, when you jump out, the sents will not follow. So, when they get you to armor, it's time to head for a jumpgate and recharge a bit or dock. Going for a dock without jumping out/in is much riskier as you can always mess up and splash the station or get shot to death half a second from a safe dock.

Missile Usage:
Missiles will not usually hit sentients unless in a divebomb situation. And even then, sentients move so quickly that they don't usually hit. Missiles create lag and should not be used.

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Multiple Targets

Fighting more than one conflux at a time can be easy, tricky, or impossible depending on the circumstances. This page will deal with multiple targets as separated into fighting alone with the various fighting styles, fighting using missiles as a wingman, fighting with a wingman, and fighting multiple c7-c10.

Solo Styles

Turreting
When fighting multiple squid, you can turret fight. There are two approaches which you can choose between or mix successfully. You can target the strongest squid and focus your firepower on it while ignoring the others. Once you kill the squid, you can move on to the others. This works if you have a decent shield and the escorts are either farther away or c1s. If the escorts are hurting you, you can alternate your targets, scoring hits on 2 different squids. Remember, when you hit them, they don't hit you. Turreting is suicidal when dealing with multiple targets if any flux other than squid are involved.

Circle Fighting and Drift Jousting
When fighting multiple c1-c5, you can easily keep moving to avoid snail fire while focusing on killing the more accurate squids. Focus on higher level squids first as they do the most damage. If you are fighting 3 squids and no snails, these two methods may be tougher since you may stay within range of the squids for extended periods. Multiple high level squids can be a tough fight in a shuttle. You may have more success jousting, but the short laser range of size one lasers will make even that quite difficult for laser users.

Jousting
The concepts of jousting multiple flux apply whether you are jousting multiple squid, manta, or kraken (laser using flux) as long as they do not have c7 manta or eel as escorts (see the later topics on this page for how to deal with those combos). Should you come up against a pair of laser using flux with one or more snail escorts, ignore the snails as they can do little if any damage to you while you are jousting. So let us take for consideration 2 squid or 2 manta or 2 kraken (2 laser using flux fighting against one pilot in a Shuttle, Light/Medium Fighter, or Fighter, respectively). If the flux are separated, the pilot should try to kill the closest, deadliest flux quickly (if faced with 2 squid and a snail, attack the closest squid first). If the 2 flux are together at the start (or if they end up together after you engage the closest flux), then you must make long jousting runs focusing on just one of the flux. When you hit the flux, it will turn (or "slide") and not shoot you, but this turning also has the effect of slowing its turn. So, the flux you are not firing on will turn much quicker and be much closer to you. This method keeps both flux in the same joust plane, but puts considerable distance between them. This gives you the luxury of not being shot at by both flux at the same time. Use afterburner liberally to recharge, give yourself distance, and to straighten the joust run. When you turn, remain focused on the same flux who is now farther away from you. Accurate shooting is required, as you need to down the first flux as soon as possible to reduce the amount of punishment you take each joust run. You can also sometimes hit both of them in the same pass if they are seperated enough, but you should keep your jousting plane straightest with the initial damaged target. Destroying one flux is better than damaging two.

This same concept can be used for three or more laser using flux, but it becomes more and more dangerous with each laser using flux beyond two that you face.

Using Missiles as a Wingman
Though more expensive and not as effective as a wingman, you can use missiles to improve your chances against multiple targets. Using missiles on any conflux but manta or kraken is a waste of money. Purgatory and Screwdrivers and MorningStars (a bundle of 4 Screws) are the best missiles for using on conflux, though some pilots have success with others. Purgs, SDs, and MSs seem to work best if fired at an approaching conflux at a range of 5-6k. Then, turn to a slight angle and fly straight until the missiles kill the flux. Both manta and kraken will try to dodge missiles, manta doing so successfully more often due to their greater top speed. It takes 2 Purgs, 4SDs, or 1 MS to kill a manta or kraken. If you are running from flux, you can fire at targets behind you and meet with a fair amount of success.

If the number of conflux attacking you is one greater than the number you can gun down, then you can use a missile to kill the extra flux. If there are two more flux than the number you can gun down, you can use two missiles, and so on to keep the others busy while you focus your guns on one.

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Fighting with a Wingman

If you have a reliable wingman, you can kill a rather lot of conflux together. Two pilots can jump into a sector containing more than one pilot can deal with and with teamwork, can empty the sector in no time. The technique to use is to ensure that one pilot is leading ("towing") the flux, and the other pilot is not targeted by any flux ("free"). This scenario can be accomplished when both pilots jump into an empty sector and spawn conflux. The towing pilot then runs in the direction opposite from which the flux are coming. The free pilot can jump out and back in so that his flux now target the tow. The free pilot must make certain he did not spawn any new flux when he came back or he will need to jump out/in again until he is truly free from targets.

The tow keeps towing the flux in a straight line and they should eventually pass by the free pilot who is close to the gate. The free pilot should always attack the fastest target first for the safety of the tow. Once the first flux is dead, the free pilot is now free again to try to kill the next flux. Depending on the speed of the tow and flux, he may have to afterburn or flashfire, or the tow may need to turn either gradually or sharply. A gradual turn allows for safety of the tow and lets the free pilot "cut the corner" because he knows where the tow is heading while the flux targeting him constantly update their flight path based on the tows current position. A sharp turn can be successful if the tow has sufficient shields to take whatever punishment the flux trailing can dish out in one pass. Once the free pilot has killed all but a couple of flux, the tow then gets the rest of the kills.

It is always easier to pick off a flux from a tow if the free pilot lets the tow and flux pass him while he matches speed rather than try to joust the flux. The matching speed method can be dangerous as the flux usually score several hits if the free pilot does not really pound the flux. Often extensive afterburner or flashfire is needed to gain a safe distance on flux the free pilot has tagged.

An understanding of the targeting methods of conflux will be helpful at this point. A conflux at 100% shields keep his current target until it leaves the sector (via jumping, disconnection, or death) unless another pilot scores a hit dropping its shields below 100%. A conflux below 100% will retain its current target even if hit by a wingman. So, if a tow can hit ("tag") a conflux, then his wingman can fly up right behind it and get an easy kill as long as the flux's shields remain below 100%. If the flux's shields get to 100%, any new tag will make the flux change targets. This is a useful tactic to allow a weaker craft to kill a conflux it would otherwise be unable to kill. For example, a Scout is towing two kraken with a Fighter wingman. The Fighter should tag one kraken down to 50-70% shields and then fly straight and "tow" it for his Scout to get the easy kraken kill (the Scout can easily turn and take the hits a lone kraken can dish out on a single pass). If both ships in the example were Fighters, one could tag the extra kraken off of the tow Fighter and allow his wingman to solo kill the first kraken while he "holds" the second kraken.

This scenario works extremely well if the tow is a in Scout or Ranger and the free pilot is in a Fighter. You can perform the towed hunt technique with other classes of ships, but Scout(Ranger)/Fighter works best. (The faster Fighters can also serve as the tow rather well.)

It is the tows responsibility to keep track of how many and which types of flux his is towing as sometimes lag can cause some flux to not appear on the wingman's radar. Also, it is the tows responsibility to cycle through the targets looking for new targets. A tourist can be more deadly than any conflux when group hunting. Imagine if a Fighter has just tagged an eel when someone jumps in, spawns another eel, and jumps back out. If the Fighter were closer to the new eel than the tow when this happened, then the Fighter is about to get attacked by an unexpected eel. Unexpected eels more often than not mean a pod ride for the unexpecting Fighter.

This type of hunting works well with more than just a tow and a single wingman. However, if the group gets to be more than a tow and three Fighters, things can get rather confusing especially if the pilots are not used to working together as a team. It is important that the tow pilot go in the direction opposite the flux being towed and that all other pilots jump out/in in unison so that they all will be free.

Fighting Multiple c7-c10

When alone, sometimes it is better to go for the quicker, easier kill than to focus on the most deadly enemy. If you are solo fighting a c7 c8 c10 combo, it would be best to kill the c7 with guns quickly, then use a missile and a flashfire to kill the kraken, then come back and kill the eel with guns. Whereas, it might be more difficult to kill a kraken while an eel and a c7 are shooting at you. Each scenario will be slightly different because different flux spawn in different locations with each hunt.

Once you can kill a kraken in one or two passes regularly, then in a c7 c8 c10 scenario, you should target the closer of either the manta or kraken. The more quickly you can destroy the first flux, the better your chances are of being able to kill the second flux with an eel shooting at you. While the eel is firing on you, you will need to adjust your jousts (vary speed and direction) to minimize the eel's ability to score hits. This will also throw off your own shots, so you need to know your weapon and your own aiming skills before trying it.

Another way to dela with the same c7 c8 c10 combo would be to target the eel first and make very long jousting runs at the eel group as your Fighter is fast enough to keep pace against the smaller flux or extend range using AB. Focusing on one target is

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important as the quicker you can kill one target, the fewer guns you have shooting at you.

When fighting 2 eels at the same time, it is easiest when they are separated either by spawning location or by using a missile to distract one for a minute or two. Don't expect missiles to do much damage to an eel as 3 MorningStars reduce it to no shields and 20% armor if they hit. Eels high speed make them challenging missile targets. When faced with a pair of eels that are grouped, there are three methods you can use that do not require missiles. The first is to drift joust as normal and use liberal afterburners to keep from getting torn apart by the second eel which you are ignoring. The second is to try to score a hit on each eel each pass to keep them both from being able to shoot you on every pass. The third is to make very, very long joust runs (using an angle on your approach...a head-on eel joust is never advisable) and essentially treat each run as first pass on one eel. This last method will take longer, but is mostly likely the safest approach. All three methods have been repeatedly proven effective in combat with a pair of eels. Here, a member of New Dawn is saving a tourist from a pair of eels by tagging them both from behind then later destroying them.

When hunting with a wingman (or wingmen), it is always best to kill off the fastest conflux first as a safety precaution for your tow. Kill c10, c7, c9, c8 in that order with c10 being very high priority due to their 500v top speed.

Fighting Multiple c10-c12

Multiple phocaena are much more difficult than any other flux combination. Like kraken, if you ignore them they will fire on you from behind. However, unlike kraken, these guys cruise faster than you, and do a little more damage per shot. Thus, very careful joust setup is required.
First, when entering a sector with multiple phocs, run! Target the closest c12 (c11 if there is no 12) and run away from it. By the time you are about 30-40k away from the gate, all the phocs should be lined up behind you with some space between them, so it is possible to hit most or all of them in one joust. Even if you fail to do this, however, a phoc will take more time to turn on you than if it was attacking from an angle, giving you a bit of distance.

At this point, just using very long drift jousts and hitting as many phocs as possible in each joust, and flashfiring when needed, will win the day.

Lasers are simply not recommended for this, because they have a very short range, and more importantly, limited damage/sec. Non-nova ammo can work, but taking multiple phoc with it becomes difficult, because you need to "reach out and touch them" to give your moderate damge/sec rate the time it needs to do significant damage. This will start the phoc's slide early, making it more difficult to hit and allowing it to come out of the slide sooner meaning it will be closer behind you after you pass.

Nova users can safely hold their fire until the phoc is within about 2000m, and then open up. If the phoc does not die in the first pass, it will end up tailing you at about 5500m, out of its weapons range. This makes it much easier to deal with multi phoc, because the need for constant flashfiring goes way down.

Still, multiple phoc is a very challenging combo, and each fluxer has to find his or her own way of killing phocs, with his or her own preferred weapons and ship.

For more on how to joust, drift joust, turret, and circle fight effectively, read Ammo vs Lasers: The Duelist.

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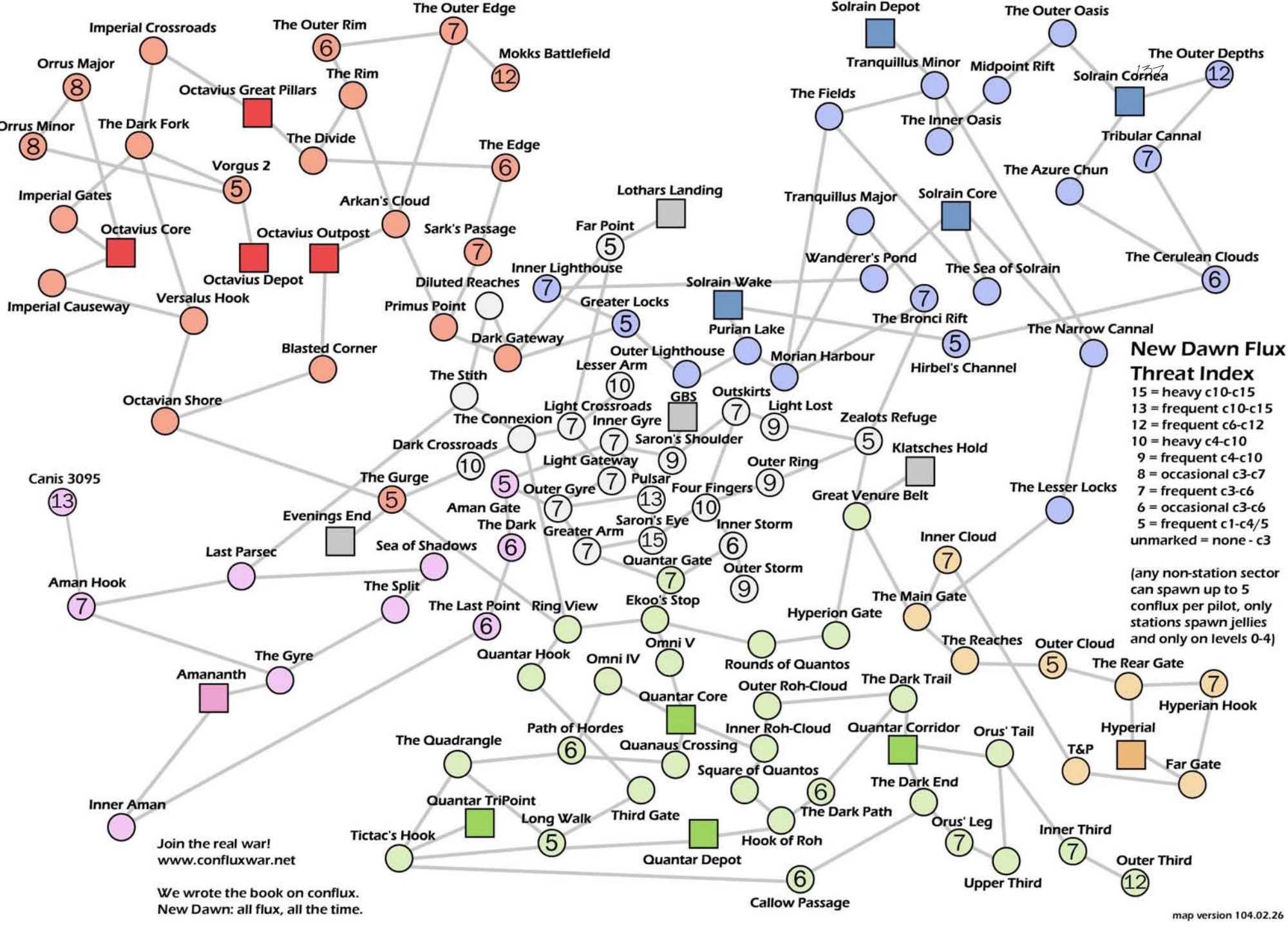
Imperial Crossroads
The Outer Rim
The Outer Edge
Mokks Battlefield
Orrus Major
The Rim
Octavius Great Pillars
Orrus Minor
The Dark Fork
The Divide
The Edge
Vorgus 2
Imperial Gates
Arkan's Cloud
Octavius Core
Octavius Outpost
Sark's Passage
Octavius Depot
Imperial Causeway
Versalus Hook
Blasted Corner
Octavian Shore
Lothars Landing
Far Point
Inner Lighthouse
Diluted Reaches
Primus Point
Dark Gateway
Greater Locks
Solrain Wake
Purian Lake
Outer Lighthouse
Morian Harbour
Lesser Arm
The Stith
GBS
Outskirts
Light Lost
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The Connexion
Saron's Shoulder
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The Dark
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Inner Cloud
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Outer Storm
Aman Hook
The Split
The Last Point
Ring View
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The Gyre
Quantar Hook
Omni V
Omni IV
Rounds of Quantos
The Reaches
Outer Cloud
The Rear Gate
Amananth
Outer Roh-Cloud
The Dark Trail
Hyperian Hook
Quantar Core
Path of Hordes
Inner Roh-Cloud
Quantar Corridor
Orus' Tail
Hyperial
The Quadrangle
Quanaus Crossing
T&P
Far Gate
Square of Quantos
The Dark End
Inner Aman
Quantar TriPoint
Long Walk
Third Gate
The Dark Path
Orus' Leg
Inner Third
Tictac's Hook
Hook of Roh
Quantar Depot
Upper Third
Outer Third
Callow Passage
Solrain Depot
The Outer Oasis
Tranquillus Minor
Midpoint Rift
The Outer Depths
Solrain Cornea
The Fields
The Inner Oasis
Tribular Cannal
The Azure Chun
Tranquillus Major
Solrain Core
Wanderer's Pond
The Sea of Solrain
The Cerulean Clouds
The Bronci Rift
The Narrow Cannal
Hirbel's Channel
New Dawn Flux
Threat Index
15 = heavy c10-c15
13 = frequent c10-c15
12 = frequent c6-c12
10 = heavy c4-c10
9 = frequent c4-c10
8 = occasional c3-c7
7 = frequent c3-c6
6 = occasional c3-c6
5 = frequent c1-c4/5
unmarked = none - c3
(any non-station sector can spawn up to 5 conflux per pilot, only stations spawn jellies and only on levels 0-4)
Join the real war!
www.confluxwar.net
We wrote the book on conflux.
New Dawn: all flux, all the time.
map version 104.02.26

JUMPGATE ECONOMY

Basics 101

Basic Jumpgate Economy Theory

1. Introduction

This document is intended to give a *basic* introduction to trading and the economy in JumpGate.

It aims to introduce newer pilots to the most basic concepts, and encourages more experienced pilots to think beyond the obvious trading features in the game. This guide does not cover more advanced strategies, piloting or ship equipment, nor provide a robust mathematical analysis of 'the economy'. It does not explicitly tell you 'how to do it', although it does include some examples.

It starts by examining price/profit based trading and cargo missions, then looks further at demand, supply and production based trading. Boxed text indicates an example or more detailed explanation of a concept. Like many aspects of the game, trading and the economy are complex: far more complex than it may at first seem. Consequently, nobody has a perfect understanding of the subject - including the author.

Version 1.02, 1 October 2003. Updated information on Custom Producers and pricing.

2. Credits and Legal

This guide was written by Tim (timski) Howgego, copyright 2001-2003. Errors and suggestions should be reported to tim (at) capsu (dot) org . Please put "Jumpgate" somewhere in the email subject field. Contributors are noted with the relevant text. Special thanks to baadf00d and Xindaan. This document is in the public domain: You may copy and repost this guide, but the content of the document, including the credits, must remain unchanged. Jumpgate copyright (c) 1999-2003 NetDevil Ltd. Other trademarks and copyright are owned by their respective trademark and copyright holders.

3. Markets and Stations

Every station has a public market screen. This screen lists items in the station's public inventory, with quantities and prices. These items are available for purchase by any pilot with the required rank, political rating and cash.

Items are divided into categories - the important split is between commodities and ship equipment. Commodities are materials produced by stations which cannot be equipped to ships.

Different stations have different volumes of different items available. Prices vary between certain stations. Stations will always buy an item, but not always at a profit.

That is the basis of a simple trading system: Pilots purchase an item at one station, transport it to another station where they expect the price is higher, and hopefully sell for a profit. Such a concept should be familiar to anyone with previous experience of 'Elite style' space simulation games.

Simple Trading Example

A relatively new Solrain Premia pilot has 7,000 credits available, and four cargo spaces. They buy four units of Water from the Wake station market for about 1,550 credits each. They launch and fly to Outpost station. On docking they sell the four units of Water to the station market for about 2,100 credits each. They have made a total profit of 2,200 credits.

Most stations have two other markets: (1) A private hidden inventory, used by the station to store certain commodities. (2) Inventory held by other pilots that are docked - in their ships, on the station floor, or (in the case of storage depots) in store. The private hidden inventory cannot be seen, nor can items be purchased from it. Inventory held by other pilots cannot be seen, but can normally be traded between consenting pilots.

4. Rank, Political Rating and Taxation

Every item has a minimum rank and political rating that must be met in order for the item to be purchased by a pilot.

Rank is constant through the galaxy. Rank is gained by gaining experience. Experience is gained by completing missions, killing conflux, collecting medals, holding beacons, retrieving artifacts, and a few other things.

Political rating varies by faction. The rating used is that for the faction owning the station where you are purchasing items. Political rating is not relevant at neutral (unregulated) stations. Political rating is gained by completing missions for a faction. Each successful mission adds 3 political rating for that faction, regardless of the type or difficulty of the mission. Political rating over 100 decays by about one point per hour online. Unlawful hostile acts reduce political rating dramatically, potentially to -100.

All commodities have a minimum of rank 0 and political rating 0. All new pilots may purchase any commodity if they have the cash to do so. Equipment varies greatly. Only half of all equipment can be purchased at 0 rank and political rating, and that's mostly the worst stuff.

Items can always be sold, regardless of rank and political rating.

Know Your Political Rating and Tax Rate

Political rating can be seen on your JOSSH profile. In game, it can be seen whilst docked at a station: Click the slider bar at the bottom of the screen.

Tax rate can be calculated in-game by comparing the price displayed below an item on the main market screen, with the price shown when you click on the item prior to purchasing it. The difference is the tax paid, from which you can calculate the tax rate.

Political rating is important initially because it is the main factor affecting taxation.

All purchases from station markets are taxed. Sales are not taxed. Commodities have a base tax rate of 1%. Equipment has a base tax rate of 10%.

At 0 political rating, the base rate is modified by +2%: Pilots with 0 political rating pay 3% tax of commodities and 12% on equipment. At political rating 125 (the highest), the base rate is modified by -0.5%: Pilots with 125 political rating pay just 0.5% on commodities.

Tax rate is modified by other factors, not all of which are fully understood. The most obvious other factor is the number of beacons held by your faction. Each beacon counts for a 0.01% reduction in the tax paid. So, a pilot with political rating 125, whose faction holds 50 beacons typically pays no tax on commodities. It is not (currently) possible to have a negative tax rate.

Dangers of Trading at High Tax Rates

Our Solrain Premia pilot has received a donation of 400,000 credits from a passing veteran. They decide to buy four units of Radium at Outpost and transport them to Hyperial. The market price to Outpost is 81,300 credits a unit, and Hyperial pays 84,000 credits. Great - a profit of 2,700 each. However, our new trader has a 0 political rating with Octavius. This means they are paying about 3% taxation on the purchase of Radium at Outpost. So, the actual price they pay is around 83,700 credits a unit, which gives less profit overall than the Water they shipped in earlier, but for a lot more effort.

Rule of thumb: Generally, the cheaper the commodity, the greater the profit margin, the safer it is to trade with low political rating.

Equipment is rarely profitable when sold via station markets. In addition, equipment is not insured whilst being transported as cargo, so deaths are very expensive. Inexperienced pilots should avoid the transport of equipment.

Rank is primarily relevant to commodity traders because it restricts the availability of ships, and to a lesser extent, equipment. Lower ranking pilots can only access shuttles, which have small cargo capacities, as well as other disadvantages such as slow speed and poor defences. This varies slightly by faction, but generally: A level 21 pilot can potentially purchase a ship with ten times the capacity of the best ship available to pilots below level 10. Level 26 pilots can purchase a ship with ten times the capacity of the level 21 ship.

Largest Available Cargo Ships by Rank

Rank	Class	Solrain		Quantar		Octavius	
		Ship	**Capacity**	**Ship**	**Capacity**	**Ship**	**Capacity**
0	Shuttle	Premia	4	Storm	2	Apteryx	1
3	Shuttle	-	-	-	-	Albatross	3
6	Large Shuttle	Premia SC	6	Breeze	7	Buzzard	8
9	Light Fighter	Interceptor	6	-	-	-	-
12	Fast Transport	Vedetta	15	Whirlwind	14	Hawk	12
21	Transport	Traveler	60	Hurricane	52	Wyvern	48
21	Light Miner	Quarrier	62	Harmattan	65	Simurgh	60
26	Tow	Pioneer	500	Thunder	500	Condor	500
38	Freighter	Viceroy	750	Chinook	735	Roc	740

Light Miners are primarily mining ships. While having larger cargo capacities than Transports, their lack of speed and poor handling tend to make them inferior craft for trading.

Trading in shuttles tends to be relatively inefficient. If done carefully, shuttle pilots can make modest profits trading, but they cannot expect to compete with whose able to fly larger vessels, with more cash and higher political ratings.

5. Price Basics

The price of a specific item may vary between different stations. These variations are a combination of fixed differences and variable differences.

Fixed differences primarily reflect long term demand and supply. Stations that demand or require an item, but do not produce it, tend to pay more than stations that produce it. The value of the fixed difference is commonly used as a profit margin on an item.

Variable differences reflect short term shortages or surpluses of an item at the station. Shortage will raise the price, surplus will lower it. It takes about half a day for a complete adjustment in price, for example, from a situation where there is a shortage to large surplus. Price will gradually change, reducing slightly every six minutes. Since the station's inventory is in constant flux (pilots keep on buying and selling), prices also tend to be in a state of constant adjustment. Variable price differences are relatively small - typically less than 5%. Clearly on large shipments of high value items, such small percentages can account for a lot of cash. Recent changes mean that variable differences tend to only be significant when stocks are low - typically less than 2000 units.

Pricing Water

Earlier we transported Water from Wake to Outpost for a fairly good (in percentage terms) profit. Why was there a price difference?

Wake produces water, while Outpost does not. Outpost requires water to sustain the population of the station and nearby planet, and to produce manufactured food and beer.

Water tends to be in shortage at Outpost because it gets used up quickly.

So, we have a strong demand but no supply at Outpost, with a natural supply at Wake, which gives a fixed price difference. A tendency towards shortage of Water at Outpost is probably leading to a higher variable price difference. The profit margin is so high a percentage that variable price differences will account for a small proportion of total price difference.

Price differences are commonly identified using data made available from JOSSH, http://www.jossh.com/ .

Most pilots use third party utilities that process dynamic price/inventory data. Commonly used utilities include Slopey's WebTracker (http://www.slopey.com/) and Gossip's Market Lister (http://www.jumpgateweb.com/MarketLister/), but there are various others listed at the bottom. These sum fixed and variable price differences to give the same sort of value that would be displayed in-station. They tend to report data that is 5-30 minutes out of date, so often miss profitable runs. Most such utilities allow the calculation of a single commodity that appears to give the best profit when transported between a pair of stations specified. Careful analysis of options may reveal the true best profit to be a combination of different commodities.

Alternatively, production patterns can be examined to reveal where there are likely to be fixed price differences. Again, there are utilities available to assist in processing JOSSH database data.

Precisely how much do prices change?

Here is Baadf00d's current price range theory (this aggregates fixed and variable differences):

Stations that produce an item: Base Price -- Base Price * 103%
Stations that neither produce nor demand: Base Price + 200 -- (Base Price * 105%) + 200
Station that demand but don't produce: Base Price + 500 -- (Base Price * 107%) + 500

Note that price changes are most obvious where stocks are small (below 'full stock' of 2000 units). Where high value items are over-stocked at demanding stations and under-stocked at production stations, it is theoretically possible for prices to be highest at producing stations. This accounts for many apparent oddities on the US server at the time of writing.

Xindaan offers precise way of determining price based on stock:

Producer: (Base_Price) * (1+ (1 - Stock/2000)*0.03)
Neutral: (Base_Price) * (1 + (1 - Stock/2000)*0.05) + 200
Consumer: (Base_Price) * (1 + (1 - Stock/2000)*0.07) + 500

6. Cargo Missions

Cargo missions involve finding a specific commodity, purchasing it, taking it to another station, and selling it onto that station's market to complete the mission.

Only one unit of the commodity must be sold to complete the mission. Additional experience and credits are paid for additional units (the maximum number of additional units that may count towards the mission are shown in the mission description - this varies by rank). Sell everything at once to maximise bonuses.

It will not always be profitable to undertake the mission. Evaluate the cost involved carefully before taking a cargo mission, particularly one for a high value commodity.

Cargo missions are made available from a station producing a commodity and with more than one unit of that commodity in stock, to a station that demands that commodity but does not produce it and currently has less than 2000 units available (later condition may not apply to US server). Most stations make demands based on economic needs (see Demand and Supply below). Depots and neutral stations make some irrational demands. Cargo missions can never be taken from Depots (no production) or neutral stations (no mission computer).

Brokering may be used to for fill a cargo mission. This involves taking the mission and flying to the destination without the cargo. On arrival, another pilot trades the commodity to you. You then sell to complete the mission. While in the station, you can place cargo on the floor, which effectively increases cargo space by 25 units. This increases the volume that small ships can sell to complete the mission above what they could have transported there themselves: Particularly useful for lower ranking pilots. Unfortunately brokering of cargo is difficult to organise for conventional cargo missions, mostly because the commodity is not available at the destination.

Faction missions are often missions involving the delivery of cargo. They encourage organisation and brokering. Commodities sold as part of a faction mission are not immediately placed in the station's hidden inventory. Missions often request commodities that are available at the destination station. Brokering is therefore easier for faction missions. Faction missions are conventionally organised across f5 channels - first letter of faction, followed by bld - for example *qbld* for the Quantar faction mission.

Faction Mission Brokering

Faction missions are often designed to undertake reconstruction projects - often new buildings, equipment, or technology. Brokerage speeds up the completion

of these projects by rewarding teamwork. Faction mission brokerage schemes have three main components: (1) A broker, who stays at the faction mission station buying and selling commodities; (2) Suppliers, who find or produce the commodities required for missions and supply them to the broker; and (3) Runners, who continually take faction missions. The later role is probably the easiest way to start, and below is a short set of instructions for 'runners':

1. Fly to any station other than the faction mission station.

2. Check the 'Faction Mission' on the mission screen. Remember what commodity the mission is asking for, but do not take it.

3. Ask the broker over the public mission channel if they have the commodity from step 2 available.

4. If the commodity is available, accept the mission and proceed to step 5. If it is not return to step 1 by flying to another station.

5. Having taken the mission, launch and fly empty to the faction mission station.

6. Dock and ask the broker over the local channel for the commodity you need. Note that the broker may only be prepared to sell you 50 units, since this is all that is needed to maximise progress on the project.

7. The broker initiates trade. You (normally) pay for the commodities at this stage.

8. Once trade is complete go straight to the market screen and sell everything at once to complete the mission.

9. If the commodity is in shortage and/or is likely to be used quickly by the station, it is polite to inform the broker that you have sold, so that they may attempt to re-purchase the commodity.

10. Return to step 1. You can take another mission such as a transport on the 'dead' return run.

If done as part of an organised system, faction missions can provide exceptionally good experience for lower ranking pilots.

7.Demand and Supply

So far, trading has been in response to a price difference or a server generated mission. These primarily reflect demand and supply. So where do these demands come from, and how are they met?

Pilots demand equipment. Stations demand staple life sources (food and drink), luxuries, repair materials for ships and pilots, and materials to build

reconstruction projects. Most such items have to be produced. Production in turn demands other commodities.

Most things start out as raw materials, sometimes called '1st tier commodities'. Most raw materials are produced by planets and made available at a small number of stations. Asteroid mining (of regular and pure 'roids) produces some raw materials, but rarely in large quantities.

Sometimes the raw material can be used immediately to satisfy a demand: Textiles are a good example.

Textile Demand and Supply

The planet Hypsos produces Textiles as a raw material. A fixed amount is supplied to Hyperial station market at regular intervals. Textiles have no specific uses in production, but are required at most stations to cloth pilots and planetary populations.

Our Premia pilot, having finally dropped off that Radium, sees an opportunity to cloth his fellow pilots. He buys up Textiles and transports them to Solrain Core. On arrival and sale, he'll not only be benefiting the station, but because he has shipped from a production point to a demand point, he'll see some profit as well.

If the demand for textiles was not met, the only consequence is a Role-Play one - Solrains begin to get known across the galaxy for their outdated dress sense. Many of the demands shown below have far more noticeable consequences for other pilots.

In most cases raw materials need to be fed into production processes. In some cases the result of one production process is needed for another process, and so on. The production dependencies of certain items are long and complex.

8. Production

Every production process requires some combination of specific commodities.

These commodities must be present at a producing station, either on the public market or in the hidden inventory, for production to occur.

On the EU server production is restricted to a small number of stations for any one item. On the US server 'trickle' production allows the production of many items at many stations, in addition to the main production stations.

Stations produce things in regular cycles. These 'production cycles' last just over six minutes. (There is currently a double production cycle every tenth cycle - the reason for this is not clear.)

Each station has a production capacity per cycle for each item it can produce. This is often referred to as the 'production index'. This is the maximum number

of an item that will be produced if all the commodities required for production are present. It varies by item and station: Two stations that notionally produce the same thing may have different production indices. Production of large quantities at one may be quicker than at the other.

Electronics Part I

Electronics are made using a combination of Aluminum, Chemicals, Copper, Gold and Silicon.

Amananth produces Electronics.

If all five required commodities are present at Amananth station, production will start. Up to 27 units (the station's production index for Electronics - subject to change) may be produced each cycle. At the end of each cycle, the additional units of Electronics will be placed on the station market. Production will continue until one or more of the required commodities runs out.

Note that the required commodities may be present in the station's hidden inventory, and not visible from the public market. For example, Amananth stores up to about 200 units of Silicon in its hidden inventory.

Also note that cycles do not start the moment commodities are sold to the market - they are already running. The first batch of finished product may therefore take anywhere between a few seconds and six minutes to be produced.

One unit of finished product is made using different volumes of each required commodity. On average 0.1 of each required commodity is used to make one unit of finished product. However, that average varies greatly.

Certain stations are more efficient in their use of commodities in production than other stations.

Electronics Part II

One unit of Electronics is made from: 0.1 Aluminum, 0.1 Copper, 0.05 Gold, 0.2 Silicon, and 0.05 Chemicals.

If Amananth had a Tooling Center (see http://www.jossh.com/database/buildings/tooling_center.html), production efficiency would increase, so the same volume of required commodities originally used to make 1 unit of Electronics would now make about 1.1 units.

Non-station buildings are becoming increasingly important as sources of commodities and equipment. There are three that are particularly relevant - Nano Assemblers, Custom Producers, and Science Factories.

Nano Assemblers dispense 'recycled' raw materials. Simply fly through the tunnel on the building and a unit of the relevant commodity will be added to your cargo.

Custom Producers and Science Factories manufacture a specific item if you deliver all the relevant commodities required for production. Fly through the building's tunnel with at least one of each required component. Each set of components will be exchanged for one of a finished product.

The use of such buildings is less efficient than production at stations because they use a whole unit of each required commodity. They also make a 10-15% loss if the finished product is sold straight to a station (see the Custom Producer Money Transfers box below). Production can however be controlled by the pilot, and increasingly high-demand items on EU server are only produced via Custom Producers.

Custom Producer Money Transfers

Post v1.0077, when you use a Custom Producer or Science Factory an amount of money is transferred to or from your account. This reflects the difference between the cost of the raw materials and the value of the finished product, thus preventing mindless 'cash-printing'.

The apparent formula for determining money transfers from Custom Producers and Science Factories = (Sum of the Base Price of 1 of each component commodity) - (Base Price of item produced * 115%)

For example:

Thorn is made from:
+ Laser Components @ 114000c base price
+ Optics @ 24000c base price
+ Xenon @ 2100c base price
= Sum of base prices = 140100c

Thorn base price = 161000c

Thorn base price * 115% = 161000c * 115% = 188150c

Custom Producer/Science Factory transfer = Sum of base price of components - (Base Price of Thorn * 115%) = 140100c - 185150c = -45050c

9. Advanced Production

Any one commodity may potentially be used for between none and many production processes at the same station.

Each of those production processes conforms to the same rules in the previous section: all the required commodities need to be present at the station.

If multiple production processes are running, a specific required commodity may be used up more quickly than was expected.

Electronics Part III

Aluminum is used to produce both Electronics and Construction Materials at Amananth.

The requirements for Construction Materials are Aluminum, Lumber, Machined Parts, and Titanium.

If all the requirements for both Electronics and Construction Materials are present at the station, both production processes will run. The initial supply of Aluminum will be used by both processes, and hence will be used up more quickly and result in fewer units of Electronics than would have been produced had Construction Materials not also been produced.

It is often possible to manipulate the public market to target scarce resources towards a specific production process. For example, removing Lumber from the market by buying it all up will eventually stop all production of Construction Materials. Note that production will not stop immediately because it is likely some Lumber will have already been stockpiled in the station's hidden inventory.

Note that many of the other requirements for Electronics production are also in part requirements of other production processes. These are not all avoidable using the method above. For example, RAM is produced at Amananth and requires only Copper and Silicon. Both commodities are required for Electronics, so it is impossible to prevent the production of RAM alongside Electronics.

Information Sources

By now you are probably asking how we know what makes what where and what-have-you.

Basic production information (locations and requirements) is shown by JOSSH's database - http://www.jossh.com/database/ . For example, Electronics http://www.jossh.com/database/commodities/electronics.html .

JOSSH does not show the production index, the size of the hidden inventory, the precise proportion of required commodities used to make a unit of finished product, or the station's overall efficiency. Watching markets change in response to the delivery of commodities will give you a basic understanding of the magnitude of these variables.

JOSSH can be used to reveal multiple uses of the same commodity at a station, but it's awkward to use. This widget, http://www.capsu.org/jumpgate/ (shameless plug) should help identify such uses quickly.

Every production process is capped: There is a fixed level of stock at the station, beyond which production will cease. This is equal to the production index * 1000.

However, it is possible that production almost never stops, because of the interaction of decay and production.

Decay

Items on the public market decay by 1% (subject to change) of stock per hour when stocks are over a certain level.

The decay threshold varies for commodities and equipment, and between servers. It has been anywhere between 100 and 20,000. On EU server it was 2,000 for commodities and 2,200 for equipment (but it changes...).

If the decay threshold is at or below the production cap, and the item being produced is not well used, it is easy for production to eventually exceed the decay threshold. Once over the decay threshold, each hour 1% decays. That is then produced again in the next 10 cycles, before the next decay occurs. That wipes out almost precisely everything that had been produced in the previous hour.

10. Transport and Meeting Demand

In most cases, production occurs at different stations to those supplying the required commodities for production. Demand for the finished product is often at another station.

This creates a requirement for transport, which forms the basis of all trading.

Electronics Part IV

Electronics are made at Amananth using Aluminum, Chemicals, Copper, Gold and Silicon:

Aluminum can be mined (common or pure Aluminum 'roids), but mostly is supplied by Octavius stations. Chemicals are only supplied by Octavius Great Pillars and Outpost. Copper can again be mined (from common or pure 'roids), but is mostly supplied by Evenings End and GBS. Gold can be mined (precious or pure 'roids), but is mainly supplied by Solrain stations. Lastly Silicon can be mined (semifluxor or pure 'roids), but is commonly supplied by GBS and Klatsches Hold.

Mining aside, that's quite a large requirement for transport.

Also note there are a large number of different stations involved, and in this case the requirement to pass through several areas of unregulated space with heavy cargo. There are many advantages to involving other pilots.

Every faction station that produces items requires Electronics for something, so once Electronics have been produced, there are plenty of places to take them.

Most commodities are ultimately used in the production of equipment which pilots then use and (inevitably) lose. This theoretically creates a balanced universe, where traders are genuinely needed to maintain the operations of combat orientated pilots. In strategic terms there is a purpose to trading, beyond just moving things for the fun of it. That can create a lot of depth of gameplay, which is why some of us like JumpGate ;-) .

Electronics Part V

Electronics are used directly to produce a few high-end guns (such as Barraks, Featherfires and Hitmen), all missiles, targeting computers, scanners and cameras.

Electronics are used indirectly in other items of equipment, since Electronics are required to make RF Transceivers. RF Transceivers are primarily required for radars and Beacon Control Units.

It is possible to launch without something made from Electronics, but it's a brave pilot that does so.

Electronics on their own are of no use to pilots. However, if you can use Electronics to produce an item of equipment which is in constant shortage, you suddenly become useful to other pilots. Understanding that role opens up a number of interesting career paths.

11. Self Training

Time to put all that into practice: I want you to make and sell Purgatory missiles (Purgs).

This exercise presumes that Purgs are not already in production everywhere, and ideally not available on any public market. I cannot foresee the state of your economy: These are popular missiles that tend to be in shortage, but yet they can be produced and purchased by poorer middle-ranking pilots, which is why I suggest using them. On the EU server Purgs are now only made using a Custom Producer, so are no longer a good example. Much of the method outlined below will work as a training exercise regardless of what the item is, although it is ultimately pointless to produce something that is already over-stocked, so try and find something which is poorly stocked but still produced at conventional stations.

For this training, you will need to be at least rank 12, flying a fast transport or larger. Larger cargo capacity ships will give more scope for experimentation. You should have several hundred thousand credits available - preferably a million or more. You must have at least political rating 28 with Quantar. Good political rating everywhere else will help, particularly with Octavius.

1. First, identify what is required to make Purgs, and where they are made. Then find out what is required to make each of those required commodities, and where they are all made. Progressively work backwards through the full production history, until you are familiar with everything that *might* be needed. Hint: JOSSH is useful for this.

2. Now, examine the current stock of required commodities at producing stations. Do this first for those immediately required to produce Purgs. Do this for all three producing stations. Find out what is available on the station market and what is not, and what size any existing stockpiles are. Discount very small stock levels (under 100 units) since these may not last long enough for you to use them. Hint: You could fly to all the stations in question, but the use of inventory tracking utilities will save time.

3. There are other factors in station choice, but for now, use the station that is missing the smallest number of commodities.

4. Next, find out if any of the missing commodities are stockpiled at any of their production stations. If they are, all you will need to do is fetch them. Note: Normally avoid stripping commodities from non-producing stations. You will be making it harder for someone else to produce another item. You will also probably lose money. A possible exception is where the commodity has no use in production where it is found.

5. If a commodity is not available at a producing station, you will need to first concentrate your efforts on producing that commodity. Again, identify what is missing at the production stations, and fill the smallest set of gaps at one station.

Missing Commodities

Assume that Barium and Fuel Cells are missing from the station we intend to produce Purgs at.

The nearest producing station for Barium is Klatsches Hold, where there is plenty stockpiled. All we need to do is transport it to the Purg production station.

Assume Fuel Cells are not available at any Octavius station. However, Chemicals, Gallium and Phosphorous are available at Octavius Core. So, by shipping Silicon from Klatsches Hold to Octavius Core, we can start the production of Fuel Cells at Octavius Core, which we can then buy up and transport to the station where we are making Purgs.

6. Now assemble all the required commodities for Purgs at the production station, by transporting those that are missing from the current market inventory of the production station to that station. At this stage, assume the same proportion of each commodity is needed to make one Purg. Assemble as much as you can: four or five units of everything is adequate, but a hundred of each will give you more scope for experimentation and will, ultimately, create more missiles. There is scope here to involve other pilots - particularly if you need to

bring commodities in from a range of stations, or you need to fly across unregulated space.

7. Sell five or ten units of whatever is missing for Purg production at the producing station. If you only have a small quantity sell everything at this point. Everything you sell should almost immediately be brought up by the station (and placed in its hidden inventory) if Purgs were previously out of production. Now wait until the production cycle ends (up to six minutes). You should eventually see one or more Purgatory missiles on the market. Buy your Purgs quickly before anyone else spots them. Congratulations. You have produced something that was not available before, but is normally in heavy demand.

Cycle Tips

A good method of spotting that the market has cycled is to watch the stock level of a raw material which is produced at the station, but which is often shipped elsewhere (for example Grain or Water). Increased stock normally indicates that a cycle has been completed.

The market inventory will eventually automatically update after a cycle. However, this process lags some time behind. You can force an update by clicking on a different market category, then clicking back on the category you want.

If you are intending to buy a specific item, display all the items in the category, and try and adjust the sort order so that the item is visible in the upper part of the screen. This might save valuable seconds scrolling down the list prior to purchase.

When you spot production has cycled, make a note of the time. Be back in six minutes for the next one.

If you have a large volume of commodities available, follow steps 8 and 9. If not, just read them and jump to step 10 - they are only worth doing if you are trying to create large volumes of Purgs.

8. Next try to determine what other production processes may use up the commodities required to make Purgs at the production station. (Hint: JOSSH can be used, but the usage section of this - http://www.capsu.org/jumpgate/ - may be easier ;-) .) Look at the complete requirements of everything that uses any of the commodities required to make Purgs. See if there is any easy way in which their production can (ultimately) be stopped by removing another commodity from the market. Look specifically for small volumes of other commodities that are relatively cheap. Buy them up and hold them until production of Purgs is complete.

Why are we trying to stop their production?

Those other production processes will use up commodities required for Purgs, and so reduce the final volume of Purgs we can make with the commodities we

have shipped in. We are trying to focus our resources specifically on what we are trying to produce.

Most Quantar missiles have the same requirements, so we probably cannot do much about those. But Rubber production could potentially be stopped, perhaps by buying up some Antimony or Chemicals.

Note: This is probably a futile exercise if you are only expecting to produce a few Purgs. Production of other items will take time to finish because required commodities may already be stored in the station's hidden inventory.

In future attempts, consider the extent of conflicting production processes in your choice of station. Perhaps consider re-distributing troublesome commodities to other stations (although they often come back as other pilots' cargo missions, so don't waste too much time... it will drive you mad).

9. Make a note of the public market volume of the commodities used to make Purgs and those other things with conflicting production processes. Now sell all the Purg production commodities you are holding, and watch the market.

The first thing to watch is what volume the station immediately purchased of the commodities you sold. You will start to see how large its hidden inventory is for those items. Note that you do not know what was in the hidden inventory to start with, so you cannot be entirely sure about its size.

Let a few cycles run (remember to buy up the Purgs as they are produced). Watch how the volumes of commodities making Purgs and other production conflict items change. Watch how many Purgs and other production conflict items are produced. Keep an eye out for other pilots buying or selling, and remember that they may sell certain commodities which will go straight into the hidden inventory. The aim here is to start to understand how many Purgs the station produces each cycle, and what approximate proportion of required commodities are used up for each Purg. You should start to see certain patterns, like a consistent number of new purgs each cycle, and an above average use of Explosives. Be aware that much may be happening that is not at first clear. For example, stations tend to buy commodities up faster than they use them. If volumes of a commodity are large, you may experience decay.

In future attempts, consider how to better balance the volumes of required commodities supplied to the station, so they all (eventually) run out at about the same time. Perhaps balance your deliveries so that production of Purgs does not exceed the amount you can buy and store. Experiment with different stations: Quantar Core, for example, may be more convenient and more efficient, but may be found to have a lower rate of production and more pilot activity. More pilot activity may be helpful, but sometimes results in commodities you want to stay on the market being moved elsewhere, the sale onto the market of commodities that somehow hinder Purg production, or other pilots buying up 'your' Purgs before you can get to them.

10. You may now be sitting in a Quantar station with some of the last Purgs in the galaxy. This is quite a powerful position. You may be able to trade those Purgs to other pilots in the same station for a 50%, even 100%, mark-up, simply by announcing 'Purgs for sale' on the station's public channel. You may manage a larger profit by transporting them elsewhere and doing the same. You may attempt to identify a squad who will buy a large consignment from you, or an individual pilot who you can sell them to. Alternatively, sell them to one of your faction's front line home stations, and make your faction a little bit stronger (there is no financial profit in this). Or go out and hunt some big Conflux with them.

Remember, what you have is only a bargaining counter when it is not available on the local market, and even more so, when it is not available on *any* public market. Unless you are specifically aiming to stock a station with Purgs for the benefit of all, measure your production efforts so that supply does not exceed demand.

12. What Now?

Some players are happy to follow cargo missions or the results of best profit calculators. This is fine to a point, but some will find it misses much of the game's depth.

You should now know enough to consider meeting other objectives or slightly different careers. The next box gives a few suggestions.

Things to Do

Make More Cash - The best overall profits tend to be created by production. This is particularly true when producing a high value shortage item.

Market Manipulation for Profit - Aim to create a profitable cargo run by encouraging shortage at one station and over-stocking at another. Farm a commodity for profit. Best done with high value commodities at low tax rates, between two neighbouring stations over a half a day.

Reconstruction - Start by running for Faction Missions, but then try brokering and supplying commodities. Few experience points or credits involved in the later roles, but plenty of teamwork and tangible output.

Get Focused - Find a specific shortage and take all the measures needed to address it. Find a station and attempt to get everything it makes into production. You will see a real tangible result to your actions.

Broker - Supply equipment that other pilots cannot purchase because they have insufficient rank or political rating. Rarely a career, but a good occasional sideline.

Support - Produce and supply shortage equipment to your friends or faction. When they get killed they'll be up and flying again in no time, which will give them an edge over their enemies. Alternatively run small consignments of equipment for individual pilots. If you anticipate a large battle, consider being ready to re-equip pilots as their pods (inevitably) return to the station.

Smuggle - Supply one set of pilots without their enemies realising. You can supply their enemies too, so long as the first set of pilots do not know. And all the time you maintain an air of respectability among those who both groups are busy killing.

Strip - Hinder the production of equipment or Faction Mission progress by removing certain commodities from stations. Remove carefully stockpiled equipment whilst your enemies are out getting killed, so when they return home it will take them longer than they expected to re-equip.

Those suggestions become progressively more dangerous (and also fun), the further you go down the list.

It helps if you have a character, with friends and enemies; if you can work with other pilots; and if, every so often, you are prepared to forget about making money and experience.

A1. Appendix: Newbie Tips

Taking a cargo mission that requires an hour of flight to find the commodity, or trying to trade expensive cargo with an appalling tax rate are some of the things that all new pilots do at some stage. They are part of a standard list that includes crashing into stations and asteroids, being killed by Mantas, and selling their engines without enough cash to buy new ones.

Many pilots go through a second stage of newbie-dom when they first load up 500 units of Uranium or Iridium and try and fly it to another station.

New pilots need to address some issues before they can begin serious trading:

- Rank - Primarily to allow ships with larger cargo capacity. Partly to allow the purchase of equipment.
- Political Rating with all factions - Primarily to lower tax. Partly to allow the purchase of equipment.
- Knowledge - Ability to fly main routes safely with reference to navigational hazards such as asteroids and Conflux. Knowledge of station docking approaches. Basic understanding of the markets and trading.
- Cash - Primarily to allow the purchase of ship loads of most items. Partly to allow the purchase of larger cargo ships.

A good way to do all that is to aim to level by collecting (Super)Nova medals. Muffy's guide to political rating powerlevelling strategy (

http://umec.oesm.org/phpBB/viewtopic.php?topic=446&forum=25) gives an overview of what's involved.

Consider taking small consignments of cheap (but high profit margin) commodities when flying between stations with another mission. These can be safely traded at high tax rates, and won't cost you your career should you crash with them.

Octavius space is probably best for finding short local profitable cargo runs for low value commodities, like Grain and Chromium. Solrain has a few good runs within its own space. Quantar space should be avoided since there are few natural internal cargo routes. The best early inter-faction space cargo runs are probably between Octavius and Solrain space: The routes tend to be shorter than visits to other factions, commodities plentiful, and risk of Conflux attack relatively low on most routes. A good start for poor, high tax paying newbie traders (specifically Solrains who have the cash and cargo space to trade at the very start of their careers) is Wake to Outpost with Water and back with Helium - you can double your money after two return trips.

When you buy a new ship, try it out in the simulator with a heavy load (try filling it with Iridium), to see how mass changes how the ship handles.

Artifacts

Information Thanks to Quorx 's Artifact Search Pattern Site.

Artifact Coordinates

Arti-coords are simple to get your hands on, just go to Quorx's arty patterns and use the pattern generator. Make sure to generate patterns for the right radar size, and for the US server. (EU artifacts spawn differently)

so, how to use the patterns?
A pattern is a series of coordinates in the sector, and if you travel from the first coordinate to the second and so on, until you reach the first cords again, you will have covered a large part of the volume of space that the artifact might have spawned within, with your radar. (A huge hollow sphere) How much of this volume you covered, is listed for each pattern in the generator, usually 80% or more is enough, as long as you keep a more thorough pattern at hand, if the artifact happens to spawn outside those 80%

You follow the pattern by equipping a rotacol, and heading out to the sector you want to hunt in. then type "/rotacol x.xx y.yy z.zz".
Now search through the available radar targets, and you will find one named "rotacol", that's the spot. Head out to within 1km of it, and type the coordinates for the next point in the pattern, and go for it. Repeat this until you find an artifact or reach node 1 again.
As soon as you travel one whole lap on the pattern without seeing a single artifact, you should change to a pattern with more points in it, thus having greater volume coverage.
Once you find that arty, you can revert to your first pattern again.
Remember that its the "legs" of the arty pattern that is important, not the end points, so unless you have traveled all the legs, even if you have visited all the points, you wont have searched through all of the pattern.
(For example, you are done with a 4 point pattern when you have traveled in a straight line between points 1 and 2, AND 2 and 3, AND 3 and 4, AND 4 and 1. (<-important!!!))

once you find the artifact (represented as a yellow dot on the radar, named "Wreckage, contents unknown") target it and head for it, while guessing what goodies might be within
when you reach the artifact, use the equipped insight gun and displacer MODX to transfer the wreckage contents to your hold.
Once that is done, the wreckage will implode and disappear.
A new wreckage with an artifact inside will spawn somewhere in the sector, so you can get back to searching immediately.

How to improve effectiveness on finding arties?

#1: PATTERN
Ineffective patterns can give you as much as twice the amount of travel distance while offering no extra coverage. I have found Quorx arty patterns to work very well, and they are a LOT shorter than most patterns out there.

#2: RADAR
With a larger radar, you can cover a larger volume of space with each pattern leg. In short, you will have to travel less to cover the same amount of space.

#3: SPEED
all artifact patterns involve a lot of distance to fly, even the shortest patterns are at least 450k long, 650k if you want 100% coverage. The faster you travel, the faster you will complete the pattern.
Needless to say, a ranger excels at finding artifacts fast, but some pilots prefer a tow, since it can hold more artifacts at once, lowering the frequency at which you need to return to station and empty your hold. A tow can also be enhanced with artifacts to quite impressive cruise speeds, and hold almost as large radars.
(50k compared to the ranger's 54k)

#4: NUMBERS
searching for artifacts together in one sector can be very profitable, since the rate of artifact finds will increase drastically.
However, you need to use patterns that are made for multiple pilots; just dividing a single pilot pattern between you will rarely work well. Also make sure to tell your partner when you find an artifact, and when you have retrieved it. While the risk is relatively small, there have been accidents where the new artifact has spawned directly in front of a hunter, who had no chance to avoid a fatal accident. While artifact retrieval is under way, all other pilots should come to a standstill and resume their search once the artifact has been collected.

#5: JGRotPro
JGRotPro gives you access to artifact patterns in game, it also enters the "/rotacol ...." command for the node you select, saving a lot of time and effort. All through a simple and easy to use in game menu. Quorx artifact pattern generator does in fact also generate .dat files for use with JGRotPro. Simple, easy and fast.
(The patterns that ship with JGRotPro itself are very bad and should not be used.

#6: SECTOR?????
It helps a lot to do your search in a sector near a depot or friendly POS, so you can empty your hold once it gets full.
There are a lot of rumors going around about some sectors giving better finds than others, but so far no one has been able to prove this, and until such a fact is proven, I think it is safe to assume that all sectors give the same artifact spawns.
Avoid sectors that spawn dangerous conflux, since an arty hunt-equipped ship is usually not very good at defending itself.

Artifact Treasures come from pre-collapse era wreckage found throughout the galaxy... See what treasures each wreckage yields and what use of its superior technology can be made to improve your ship!!!!

"Pyramids" come in Rusty,Green,Blue &Gold Color and yield superior equipment to anything presently manufactured... The size of the equipment yielded is related to what color... Different ships take different size equipment...

Pre-Collapse Engines (PCE- 1,2,3,5) are found in "Pyramids" as well as Pre-Collapse Shields (PCS- 1,2,3,4) and Pre-Collapse Power Plants (PCP 1,2,3,4)

"Plugs" come in Rusty,Green,Blue & Gold Color and yield Booster Artifacts that increase performance of equipment on your ship... The size of the modX artifact which modifies existing equipment relates to how much boost received by it with Gold and Blue "Plugs" yielding the greatest size booster modX....

Booster ModX treasures yielded by this wreckage include - (EB 1,2,3) Engine Boosters, (PB- 1,2,3) Power Boosters, (SB- 1,2,3) Shield Boosters, (CB- 1,2,3) Capacitor Boosters.....

"Saucers" come in Rusty,Green,Blue & Gold and yield Multi-System Efficiency Modx Artifacts that are used to enhance efficiency of varying ship systems...The degree of improved efficiency received depends on the size of the modx, and, the color of the "Saucer" gauges what size you will find inside the wreckage, with Blue and Gold yielding the greatest treausres...

Multi-System/ Efficiency ModX Artifacts include- All Ship Booster (AB- 1,2,3,4), All Increased Efficiency (AE- 1,2), Engine-Shield Boost Combo (ESB), Engine Efficiency (EE- 1,2,3), Capacitor Storage Efficiency (CS- 1,2,3,4) , Weapons Efficiency Modx
(WE- 1,2,3), Shield Efficiency (SE- 1,2,3) ....

"DSS" Artifacts yield Data Disks from the pre-collapse era that shed light on it's superior technology and how and why the collapse occurred.....

"Cubes" yield Component Artifacts that are used to produce something else , such as repair guns etc....

Artifact Data

Engines

PCE-1

Size: 1
Mass: 2900
Efficiency: 0.95
Max Thrust: 1080K

"Obviously manufactured using advanced techniques, this pre-collapse engine is small enough to put on any current ship, and provides a level of power and efficiency unmatched in modern designs."

PCE-2

Size: 2
Mass: 4260
Efficiency: 0.95
Max Thrust: 1970K

"Although very rarely found, this type of pre-collapse engine is a very valuable find indeed. With the ability to fit into the very common size 2 engine mounts, but provides a level of power only seen in size 3 systems. Coupled with a high efficiency, a pair of these engines could result in a very fast ship."

PCE-3

Size: 3
Mass: 5800
Efficiency: 0.94
Max Thrust: 2429k

"Another artifact engine, this model exhibits a number of technologies seen in the modx type artifacts. Basically this results in an engine with great power and excellent efficiency."

PCE-5

Size: 5
Mass: 7500
Efficiency: 0.95
Max Thrust: 3800K

"While this pre-collapse piece of technology is not much more powerful than modern designs, its efficiency is far greater. This means that the power plant requirements are much lower to use this engine compared to other size 5 engines of similar power."

Power Plants

PCP-1

Size: 1
Mass: 2000
Max Output: 2800K

"A small but comparatively powerful size 1 fusion power plant from a pre-collapse ship. This could be a very valuable addition to a ship with limited power plant space."

PCP-2

Size: 2
Mass: 4600
Max Output: 4060K

"Artifacts such as this power plant show that pre-collapse engineers were masters of heat transfer, allowing them to pack more components in a smaller space. This allowed them to build highly developed systems such as this one, that provides more power than any modern design of its size."

PCP-3

Size: 3
Mass: 5230
Max Output: 9405K

"An amazing example of pre-collapse technology, this power plant is far superior to the designs of compatible size offered by current manufacturers."

PCP-4

Size: 4
Mass: 6700
Max Output: 13700K

"As typically exemplified in other pre-collapse systems that have been found, this power plant incorporates a number of components and manufacturing techniques that are beyond the current abilities of TRI members."

Shields

PCS-1

Size: 1
Mass: 2900
Base Rate: 980
Efficiency: 0.84
Max Damage: 8400K
Recharge Rate: 81000

"This artifact is a prime example of pre-collapse engineering. A compact package, compatible with current size 1 shield mounts, yet provides more protection than current systems of that size."

PCS-2

Size: 2
Mass: 3740
Base Rate: 2000
Efficiency: 0.85
Max Damage: 18300K
Recharge Rate: 138000

"An extremely valuable find, this device fits in the very common size 2 shield slot. Its pre-collapse manufacture is without equal in the modern galaxy, as is its level of protection."

PCS-3

Size: 3
Mass: 3980
Base Rate: 2700
Efficiency: 0.95
Max Damage: 25400K
Recharge Rate: 157000

"Another great find, this pre-collapse artifact will provide a great level of protection for any ship that has a size 3 or larger shield mount. As a bonus, this shield is very energy efficient."

PCS-4

Size: 4
Mass: 6340
Base Rate: 3000
Efficiency: 0.78
Max Damage: 37500K
Recharge Rate: 163400

"Although only a few ships have the ability to mount a shield this size, given the level of protection it provides, it's amazing to think that pre-collapse ships equipped with it were ever destroyed."

CB - Capacitor Boost

PCM-CB1

Size: 1
Mass: 850
3% increase to capacitor recharge rate.

"This artifact is actually a cooling system that seems to be designed to attach to the metal layers of the metal-dielectric-metal capacitors, thus increasing the conductivity and recharge rate by 3%."

PCM-CB2

Size: 1
Mass: 745
5% increase to capacitor recharge rate.

"This device appears to be very similar to PCM-SB2 (with the exception that it is meant for capacitors), meaning that it adjusts the voltage precisely to what is needed by a capacitor for maximum recharge rate, resulting in a 5% improvement."

PCM-CB3

Size: 1
Mass: 575
8% increase to capacitor recharge rate.

"This artifact is a thermo-electric device that converts waste heat generated by the electrical current flowing into a capacitor into more energy, thus recharging it 8% faster."

EB - Engine Boost

PCM-EB1

Size: 1
Mass: 350
3% increase to engine thrust.

"This artifact appears to be a pre-collapse engine addon that uses a directed force field to isolate the exhaust ions from the metal walls of the exhaust nozzle. This increases the thrust of any engine by approximately 3%, by eliminating the exhaust energy lost to friction from the nozzle."

PCM-EB2

Size: 1
Mass: 285
5% increase to engine thrust.

"This device is a pre-collapse system that pulses power to the ionization chamber used in engines to ionize the exhaust mass. This increases the mass delivered to the acceleration stage of the engine, and thus the thrust from the engine goes up by about 5%. Of course this requires more power, as there is no free lunch."

PCM-EB3

Size: 1
Mass: 1220
8% increase to engine thrust.

"An artifact that is based on a very advanced (and unfortunately lost) technology that uses localized subspace fields to reduce the apparent mass of the particles in the acceleration stage on an engine. This results in a vastly increased exhaust velocity, and thus a huge 8% increase in thrust."

PB - Powerplant Boost

PCM-PB1

Size: 1
Mass: 428
3% increase to power plant output.

"Another pre-collapse artifact that is based on directed force fields. In this case the force field is used to enhance the containment of the fusion reaction that provides the base energy source of any power plant. This increases the output of all known power plants by 3%."

PCM-PB2

Size: 1
Mass: 325
5% increase to power plant output.

"PCM-PB2 is the designation for this pre-collapse modx that is a precision flow regulator for deuterium as it is sent to be fused. This increases the output of a power plant by up to 5%."

PCM-PB3

Size: 1
Mass: 890
8% increase to power plant output.

"Another extremely advanced pre-collapse technology, this device creates highly tuned magnetic fields that reduce the losses inside the photo-electric panels to near zero. These losses were due to unwanted recombination of electrons and holes inside the semi-conductor, resulting in waste heat. Without these losses, power output is increased by 8%."

SB - Shield Boost

PCM-SB1

Size: 1
Mass: 650
3% increase to shield recharge rate.

"Using a methodology that appears to be common to a number of pre-collapse artifacts, this system recaptures power that is lost during the recharge of zero-point energy barriers to improve shield recharge rate by 3%. This power normally would be lost as noise, but this device transfers the noise to the resonate frequency of the shield system."

PCM-SB2

Size: 1
Mass: 780
5% increase to shield recharge rate.

"In rought terms, this device appears to be a variable transformer that dynamically adjusts the voltage of the electrical power delivered to a shield system, resulting in a 5% improvement of recharge rate."

PCM-SB3

Size: 1
Mass: 1045
8% increase to shield recharge rate.

"This device, while relatively simple to understand, appears to be very difficult to manufacture. It is in essence a secondary shield generator that reinforces the primary system, resulting in an 8% improvement in the rate the field is restored to full."

AB - All Boost

PCM-AB1

Size: 1
Mass: 1162
2% increase to power plant, engine thrust, capacitor and shield recharge rates.

"This is the least effective of a very useful class of artifacts that are power distribution 'conditioners'. This particular unit results in a 2% improvement in all of the following: effective power plant output, engine thrust, shield and capacitor recharge rates. This is achieved by adjusting the potential of electrical power as it is delivered to each subsystem."

PCM-AB2

Size: 1
Mass: 1492
4% increase to power plant, engine thrust, capacitor and shield recharge rates.

"PCM-AB2 adds phase correction to the power delivery system of the PCM-AB1, resulting in a 4% increase in all of the following: effective power plant output, engine thrust, shield and capacitor recharge rates."

PCM-AB3

Size: 1
Mass: 1812
6% increase to power plant, engine thrust, capacitor and shield recharge rates.

"Another pre-collapse power distribution node, this model adds its own energy storage system to store unused power for delivery during peak demand. Results: 6% increase in all of the following: effective power plant output, engine thrust, shield and capacitor recharge rates."

PCM-AB4

Size: 1
Mass: 2550
9% increase to power plant, engine thrust, capacitor and shield recharge rates.

"The best in class of power distribution modx, this system has all the features of PCM-AB3, plus a system for recapturing high frequency noise and delivering it as useable energy. This gives an awesome 9% improvement in effective powerplant output, engine thrust, shield and capacitor recharge rates."

EE - Engine Efficieny

PCM-EE1

Size: 1
Mass: 550
2% reduction to engine power consumption.

"Another pre-collapse device, the PCM-EE1 does not increase the output of an engine, but rather reduces the power consumed by a given engine by 2%. Like some other artifacts, it is also a force field based system, that reduces the parasitic load of stray ions hitting the conductors of the electro-magnetic acceleration stage of an engine."

PCM-EE2

Size: 1
Mass: 1100
3% reduction to engine power consumption.

"An artifact that is used to regulate the flow of ions to the acceleration phase of an engine. This reduces the power used by the engine for a given thrust level by 3%."

PCM-EE3

Size: 1
Mass: 2000
4% reduction to engine power consumption.

"PCM-EE3 is a pre-collapse system the recaptures engine power lost in the IR and visible light range and feeds this power back to the engine. This results in reducing the power requirements for a given thrust level by 4%."

SE - Shield Efficiency

PCM-SE1

Size: 1
Mass: 485
2% reduction to shield recharge power consumption.

"This modx reduces the electrical load of a shield by 2%, leaving the excess power to be diverted to other systems. Since most shield systems are high-pass filters, using only higher frequency electrical power, this system diverts the DC component of the EMF back to the main bus, boosting DC current to other devices."

PCM-SE2

Size: 1
Mass: 980
3% reduction to shield recharge power consumption.

"This very advanced pre-collapse modx seems to create a field that captures background energy in the UV and Gamma range and feeds it to the shield system. This reduces the energy required to recharge a shield by 3%."

PCM-SE3

Size: 1
Mass: 2300
4% reduction to shield recharge power consumption.

"This artifact reduces the energy needed to recharge a shield by up to 4%. This appears to be achieved through the generation of a cancellation field that prevents the shield from interfering with its own power converters."

WE - Weapon Efficiency

PCM-WE1

Size: 1
Mass: 685
2% reduction (per shot) to weapon power consumption

"A multi-connection power coupler, the device uses some relatively simple electronics to tune the high energy pulses required to fire a weapon, thus reducing the energy drained from a ship's capacitor by approximately 2% per shot."

PCM-WE2

Size: 1
Mass: 1400
4% reduction (per shot) to weapon power consumption.

"Substantially the same as PCM-WE1, this model adds the common pre-collapse phase correction technology to further decrease weapon power for a total reduction of 4% per shot."

PCM-WE3

Size: 1
Mass: 1650
6% reduction (per shot) to weapon power consumption.

"A modx that incorporates a feed-back amplifier as well as pulse shaping circuitry in order to meet the precise energy needs of a given weapon, reducing capacitor drain by 6% per shot."

AE - All Efficiency

PCM-AE1

Size: 1
Mass: 1090
3% increase in efficiency of engines, shield and capacitor.

"Similar in function to PCM-AB devices, this device focuses on increasing the efficiency of engines, shields and capacitors by 3% by delivering power to each system only in the frequency range best used by that system."

PCM-AE2

Size: 1
Mass: 1370
4.5% increase in efficiency of engines, shield and capacitor.

"This device appears to improve upon the PCM-AE1 by capturing reflections in the transmission lines and converting them to useable power. The total result is a 4.5% improvement in efficiency of engines, shields and capacitors."

CS - Capacitor Storage

PCM-CS1

Size: 1
Mass: 720
3.5% increase to total capacitor energy storage.

"This pre-collapse device allows energy that is normally considered lost to parasitic capacitances (in conductors, couplers, etc) to be captured and used for weapons, thus increasing the total energy stored by the capacitor system by 3.5%."

PCM-CS2

Size: 1
Mass: 1560
5% increase to total capacitor energy storage.

"The PCM-CS2 is in essence a self tuning inductor to correct the phase of the circuit made by the power plant and capacitor, thus improving the energy storage of the capacitor by 5%."

PCM-CS3

Size: 1
Mass: 2560
7% increase to total capacitor energy storage.

"Another advanced pre-collapse technology. This dynamic magnetic field inducing device increases the permittivity of the dielectric used in a capacitor, thus increasing its ability to store energy by up to 7%."

CM - Counter-Mass

PCM-CM1

Size: 1
Mass: 100
8% Mass reduction

"This artifact appears to be an Antimatter counter-mass, and thus has the effect of removing8% of mass from the ship's cargo hold, but must be equipped as a modx so that the field can be energized. This counter mass."

PCM-CM2

Size: 1
Mass: 100
11% Mass reduction

"A more advanced counter-mass than -CM1, this modx appears to remove 11% from a ship's mass, but must be equipped as a modx so that the field can be energized."

PCM-CM3

Size: 1
Mass: 150
15% Mass Reduction

"This pre-collapse device uses a ship's shield system to reinforce the counter-mass effect via a subspace field, reducing a ship's mass by 15%, but must be equipped as a modx so that the field can be energized."

PCM-CM4

Size: 1
Mass: 150
20% Mass reduction

"The most powerful of the counter-mass artifacts, this device creates a strong field that reduces mass by a massive 20%, but must be equipped as a modx so that the field can be energized."

ESB & RCM ModX

PCM-ESB

Size: 1
Mass: 800
5% increase in efficiency of engines, and 2% for shields.

"This device bridges the power input systems of the engine and shield subsystems of a ship with a 'noise' frequency conversion device that converts power to sine waves of useable frequency. This results in an efficiency gain of 5% for the engines and 2% for the shields."

PCM-RCM

Size: 1
Mass: 1200
20% reduction to power consumption of radar and ECM.

"Again pre-collapse power conditioning technology is applied to a different set of subsystems. This time for radar and ECM applications, this device reduces the power used by both subsystems by a monumental 20%, due to the narrow power requirements of these devices."

Data Storage Systems

"One of a number of types of pre-collapse data storage and retrieval systems that are often studied by scientists for information about pre-collapse technology, culture and history. This one appears to be in [poor/average/very good/near perfect] condition."

PC-DSS1
"Poor"

PC-DSS2
"Poor"

PC-DSS3
"Poor"

PC-DSS4
"Poor"

PC-DSS1

PC-DSS2

PC-DSS3

PC-DSS4

PC-DSS1
"Rare"

PC-DSS2
"Rare"

PC-DSS3
"Rare"

PC-DSS4
"Rare"

PC-DSS1
"Perfect"

PC-DSS2
"Perfect"

PC-DSS3
"Perfect"

PC-DSS4
"Perfect"

Component Artifacts

"An interesting piece of technology from pre-collapse civilization, which may be useful as a component to make a new piece of equipment."

PC-UC1

PC-UC2

PC-UC3

PC-UC4

PC-UC5

PC-UC6

PC-UC7

PC-UC8

PC-UC9

PC-UC10

PC-UC11

PC-UC12

PC-UC13

PC-UC14

PC-UC15

PC-UC16

MINING

A Basic Overview

To: Venurian Prospecting Ltd

Dear Sirs,

As a Quantar, mining has always been a part of my life. I remember the day my dear old dad gave me my first toy Bussard Mining Scoop. I slept with it everyday until the day I was able to bronze it and hang it off of my first Wayfinder.

Recently I've attained enough status in the Quantar ranks to purchase a Hurricane, decked out with two of your fine Financiers. Truly, this is a miner's dream. I flew out to Aman space and happily drained every piece of rock I could find of it's soul. Besides a minor docking incident, causing me to purchase a second Hurricane and set of Financiers, business for me has been good.

However, sitting out in space staring at the hypnotic embers coming off my lasers as the precious metals flow into my holds, my mind got to wandering. Reaching over and opening another Quantar Ice, I decided there has to be a better way.

For so long we have focused on bigger and faster ways to mine. If you have a Cracker, you want a Broker, and so on. In many ways, I find this more of a Solrain philosophy. Quantarians believe in purity of their soul, as well as their ore. Mining Radioactive and Semifluxor roids for their value leaves a lot of other unnecessary ore in your holds, when your day is done.

What I propose is this: I, along with others in the mining community, work with Venurian Prospecting Ltd on a study to develop more precise mining lasers. Smaller, more precise lasers designed specifically for a type of asteroid would be marketable.

Things to consider:
* Make a series of size 1 lasers, that "purify" the ore mined from Rads, Semis, and Precious Metal roids. Ice roids are already fairly pure, so a special laser would be unnecessary. They would need to be smaller in size in order to be more precise.
* Study how the modified lasers affect the capacity and regeneration of roids.
* Study what would occur to the remaining minerals in the roid, if only a specific mineral is mined.

Sincerely,
Mentali Nikademus
Squad DDZ

MINING 101

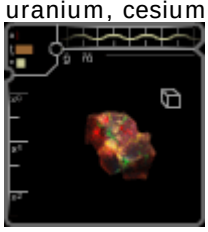
Old ND archived thread on mining & another on medals
PlanetNetDevil has just put up a very nice, though highly spindoctored guide to mining. (see that here; my critique of that guide is here)

Where are roids?: There are moderate concentrations of EVERY roid type in EVERY sector. (including station sectors; exceptions are the neutral station sectors)

Most newbies understand that nearer the pulsar sector you get the easier it is to find the rare roids - BUT, that doesn't mean that sectors closer to stations aren't barren of rare roids...As i once assumed. And i'm sure everyone else thought some sectors were barren.

Looking for roids: The one tool not mentioned so far that's perfect for exploration is the HallMonitor solrain radar. This puppy has a 10k range setting that's just perfect for figuring out which roids are within ZOOM range. (zoom range being 10k)

Roid recognition: The hardest trick is learning to tell the asteroids apart. When i was a newbie, i routinely mistook Precious metal for Ice and visa-versa. I also mistook Semifluxor with precious as well...Of course, radioactive roids were the easiest to drool...erm...spot. The best advice i can give for ID'ing ice, precious & fluxor is to think of "Brightness". (ice roids can be spotted from 10k distance without using Zoom; precious are less bright, and semifluxor are scarily dark)

1. Radiactive Ore (c6000-6400**)
   uranium, cesium, plutonium and radium.
   
2. SemiFluxor Ore (c5000-5400**)
   erbium, gallium, indium, silicon, and germanium.

3. Precious Ore (c3500-c3800**)
   gold, platinum, silver, and palladium.

4. Ice Ore (c1600-2000**)
   cobalt, boron, lithium and water.

5. Common Ore (c1000-1200**)
   chromium, magnesium, copper, aluminum, zinc, titanium, and iron.

   ***usually goes for (the stated cr amt) per unit depending on what faction station you're at (Quantar stations usually pay the least); Also note that each asteroid type has it's own composition of all 5 types (radore;semiore;precore;iceore;common):*

- *rad roid (49%;9%;5%;1%;36%)*
- *semi roid (1%;63%;3%;1%;32%)*
- *prec roid (2%;2%;43%;1%;52%)*
- *ice roid (1%;1%;1%;96%;1%)*
- *common roid (1%;1%;3%;2%;93%)*

note that these aren't covered in this thread

approaching a roid: k...I tend to approach roids in a spiral, getting ever closer, but not ever pointing directly at the roid in question...I've died way too much overcompensating on a direct run...But, if yer daring, i find with the starter shield you can ram into a roid going 20 velocity and you'll be okay at 35% shields.

You cannot target roids in the radar, the maximum range you can see them is 10,000 distance, but at least these types are permanently fixed in place. Though not really important, except maybe for more advanced mining, is the mining laser ranges. (i deal with this in the advanced mining thread)

Docking 101:uhhhhh...pretty sure pitch/yaw/roll is NOT affected by hauling cargo. Also point out that the best turning rate is left/right (Yaw); Hauling 2 units of common ore has mass equal to your Storm class ship. The importance of coming to a FULL stop cannot be emphasized enough (coming from me, who routinely thought that hotdogging it into the docking rings was considered "Cool" and would win me respect from my peers, i hope you learn that discretion is considered the better part of valour by all pilots when docking)

The storm with money engines slows a 2 unit haul reasonably quickly...As for optimal approach vectors? Well, assuming you have a rotacol, the best routes for docking are:
QuantarCore 6000m distance
SolrainCore 6000m distance
(docking is a no brainer once you approach from that position)

Also. Do remember that your average haul will have a mass almost equal to your Storm class vessel. (all ore types, except ice have the same mass - heavy)

Upgrading your ship: http://www.mindphyre.com/UMEC/PIC/JG/ships-nov2001/QuantMiner.jpg <--------- recommended layout of semi-newbie ship.

Solrain gear (lowlvlrequirement)...low priced..all within 5000-10000 range (Radar being most expensive)

Mining is dangerous, so i wouldn't recommend upgrading your cracker laser. it's rate of extraction is .006 units/sec compared to .008 units/sec for the Broker; The cracker is FREE and is still double the duster/excavator rates...And, if yer new at mining, DO NOT accept gifts of Banker lasers (the agony of losing such a treasure isn't worth the quadruple increase in mining speed)

Advanced Navigation: When using the /rotacol command once you've equipped the actual Modx item, keep in mind that you will not see the waypoint switch automatically to your set coord (you'll have to cycle the target list...the one custom waypoint you can set is right before jg wp's)

MOST IMPORTANT: Your storm class mining vessel turns best using Yaw (left/right; pitching up/down is NOT recommended)

Even more important (concerns not only mining): Do not, i repeat DO NOT, map your movement or combat keys to any keys you might use while chatting...more than once i accidently accelerated while chatting as i mined. boo hoo

1.

PIRACY

CLASSIFIED

Due to TRI Restrictions, only a brief story regarding piracy is being allowed into this guide. There will be no mention of equipment needed such as the burglar or insight gun, nor the use of them for piracy goals

Piracy a matter of style

After being informed that I pirate incorrectly, i came to a small realization.

Its all about style.

Now youve got your hardline PvPers, your midliners, your carebears, and your random WTFs.

Does it really matter if your a carebear? Not particularly, no. Its all about style. If you dont want to fight, and you dont approach it with an attitude like "I dont want to fight, so you cant bother me", you generally dont run into problems. You go about it in your style. Whether it be "formalized diplomatic relations" or you just chill, and talk with the people who could in the future be takin a shot at you, your going about it in your own style.

Just like the PvPers, and the way they choose their targets. The ones that run into problems are the ones with no style. Take AQM for instance. They go after anyone that isnt quant. Thats style. For them to pull it off is a show of even more style.

Those people that straddle the fence, imo, have the most style of all. They manage to keep a group of carebears, and a group of PvPers, workin together, and not bring the whole world onto their shoulders.

Now, this brings me to my point: What exactly is the reaction to a style that was never really used before.

To use myself as an example, I pirate. But i generally dont stay around and fight. Catch me if you can. 10 bucks says i can out-fly you without firing a shot. And i use a Light Fighter. I run a cyclone with 3 insights, a scanner, a burglar, and a FF. If you cant kill me, i won by default. My challenge to those who want to kill me, is catch me. Out-fly me. I dont take extreme amounts of cargo from people, primarily because i only have 5 cargo space, but also in my mind is keeping it fair to people.

The entire idea of Pay or Die has been used like a hooker on the corner of Packer Ave, and i have very little to prove with a kill ratio stat. Im not out to thump my chest, im out to be a nuisance to haulers. Skimming off the top of their runs.

So boys and girls, heres my style.
You wanna kill me? Come catch me. I dont stay in any one place, and i dont stand around for a boxing match. Show me that your a better pilot. Show me that you can coordinate better than I can. Im not here for a contest of aim and who can hit who more often. I carry 4 size 2 missiles. Theres my armament. If i can kill you with that, then i definately out-flew you. If i can escape you, with a slightly faster ship, and far less modx, then i won. Thats *MY* game.

Fiction FAQ

1. The Universe

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1.3. What´s life like planetside in the TRI universe?
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1.5. Capital ships... I know there out there! If we find some can I pilot one?
1.6. Can pilots travel jump gates without being genetically modified, say by some outside force?
1.7. How come space has drag?
1.8. What is the average level of technology, planetside?
1.9. Why is there sound in outer space?

2. The Stations

2.1. What about these neutral stations? I was outside one while it was being renovated, and there has to be some info as to what happened during the collapse, as well as their former use.
2.2. What´s TRI´s presence in a station? Are there TRI police keeping law and order, or is there just a TRI consulate and the station is faction run, or is there no TRI presence at all (except, of course, the mission assignment computers)?
2.3. How easy (if at all) is it for non-TRI enrolled personnel (i.e. non-pilots) to get onto stations? Obviously they can´t leave on the ships, but do TRI limit access to pilots?
2.4. Is there gravity in stations? If so is it as strong as planetside? Are sections in null G?
2.5. Especially with the new mission computers offering missions to the neutral stations, why don't the neutral stations have mission computers or simulators?

3. Factions (General)

3.1. Describe how the factions became and settled in the regions they reside in now.

4. Amananth

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8. Solrain

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9. Technical Questions

9.1. Talk a little bit about the genetic modification pilots undergo.
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10.1. Why are Conflux pink?
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11. The Great Collapse

11.1. What happened during the collapse? How long ago did it occur?

12. The Reconstruction Initiative

12.1. What are the factional tensions of TRI Officially/historically since the great collapse?
12.2. Is the TRI calendar going to be explained?
12.3. Can you explain the governmental system of the TRI and the five factions?

1. The Universe

1.1. What do Octavians and Quantar look like under the armor?

Octavians, Quantar, Solrains and Hyperials look the same as you and me. Most everyone in the galaxy agrees on that all sentient beings originated on a single planet. Every world has a story of it´s founding. Sadly, most of the details of the original home were lost centuries ago during the collapse, but genetic, linguistic, anthropological, and botanical studies all prove that there a "home world" that all life descended from. With the exception of the conflux, there has never been any evidence of xenoforms discovered.

1.2. Who built the jumpgates? How long have they been in operation?

The TRI did. Jump technology is post-collapse. Although it seems possible that there was some pre-collapse method of faster than light travel, nobody knows if it actually existed. The first jump gates were built around 20 of our years ago. It wasn´t until recent years that the TRI began recruiting a large corp of pilots.

The first pilot squad the TRI sanctioned were known as the "Thrice Seven". Those 21 pilots oversaw the construction of the initial gates, opened the trade routes between the planets, and made possible for future pilots to travel between the stars. The Thrice Seven eventually went on long range explorations between the jump gates. If you wish to find them, start at a jump gate at the end of known space and travel in a straight line for 8 or 10 years.

1.3. What´s life like planetside in the TRI universe?

Describe life on the planet Earth, in one paragraph. On Earth some people live in palatial homes made of advancaded materials. They spend their lives hooked into a a planetary network of information. In other places on Earth people live in caves, and hunt as their ancestors do. Unlike in some sci-fi shows, life on a planet is never monolithic in it´s lifestyle or living conditions. In other words, your question is a little too vauge. ;)

1.4. How come nothing in JG orbits something else?? Where are our stars?

What you see in your screen is what your ship displays. Your ship´s computer is a semi-sentient AI that sorts important and non important information. Non-essential plaentary bodies are left off of your display, and the navigational computer represents space that can be flown through. When you think you are flying a straight course, you may actually be flying an eliptical path around a sun and not even realize it.

1.5. Capital ships... I know there out there! If we find some can I pilot one?

Capital ships are outside current technology because of the way jump drives work. Jump drives emit a field of gravitons that focus the jump. This field can only be extended around a limited area making large ships impossible to send through a jump gate. Although a capital ship that never left a sector is possible, there has never been a pressing need for one. (And no company wishes to finance the manufacture of a ship with a limited use).

1.6. Can pilots travel jump gates without being genetically modified, say by some outside force?

There has never been a recorded instance of this happening.

Of course you can send anyone or anything through a jumpgate... if you like the smell of charred meat, and don´t mind having your brain explode over your cockpit.

1.7. How come space has drag?

Space doesn't. Ships experience something similar to "drag" as a result of the gravitons emitted by their engines. Graviton particles limit forward momentum.

1.8. What is the average level of technology, planetside?

Obviously there are differences between the factions. Generally speaking the level of technology is what one would expect to be found toward the end of the 21st century (nano-implants, reto-viral engineering, etc) with some exceptions. On Solrain, for example, there is a planetary transportation system that is pre-collapse. The material the tubes are made out of is an unknown substance that can´t be cut with even the most powerful of energy tools. There are many aspects of planetary life that utilize pre-collapse technology. There are other technologies that are so old, such as the internal combustion engine, that the workings of them really aren´t understood... although amature hobbiests will try to work with them.

Every planet has it´s own information network, but interfacing with this network varies from one culture to the next. The Solrain use nano-implants to stay connected, while the Quantar utilize "digi-pads". Each planetary network has access to the subspace network, but access to the subspace network is too expensive for daily use by individuals.

1.9. Why is there sound in outer space?

There isn´t! The sounds being heard by pilots are actually the output of a sophisticated computer system which is translating graviton emissions into a format humans can more readily react to and understand, similar to how radar converts electromagnetic waves into a format we can grasp. Since missile launches trigger certain predictable graviton emissions, as do explosions, as do engine thrusts, these emissions in turn become predictable sounds. A standard in all TRI ships, many pilots opt to replace the TRI-issued graviton-to-sound translations with customized alternatives.

2. The Stations

2.1. What about these neutral stations? I was outside one while it was being renovated, and there has to be some info as to what happened during the collapse, as well as their former use.

All stations have been manufactured pre-collapse. They are part of TRI space, but are disputed when it comes to which faction owns them.

2.2. What´s TRI´s presence in a station? Are there TRI police keeping law and order, or is there just a TRI consulate and the station is faction run, or is there no TRI presence at all (except, of course, the mission assignment computers)?

The staff of a station can range from a hundred workers, to over 3,000. Each station has a security force, a diplomatic garrison, a trade consulate, shops, medical facilities, and living quarters. Some stations include factories, ore processing facilities, holo-vid studios, or almost anything that you could find planet-side. Security on stations is very strict, preventing outbreaks of open violence amongst pilots.

2.3. How easy (if at all) is it for non-TRI enrolled personnel (i.e. non-pilots) to get onto stations? Obviously they can´t leave on the ships, but do TRI limit access to pilots?

Working in space is one of the highest paying and prestigious job a person can hope for. Access to space depends upon the faction. For the Solrains, anyone can visit space if they can afford the ticket. For the Quantar, you must be selected by the Spacing Tribune to be allowed a passport.

2.4. Is there gravity in stations? If so is it as strong as planetside? Are sections in null G?

Depends upon the station. No station has a gravity of a full G, for the sake of the pilots who would perish in that condition, but most stations will keep at least a minimal level of gravity (around half a G). Gravity is maintained by same gravitons that jump engines emit, allowing full control of local gravity fields depending upon the need of a portion of the station.

2.5. Especially with the new mission computers offering missions to the neutral stations, why don't the neutral stations have mission computers or simulators?

Establishing a link with the subspace information network is difficult and costly. Since support staff serving on board neutral stations must undergo the same genetic modification as pilots, there are few skilled workers available. The TRI has never found it cost efficient to establish a link.

It has to do with how subspace networks operate. Nothing is able to travel faster than the speed of light, correct? How then is information and communication transmitted? It´s done by sending an digital signal through a jumpgate. Focused energy pulses are directed at a jumpgate. Communication relays then receive the packets of data coming through the jumpgate and re-transmit it inside the sector. Now, how this relates to neutral stations is that every time a pilot docks at a neutral station, the AI transmits to the pilot´s computer it´s current need. The first time you dock with a station connected to the subspace network, the mission computers across the galaxy are updated with the needs of the neutral station. It´s not a real time connection, and because of that neutral stations have no idea what the needs of connected stations are.

3. Factions (General)

3.1. Describe how the factions became and settled in the regions they reside in now.

Historians have argued this issue for generations. The truth of the matter is that nobody really knows. What is known is that there is no mention of factions prior to the Great Collapse.

4. Amananth

4.1. Where are the Amananthii? Why don´t we ever sees them? Are they part of the TRI?

The Amananthii were first discovered when one of the Thrice Seven, Enkidoh Kahn of Octavius, entered Amananth space. He discovered the station and the planet it orbits. The planet itself is, as far as can be determined, completely metallic. Electromagnetic interference and it´s dense atmosphere prevent us from learning any more about it. Probes sent down to the planet simply vanish (along with any pilot who attempts to enter the atmosphere). The station had it´s terminals already connected to the TRI´s subspace network. Also on board were 20 children, kept in stasis until Kahn boarded the station. Those children were split up amongst the factions, studied, and then given new identities by the TRI. TRI has stated that the children were normal in every respect except that they could survive both life on a planet and hyperspace jumps. It´s not uncommon for pilots to claim to be one of the children (now in their early 20´s) but nobody really believes them. The TRI rates information about the children of Amananth Top Secret. The Amananth have not objected to being considered part of the TRI, but they haven´t said they were either. in fact, except for the semi-sentient AI on the station, there has never been any communication between the TRI and Amananth [at least officially -Gossip].

4.2. Tell me a little bit more about Canis9502.

Canis9502 is the most recent of additions to our galaxy, discovered in the year 102. You can read about the discovery here (provide link to http://www.jossh.com/jgeng/ArticleReader?p=sector/archive&n=canis_followup1.html). In Canis9502, there is wreckage of what is believed to be another Amananth station.

5. Hyperial

5.1. Where are the Hyperials? Why don´t we ever sees them? Are they part of the TRI?

After the Hyperial war with the Quantar, the Hyperials retreated from space. Although shuttle runs do occur between their home planet and their base. Hyperials stick to their tradition. Hyperial is wary of the influence of TRI on their society, therefore there are no "native" Hyperial pilots in TRI. Hyperials who work on the station are friendly enough, if you pay them. The rumors of Hyperial trafficking in Quantar body parts has yet to be proven.

5.2. How long ago was the "faith wars" with Hyperial? If Hyperial does not have jump capable pilots, how did they fight?

The war took place approximately 15 of our years ago. At the time, the Hyperials had a number of pilots. It was not until after the war that they retreated to their own home space.

5.3. Were there 1 or 2 GVB Wars?

There were two. The first war was fought before the Great Collapse but has retained powerful historical meaning. The second GVB War was fought after the establishment of TRI and ended with the humbling of Hyperial and the destruction of its fleet. The first war can be thought of like the Crusades of Europe against Islam, the second war is like the Gulf War of 1990.

5.4. What kind of government does Hyperial have? Who is in charge?

The year after the end of the first "faith war", Hyperial adopted a democratic constitution. The present constitution dates from the end of the second GVB wars, the Federal Republic of Hyperial being formally established six months later. The country is a parliamentary democracy with a bicameral legislature. Executive authority lies with the Federal Government, led by the Federal President (at present, Dr. Kelvin Rauder). Each of the states has its own legislature with power to pass laws on all matters not expressly reserved for the competence of the Federal Government. However, the power of local government executives, who are selected by higher officials, and the narrow parameters of action set by the central government strictly circumscribe the effectiveness of citizen participation. Local governments have little independence in initiating policies; as a rule, local policy is derived from authorizing legislation or a ministerial order at the national level.

5.5. Does Hyperial have royalty?

Yes, according to this article (http://server2038.virtualave.net/majorfreak/PJG/hyperial01a.htm). Hyperial royalty is considered closest to the German system of nobility for comparison purposes, and not the English counterpart many people are more familiar with. Though the formal power of the Hyperial nobility was demolished with the first establishment of the Republic, it still remains an extensive social networking force.

6. Octavius

6.1. What is the agenda for Octs - Mercenary/war race or exploration race?

Asking "what is the agenda of the Octs" (or any faction) would be like asking "what is the agenda of America?". There are many Octavians who believe that warfare is their life mission. Others believe in exploration. It is up to each individual. No culture is ever monolithic in it's goals or beliefs.

6.2. What is the Octavius society like?

The Octavians are people of nature. They love the rocks, the trees, the life and diversoity of the universe...so much so that thy are willing to kill to preserve it. Octavian politics are run by a system of guilds, or trade associations. They have the most controlled economy of any of the factions. Promotion in Octavian society is not based on individual achievement, but what you offer to society as a whole. Every Octavian is expected to lay down his or her life for the betterment of their people. The closest cultural equivalent to the Octavians would be a combination of 21st century environmental activists, 12th century mongols, and 20th century Russians.

7. Quantar

7.1. Is there only one Quantar god? A lot of Quantars now pledge themselves with a player made god

If your not a Quant, you don´t know. The Quantar keep their religious beliefs very private. It does appear to be a monotheistic religion, but little is known of it. It expects strict discipline, and forms a tight bond between the Quantar.

7.2. What is the Quantar society like?

The Quantar are somewhat similar to Islamic culture at it´s peak around the 11th century. They are a deeply religious people, who place a high level of regard for scholariship and learning. The Quantar have a highly developed artistic side to their culture. Even the most common appliance in Quantar space combines form and function to a high degree. The Quantar find Solrain and Octavian society highly chaotic and uncivilized. Although individual liberty is not highly valued, the system of family/tribal councils are decntralized to a degree that tyranny is impossible.

8. Solrain

8.1. What is the Solrain society like?

Solrain society is probally the most like America, but with a greater emphasis on capitalisim rather than religion. The Solrain, politically, are a republic. Anyone can vote in Solrain society, but the right to vote must be purchased. Solrains have rights very similar to those enjoyed by Americans (right to speech, right to assembly, etc.) but one major difference is that Corporate entities are considered to be individuals with regards to rights. In other words, a major corp on Solrain has the right of free speech, protection from searches, the right to vote and even the right to be elected to a position of power. (imagine if the coca-cola corporation, for example, could be elected mayor of Antlanta. When a corporation wins an election, they will appoint a management team to make decisions. Currently corporations hold about 30-40% of all elected offices.)

9. Technical Questions

9.1. Talk a little bit about the genetic modification pilots undergo.

Gravitons (particles that allow for the formation of jump gates) have a negative impact on the normal brain. Genetic modification is needed to allow for survival under heavy gravitonic circumstances. The modifications leave pilots smarter, stronger and more durable than the rest of their species... sadly it also prevents them from landing on a planet ever again. Under normal gravity conditions, the enhanced synapses of the brain will cause an "over load" of sorts, leading to a physical condition similar to a stroke. Conspiracy theorists have said that this is to keep pilots from becoming too strong a political force, but few believe this. The TRI insists they are working on a retro-virus to correct this problem, but for over two decades there have been no results.

A pilot could land on a smaller body with lesser gravity. The danger of flying to close to a large mass is minimized since the gravity inside the ship is artifically maintained by the engines.

9.2. What causes a gravitational anomaly to be formed? (That´s a regular anomaly, not a jumpgate.)

Unknown. Although theoretical physics are are more advanced in the TRI universe than our own, there is still no proof as to what causes gravitational anomalies.

9.3. Why do lasers have such a limited range? (I'd have thought the damage would drop with distance rather than the beam just stopping.)

It's a result of the method of focus used. The Tri-focus lenses create a pulse beam that maintains it's strength but at a cost of limiting it's range.

9.4. What's going on with the physics in our galaxy? How do storms fit in?

As revealed recently (102.07), TRI knows that the laws of the universe/physics have changed, are continuing to change, and that's why the jumpgates are unstable.

This is also what causes new sectors to be found in space. Storms are simply visible manifestations of the changes in our galaxy taking place. The many storms in the Amananth area contributed to the stabilization of the new sector near Aman Hook.

10. The Conflux

10.1. Why are Conflux pink?

Most likely too many pilots have been feeding them ham sandwiches.

10.2. Will their story be revealed?

A few years ago the first Conflux appeared in known space. Nobody is sure what the motivations, goals or origin of the Conflux are, but their story will defiantly be told through the course of the game.

10.3. Why does the screen slow down when flux are abound in this world?

Possibly you are overwhelmed with the shock of your impending death. Thus, the galaxy slows down in order to let life flash past your eyes.

10.4. What is the nature of gate-blocking conflux?

The conflux use biological "living technology". They can assimilate other life forms, but they also can infest nonliving material. "Conflux have some means of infesting a station or gate (and people as well). Through data collected by pilots during the Conflux's first attempt on Amananth station, it has been determined the Conflux do so by implanting a nanotechnological 'virus' into the appropriate medium. This is done by landing on a station or jumpgate. After a short period, a complete infestation appears. If left unchecked, it is likely assimilation will follow shortly thereafter. Assimilation is complete and total as we have been able to tell from Aeolsah." (Dr. Q'son, Research Board, 102.6.30.)

11. The Great Collapse

11.1. What happened during the collapse? How long ago did it occur?

Imagine the fall of Rome if not for Christian and Moslem scholars preserving the records of Greece and Rome (a pretty near thing. Both groups of scholars came about by one of those lucky historical accidents. Ask me about "White Martyrdom" some day if you´re bored). What would we know of early Western Culture. How would we have known at what point western civilization fell, and what the reasons were. The same is true in the JumpGate Universe. For some reason, and most agree that *something* destroyed all electronic records, the only kind kept by the time of the collapse, civilization came to a screeching halt, all across the galaxy. We know that pre-collapse culture achieved a high level of technology and a peaceful society. Scholars will continue to debate this issue until evidence is found one way or another.

12. The Reconstruction Initiative

12.1. What are the factional tensions of TRI Officially/historically since the great collapse?

If you believe TRI officials, there is no tension. Anyone who has ever stared down an enemy missile knows different. The truth is no faction trusts the other. Remember, each faction is as diverse in it´s belief as a country is on Earth. You have militants on all sides. You have Solrains who don´t believe in free enterprise. You have Octavians who loathe combat. Each individual is different, but there are some cultural differences that lead to tension.

12.2. Is the TRI calendar going to be explained?

A standard method of recording time is something the TRI is still arguing on. Each faction has it’s own calendar and it’s own method of time keeping. The TRI encourage pilots to continue to debate this issue until it is resolved.

12.3. Can you explain the governmental system of the TRI and the five factions?

TRI has complete authority on all matters outside a planets atmosphere. TRI has no right to interfere with the development of a faction’s planet. In theory. The truth is more complex. There is give and take on both sides, with a level of continually friction. TRI council meetings are full of heated exchanges.

Chapter C-1

/COMMANDS

/ai : spawns one c1 conflux in offline sim only

/assist: will page a GM or EP for help

/assistoff :cancels help request to a GM

/away <message> : ignore incoming f4 messages with an auto reply

/away : turns off your away message

/bcu : displays if you have a bcu equiped or not in the chat window
/bounty : displays your maximum possible bounty in chat window

/build : To construct a station, execute the command /build with a BuildKit in your ship's cargo hold. If you have more than oneBuildKit in your hold, one of them will activate at random. A new station owner automatically finds himself docked at his POS when the construction process completes. Smaller stations may also be upgraded by activation of larger-type BuildKits from within the POS itself. For example, the owner of a 2-point station may dock at his station with a BuildKit-4 in his ship's cargo hold. Using /build in this situation will upgrade the POS from a 2-point to a 4-point station, adding room for two more expansion modules.

/cargo : displays your current cargo in chat window

/credits : displays your current credits in chat window

/dockoff : turns off docking modx

/exp : displays your current experience points in chat window

/give x : will give credits to another pilot while in flight (pilot must be targeted), (x= number of credits)

/gms :displays a list of GMs currently online

/hear <pilot name>: removes callsign from the file ignore.txt in your Jumpgate install directory, and negates /ignore

/help : displays /commands (not complete)

/home : enables a pilot to “home” at an unreg station or POS

/ignore <pilot name> : adss callsign to the file ignore.txt in your Jumpgate install directory, and you’ll no longer receive text messages from them

/kick <pilot name> : will remove you from a POS in the event of being stuck for having too much cargo

/list : displays a list of the standard comm channels

/mentor <pilot name> : This will send the pilot an invitation to become your student. (Both parties must be docked at a station for this invitation to be sent.) Once a pilot has been awarded Mentor status, they will begin to receive messages from TRI each time new pilots log in. Mentors will also receive a message every time one of their students logs in to the Jumpgate universe.

/mentor off :To leave your Mentor, type /mentoroff.

/mentor off <pilot name> : removes student from your roster

/mission : displays your current mission

/noprice : The /noprice command is used to cancel an existing custom price for a specific type of goods. "/noprice FlashFire" would nullify any custom price previously set for FlashFires, causing the market to again use the TRI base price.

/publish : The /publish command toggles whether the characteristics of your POS are displayed in the external JOSSH interface. Stations set to "Invite Only" mode will not be displayed on JOSSH regardless of the /publish setting.

/q : quickly logs out and exits the program (will count as death if in combat)

/quit : quickly logs out and exits the program (will count as death if in combat)

/reg : displays your current registration (HG or civ) in chat window

/registry : displays your current registration (HG or civ) in chat window

/rotacol x y z : sets one rotacol waypoint per sector (x y z=co-ordinates you wish to set)

/ rotacoloff : erases rotacol waypoint currently set in that sector

/sec : displays which sector you are located in the chat window

/sector : displays which sector you are located in the chat window

/set price : By default, a POS market uses TRI base prices for all commodities and equipment. The owner may set custom prices for up to twenty types of goods using the /setprice command. To set the price for Matter Converters at the station to c800000, the owner would enter /setprice Matter Converters 800000. Be certain to enter the name correctly, though the command is not case-sensitive. An acknowledgement message will display when the command is used correctly.

/shipname <name-up to 11 characters> : sets the name of a ship you put into storage in a POS hangar; displayed only in the Ship Configuration screen when selecting a ship to switch into

/sq claim : Issuing the /sq claim command in a sector will transfer the claim to your squad if the sector is unclaimed, or if no members of the claiming squad are present to defend their claim. If members of the claiming squad are present, all TRI regulations on combat between members of your squads are rescinded within the disputed sector only.
/students : A Mentor may tutor up to 10 students at a time. Mentors may check their student roster by typing /students.

/tags : displays your current registration (HG or civ) in chat window
/time : displays how long you have until your pilot account expires(PayPal subscribers only)

/unpublish : removes your station from the JOSSH POS inventory list

/unignore <pilot name>: removes callsign from the file ignore.txt in your Jumpgate install directory, and negates /ignore
/voice <pilot name> : removes callsign from the file ignore.txt in your Jumpgate install directory, and negates /ignore

/wing <pilot name> : This pilot will be informed that you have requested to become their wingman. The second pilot must then type the same command, /wing name, but with the initiating pilot's name

/wingoff : To leave a wing, type /wingoff. A wing is also broken if either pilot disconnects.

Chapter K-1

KEYBOARD Commands

The default keyboard layout for in-flight controls, assuming no Joystick is present. If joystick is present, ignore the commands in green.

Pitch
numpad 8 and 2

Yaw
numpad 4 and 6

Roll
, and .

Look around
numbers 1 to 5

Chase view
number 6

Free look toggle
~

Fire gun
space

Fire missile
O

Next target
T

Previous target
Y

Nearest target
U

Toggle radar group
E

Toggle radar range
R

Afterburners
numpad 9

Brakes
numpad 3

Initiate jump
(only in jumpgates)
J

Toggle Guns
G

Toggle Missiles
N

Change firing mode
F

Center
numpad 5

Zoom
Z

Navigation map
M

HUD toggle
H

Scan
(only with scanner MODx)
S

Snap picture
(only with camera MODx)
P

Boosters
(only with booster MODx)
B

Anti-missile shockwave
(only with anti-missile MODx)
X

Scroll chat up
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A

options
ESC

Medals

TRI pilots who have completed basic, demanding, or extraordinary feats are rewarded with the following medals. Medals are badges of honor, and should be worn with pride by any who receive them.

Available Medals

Complete Medal	Type	Requirements
Spirit of Unity	Basic Skill Medal	Conflux Rips
Merit of Defense	Basic Skill Medal	Opposing Faction Rips
Safety Belt	Basic Skill Medal	Landings
Miner's Heart	Basic Skill Medal	Ore Sold
Ring of Commitment	Basic Skill Medal	Duty Hours
Tactical Pride	Basic Skill Medal	Missile Hits
Honor's Mark	Basic Skill Medal	Completed Missions
Flame of Courage	Basic Skill Medal	Bounty Collected
Leap of Faith	Basic Skill Medal	Jumpgates Traveled
Path of Light	Basic Skill Medal	Beacons Controlled
Unity Stripe	Basic Skill Medal	Kill 100 Conflux
Unity Stripe I	Basic Skill Medal	Kill 500 Conflux
Unity Stripe II	Basic Skill Medal	Kill 1000 Conflux
Unity Stripe III	Basic Skill Medal	Kill 5000 Conflux
Unity Stripe IV	Basic Skill Medal	Kill 10000 Conflux
Unity Stripe V	Basic Skill Medal	Kill 50000 Conflux

Unity Stripe VI	Basic Skill Medal	Kill 100000 Conflux
Closed Eye	Demerit	Claims
The Ironic Trust	Demerit	Same Faction Rips
Shame's Mark	Demerit	Failed Missions
Wire of Instability	Demerit	Disconnects
Black Dwarf	Combination Demerit	Full Demerit Set
Badge of Irony	Combination Demerit	5 Black Dwarfs
Skill Star	Combination Skill Medal	Full Basic Medal Set
Glory Star	Combination Skill Medal	5 Skill Stars
Gates of Heaven	Important Medal	c1000000 Earned
Key of Heaven	Unusual Medal	c10000000 Earned
Streets of Heaven	Rare Medal	c100000000 Earned
Title of Heaven	Precious Medal	c1000000000 Earned
Nuke Splinter	Important Medal	Radioactive Mineral Sale
Nuke Shard	Unusual Medal	Radioactive Mineral Sale

Nuke Gem	Rare Medal	Radioactive Mineral Sale
Ice Splinter	Important Medal	Ice Mineral Sale
Ice Shard	Unusual Medal	Ice Mineral Sale
Ice Gem	Rare Medal	Ice Mineral Sale
Dark Splinter	Important Medal	Semifluxor Mineral Sale
Dark Shard	Unusual Medal	Semifluxor Mineral Sale
Dark Gem	Rare Medal	Semifluxor Mineral Sale
Cross of the Counselor	Important Medal	Help a Student level
Cross of the Mentor	Important Medal	Help a Student to level 10
Cross of the Preceptor	Important Medal	Help 10 Students to level 10

Empowered Player	Privileged Position	Honorary TRI Status
Ruby Nova	Important Medal	High Political Rating
Sapphire Nova	Important Medal	High Political Rating
Emerald Nova	Important Medal	High Political Rating
Amethyst Nova	Important Medal	High Political Rating
Amber Nova	Important Medal	High Political Rating
Silver Supernova	Unusual Medal	High Political Rating
Gold Supernova	Rare Medal	High Political Rating
Adamantine Supernova	Precious Medal	High Political Rating
Ember of Courage	Important Medal	Bounty Collected
Fire of Courage	Unusual Medal	Bounty Collected

Blaze of Courage	Rare Medal	Bounty Collected
Phlogiston of Courage	Precious Medal	Bounty Collected
Rising Star	Important Medal	Fast Ranking
Starburst	Unusual Medal	Fast Ranking
Sarath's Shine	Rare Medal	Fast Ranking
Luck of the Planet	Important Medal	Order Joined
Luck of the Moon	Important Medal	Order Joined
Luck of the Star	Unusual Medal	Order Joined
Luck of the Nebula	Rare Medal	Order Joined
Luck of the Impossible	Precious Medal	Order Joined
Ruby Optimus	Precious Medal	Level 50 Earned
Emerald Optimus	Precious Medal	Level 50 Earned

Sapphire Optimus	Precious Medal	Level 50 Earned
Foundation of The Trust	Prestigious Award	Exceptional behavior on behalf of Solrain
National Honors	Prestigious Award	Exceptional behavior on behalf of Octavius
Hamalzah's Divine Grace	Prestigious Award	Exceptional behavior on behalf of Quantar
Golden Heart	Prestigious Award	Exceptional behavior on behalf of Solrain
Night's Blade	Prestigious Award	Exceptional behavior on behalf of Octavius
The Mane of Hamalzah	Prestigious Award	Exceptional behavior on behalf of Quantar
Solrain Star	Prestigious Honors	GM Assigned Medal
Emperors' Emissary	Prestigious Honors	GM Assigned Medal
Quantar's Flame	Prestigious Honors	GM Assigned Medal

The Order of Opal	Unusual Recognition	Meritorious service on behalf of Amananth
The Order of Topaz	Unusual Recognition	Exceptional behavior on behalf of Hyperial
The Order of Fenris	Prestigious Honors	Ripped a Dev during Combat Event
Fight Club	Prestigious Honors	Victor in a Combat Tournament Event
Defender of the Barrier	Prestigious Honors	Service against Infestations
TRINN Star	Service Award	Journalistic Service
Test Pilot Service Medal	Prestigious Honors	Meritorious service during Beta Testing
Test Pilot Service Medal II	Prestigious Honors	Dedicated service during Episode 2 Testing
Sarath's Shoulder	Prestigious Honors	Extraordinarily Helpful to a Recruit
Explorer's Star	Rare Combination Skill Medal	All artifact Pendants

Gules Pendant	Rare Medal	Retrieved an Antique Artifact
Vert Pendant	Rare Medal	Retrieved a Rusty Artifact
Azure Pendant	Rare Medal	Retrieved a Superior Artifact
Or Pendant	Rare Medal	Retrieved a Perfect Artifact
Sarath's Laughter	Prestigious Honors	GM Assigned Medal
Sarath's Rage	Prestigious Honors	GM Assigned Medal
Sarath's Pride	Prestigious Honors	GM Assigned Medal
Sarath's Wit	Prestigious Honors	GM Assigned Medal
Keval's Thanks	Prestigious Honors	GM Assigned Medal
Shar's Dive	Prestigious Honors	GM Assigned Medal
Shar's Drift	Prestigious Honors	GM Assigned Medal

Fish Hook	Prestigious Honors	GM Assigned Medal
Dead Fish	Prestigious Honors	GM Assigned Medal
Samon's Legacy	Prestigious Honors	GM Assigned Medal
Seeker of Knowledge	Prestigious Honors	GM Assigned Medal
Aeolsah's Sacrifice	Prestigious Honors	GM Assigned Medal
Tache's Crest	Prestigious Honors	GM Assigned Medal
Echoes of Hope	Prestigious Honors	GM Assigned Medal
Watt's Sun	Prestigious Honors	GM Assigned Medal
Medal of Hermod	Prestigious Honors	Exceptional Piloting Skill during Race Event
Traveler's Choice	Prestigious Honors	GM Assigned medal
Speedway Supreme	Prestigious Honors	GM Assigned Medal

Roid Runner	Prestigious Honors	GM Assigned Medal
Ronin's Choice	Prestigious Honors	GM Assigned Medal
Optimal Speed	Prestigious Honors	GM Assigned Medal
All Nations Flag	Prestigious Honors	GM Assigned Medal
Cormonra's Commendation	Prestigious Honors	GM Assigned Medal

Titles

TRI has many pilots worthy of note for their efforts. However, the pilot who is granted a title is at the top (or bottom) of the pile during the last 24 hours of analyzed official statistics. Only one pilot may hold any given title at any one time, and no more than one. Should you encounter an officially recognized TRI pilot, it would be wise to show the proper respect.

Available Titles

	Complete Title	Type	Requirements
	Affluent Profits Expert	Small Trophy	Highest Networth
	Cowardly Bounty Hunter	Tarnished Small Trophy	Lowest Average Bounty Per Hour
	Fatality Expert	Tarnished Midsize Trophy	Highest Death Count
	Grand Master Assassin	Midsize Trophy	Highest Kill Count
	Grand Master Bounty Hunter	Trophy	Average Bounty
	Grand Master Veteran	Trophy	(Hours x 10) + Experience
	Master Assassin	Midsize Trophy	Highest Average Kills Per Hour
	Master Bounty Hunter	Small Trophy	Highest Average Bounty Per Hour
	Master Veteran	Midsize Trophy	Highest Average Experience Per Hour
	Exterminator of the Void	Midsize Trophy	Most Conflux Kills

	Master Warrior	Pendant	Highest Kill Ratio
	Munitions Combat Specialist	Pendant	Highest Gunshot Hits
	Munitions Sniping Specialist	Pendant	Highest Gun Accuracy
	Operations Expert	Small Trophy	Most Missions Completed
	Profits Expert	Small Trophy	Most Credits Per Hour
	Projectile Combat Specialist	Pendant	Most Missile Hits
	Projectile Sniping Specialist	Pendant	Highest Missile Accuracy
	Pusillanimous Bounty Hunter	Tarnished Small Trophy	Lowest Average Bounty
	Superior Operations Expert	Small Trophy	Highest Mission Success Ratio
	Transport Specialist	Pendant	Highest Insurance Rating

Commodities

there are all kinds of goods, gizmos, and gadgets in this universe. below are listed TRI's main concerns, and a few miscellaneous things. any and all of these are available for trading at your neighborhood space station.

Available Commodities

Common Name	ID	Classification
Aluminum	Al	Trivalent Metallic Element
Ammunition	Ammo	Components
Antimony	Sb	Metalloid Element
Armor	Armor	Components
Barium	Ba	Metallic Element
Boron	B	Metalloid Element
Carbon	C	Element
Cesium	Cs	Metallic Element
Chemicals	CH	Construction Material
Chromium	Cr	Metallic Element
Cobalt	Co	Metallic Element
Common Metals	O-1	Ore
Composites	Com	Components
Conflux Biomass	CFX	BioMaterial
Construction Materials	CM	Construction Material

Copper	Cu	Metallic Element
CPUs	CPU	Computing Material
Electronics	EL	Computing Material
Erbium	Er	Metallic Element
Explosives	Exp	Components
Fiber Optics	FO	Components
Fuel Cells	FU	Fuel Source
Gallium	Ga	Metallic Element
Germanium	Ge	Metalloid Element
Gold	Au	Metallic Element
Grain	GRN	Staple Life Source
Gravitational Components	GravC	Components
Helium	He	Noble Gas
Ice	O-3	Ore
Indium	In	Metallic Element
Iridium	Ir	Metallic Element
Iron	Fe	Metallic Element
Laser Components	LC	Components
Lithium	Li	Metallic Element
Lumber	L	Construction Material
Machined Parts	MP	Components

Magnesium	Mg	Metallic Element
Magnetics	Mag	Components
Manufactured Foods	MF	Staple Life Source
Matter Converters	MC	Components
Medical Supplies	MED	Life Repair
Molybdenum	Mo	Transition Element
Nitrogen	N	Gas
Octavia Light	OBR	Staple Life Source
Optics	Op	Components
Organic Foods	OF	Staple Life Source
Palladium	Pd	Transition Element
Phosphorous	P	Nonmetallic Element
Platinum	Pt	Transition Element
Plutonium	Pu	Radioactive Metallic Element
Precious Metals	O-5	Ore
Prosthetics	SyO	BioMaterial
Proximity Fuses	PF	Components
Quanus Ice	QBR	Staple Life Source
Radioactive Metals	O-2	Ore
Radium	Ra	Radioactive Metallic Element
RAM	RAM	Computing Material

RF Transceivers	RFT	Components
Rubber	RU	Components
Semifluxors	O-4	Ore
Silicon	Si	Metalloid Element
Silver	Ag	Metallic Element
Solrain Stout	SBR	Staple Life Source
Synthetics	Sy	Components
Textiles	TX	Construction Material
Titanium	Ti	Transition Element
Trap	UXB	Cargo Bomb
Uranium	U	Radioactive Metallic Element
Vanadium	V	Transition Element
Water	H^2O	Staple Life Source
X-0013-S	X-0013-S	Shipping Crate
X-1901-L	X-1901-L	Classified Container (C/HMC)
X-3555-L	X-3555-L	Classified Container (C/HMC)
X-4533-L	X-4533-L	Classified Container (C/HMC)
X-7770-L	X-7770-L	Classified Container (C/HMC)
X-8821-L	X-8821-L	Classified Container (C/HMC)
X-9450-C	X-9450-C	Optical Data Disc
Xenon	Xe	Noble Gas

Zn Transition Element

Zinc

List of Custom Producers in the Various Faction Spaces

OCTAVIAN SPACE

- **Octavian Core**
  Tooling center (nopers)
  1 Naval Yard (see below)
  Nano Assembler (Laser Components c131100/per)
  Custom Producer (Centerfuge 5: Indium, Uranium, Fuel Cells, MC - no fee/refund)
  Custom Producer (Sentinel: Germanium, Silver, RF - c14250 refund)
- **Outpost Station**
  3 Naval Yards (see below)
  Custom Producer (Octavian Light: Water, Grain - no fee/refund)
- **Great Pillars**
  1 Naval Yard (see below)
  Science Factory (Duelist: Copper, Gallium, Electronics - no fee/refund)

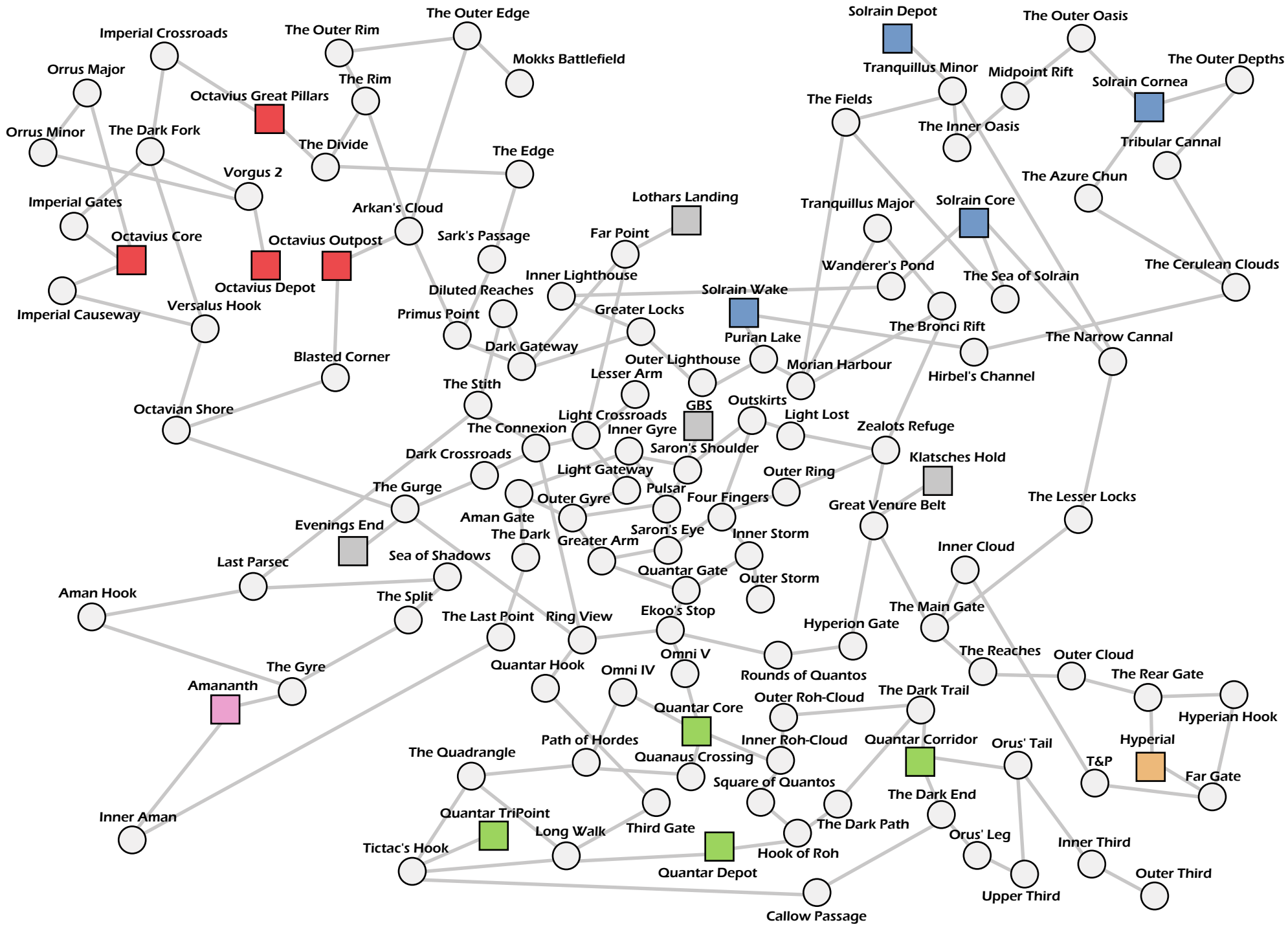
QUANTAR SPACE

- **Quantar Core**
  Tooling Center (nopers)
  1 Naval Yard (see below)
  1 Custom Producer (Ivy: Germanium, Silver, RF - c14250 refund)
- **Corridor**
  3 Naval Yards (see below)
  Science Factory (Abattis: Germanium, Gold, Magnetics - c162851 refund)
- **Tripoint**
  1 Naval Yard (see below)
  Nano Assembler (Fiber Optics c36340/per)

SOLRAIN SPACE

- **Solrain Core**
  Tooling Center (nopers)
  1 Naval Yard (see below)
  Custom Producer (Echo: Germanium, Silver, RF - c14250 refund)
- **Wake Station**
  2 Naval Yard (see below)
- **Cornea Station**
  2 Naval Yards (see below)
  Nano Assembler (Grav comps c345000/per)
  Science Factory (Proxy Fuses: Explosives, Machined Parts, RF transceivers - c50401 refund)

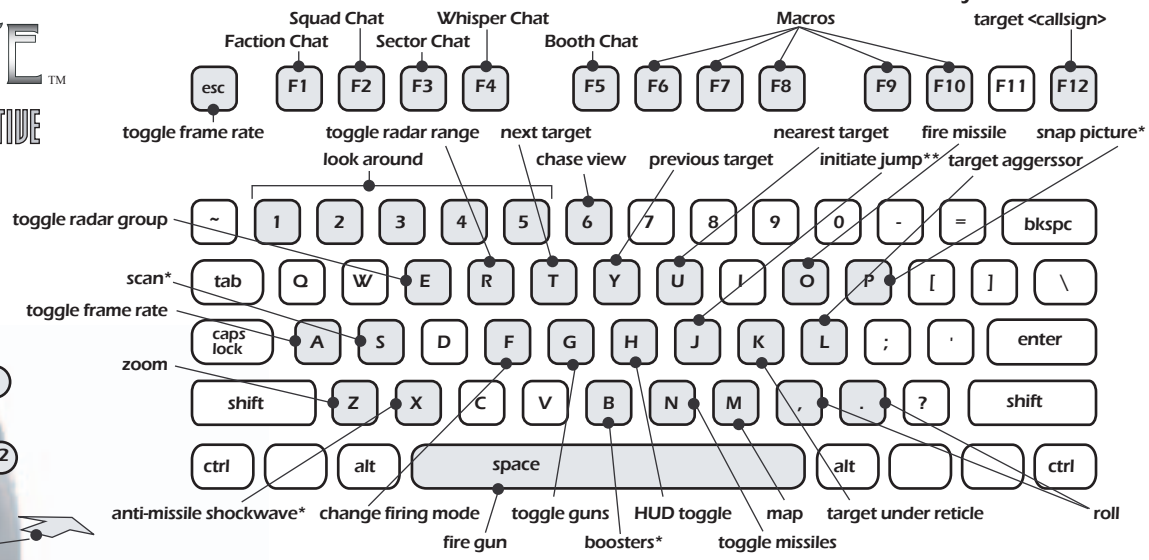
- **Octavian**
  Exclusive shipyards: Peregrine (GreatPillars); Hawk (Outpost); Chiropteran (Outpost); Raptor (Oct Core); Griffin (Outpost)
- **Quantar**
  Exclusive shipyards: Simoon (Corridor); Whirlwind (Corridor); Tempest (Tripoint); Tornado (Quantar Core); Squall (Corridor)
- **Solrain**
  Exclusive shipyards: Quicksilver (Cornea); Phaeton (Cornea); Invader (Wake); Barracuda (Solrain Core); Vedette (Wake)


Imperial Crossroads
The Outer Rim
The Outer Edge
Mokks Battlefield
Orrus Major
The Rim
Octavius Great Pillars
Orrus Minor
The Dark Fork
The Divide
The Edge
Vorgus 2
Imperial Gates
Arkan's Cloud
Octavius Core
Octavius Outpost
Sark's Passage
Octavius Depot
Imperial Causeway
Versalus Hook
Blasted Corner
Octavian Shore
Solrain Depot
The Outer Oasis
Tranquillus Minor
Midpoint Rift
The Outer Depths
Solrain Cornea
The Fields
The Inner Oasis
Tribular Cannal
The Azure Chun
Tranquillus Major
Solrain Core
Lothars Landing
Far Point
Inner Lighthouse
Diluted Reaches
Primus Point
Greater Locks
Dark Gateway
Wanderer's Pond
The Sea of Solrain
The Cerulean Clouds
Solrain Wake
The Bronci Rift
Purian Lake
The Narrow Cannal
Hirbel's Channel
Morian Harbour
Outer Lighthouse
Lesser Arm
The Stith
GBS
Outskirts
Light Lost
Light Crossroads
Inner Gyre
The Connexion
Zealots Refuge
Saron's Shoulder
Dark Crossroads
Klatsches Hold
Light Gateway
Outer Ring
Pulsar
The Gurge
Outer Gyre
Four Fingers
Great Venure Belt
The Lesser Locks
Aman Gate
Evenings End
Saron's Eye
The Dark
Greater Arm
Inner Storm
Inner Cloud
Last Parsec
Sea of Shadows
Quantar Gate
Outer Storm
Aman Hook
The Split
Ekoo's Stop
The Last Point
Ring View
The Main Gate
Hyperion Gate
The Reaches
Outer Cloud
The Gyre
Omni V
Quantar Hook
Omni IV
Rounds of Quantos
The Rear Gate
Amananth
Outer Roh-Cloud
The Dark Trail
Hyperian Hook
Quantar Core
Path of Hordes
Inner Roh-Cloud
Quantar Corridor
Orus' Tail
Hyperial
The Quadrangle
Quanaus Crossing
T&P
Far Gate
Square of Quantos
The Dark End
Inner Aman
Quantar TriPoint
Long Walk
Third Gate
The Dark Path
Orus' Leg
Inner Third
Tictac's Hook
Hook of Roh
Quantar Depot
Outer Third
Upper Third
Callow Passage

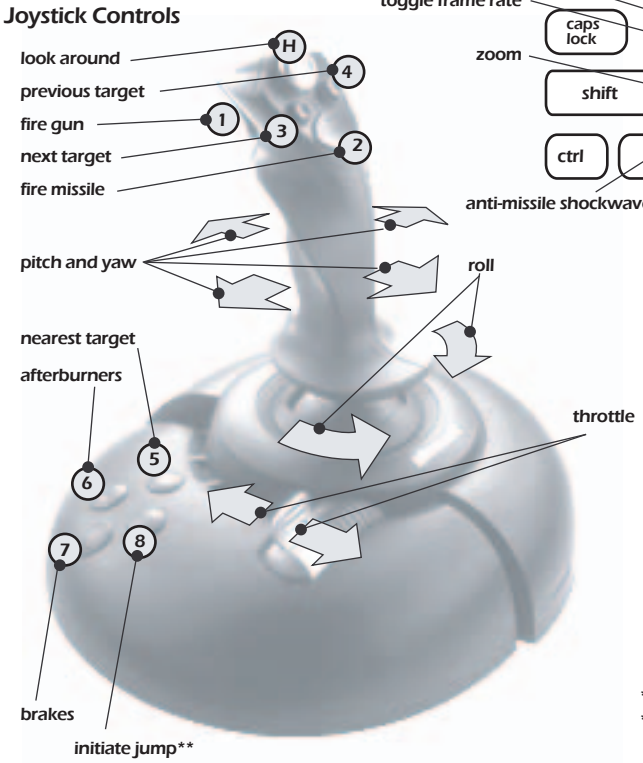
JUMPGATE™ The Reconstruction Initiative

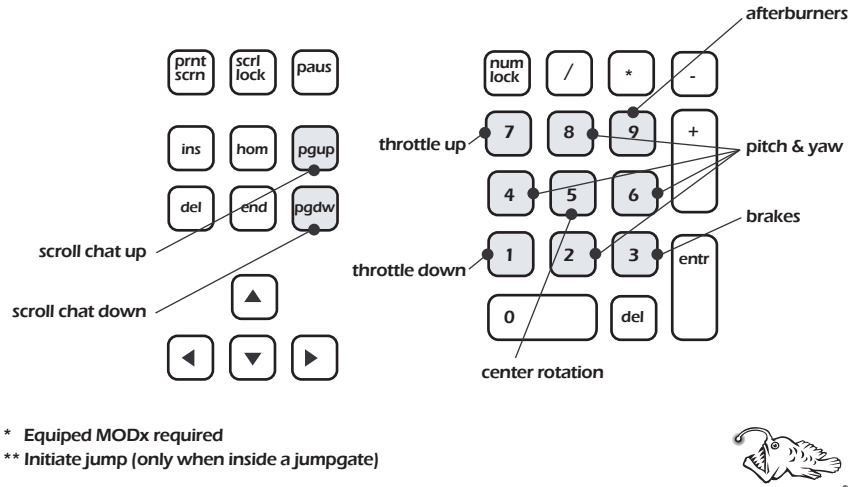
Quick Reference Card

Keyboard Controls



Joystick Controls





* Equiped MODx required
** Initiate jump (only when inside a jumpgate)

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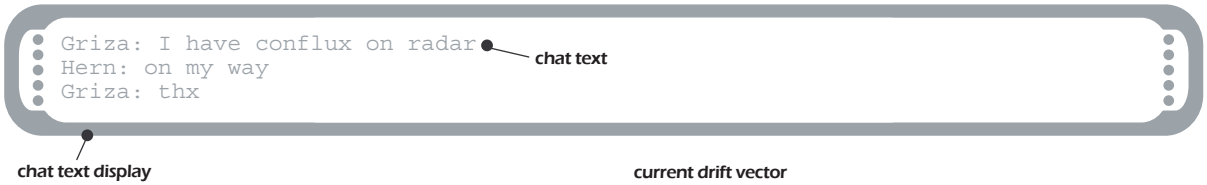
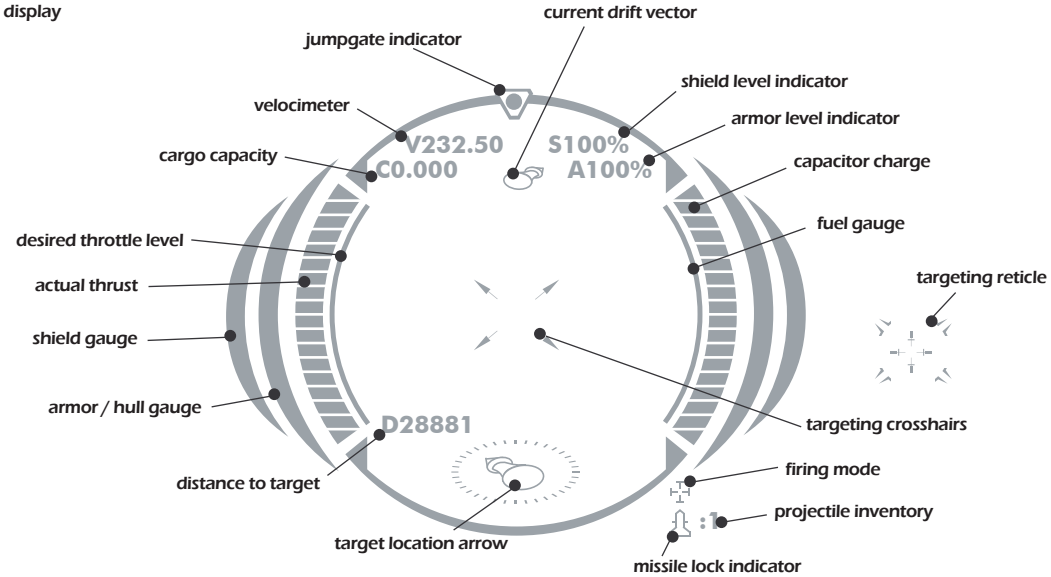
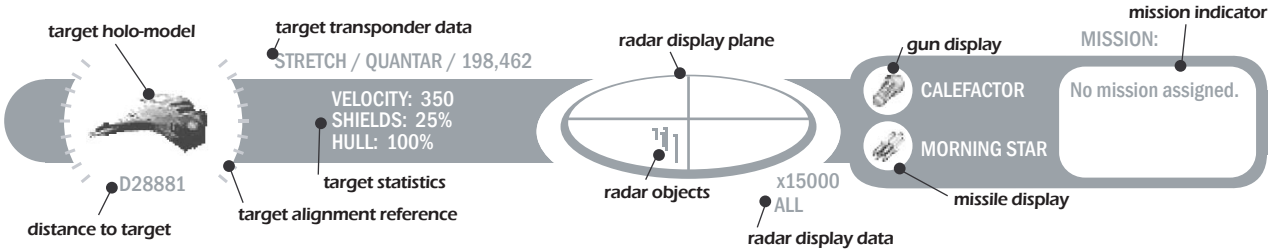
HUD


Griza: I have conflux on radar
Hern: on my way
Griza: thx
chat text
chat text display


current drift vector
jumpgate indicator
shield level indicator
velocimeter
armor level indicator
cargo capacity
capacitor charge
V232.50
C0.000
S100%
A100%
fuel gauge
desired throttle level
actual thrust
targeting reticle
shield gauge
armor / hull gauge
D28881
targeting crosshairs
distance to target
firing mode
projectile inventory
target location arrow
missile lock indicator


target holo-model
target transponder data
STRETCH / QUANTAR / 198,462
radar display plane
gun display
mission indicator
MISSION:
VELOCITY: 350
SHIELDS: 25%
HULL: 100%
CALEFACTOR
No mission assigned.
MORNING STAR
D28881
target statistics
radar objects
x15000
ALL
missile display
distance to target
target alignment reference
radar display data

Communication

function key	chat to:
F1	faction sector
F2	squad galaxy
F3	public sector
F4	whisper galaxy
F5	booth galaxy
F6	macro
F7	macro
F8	macro
F9	macro
F10	macro

To record a macro, press Shift+F key (F6, F7, F8, F9, or F10). This is the F key that the macro will be recorded to. You are now in record mode. Now type which channel you want the message to be displayed in, dropping the F. For example, if you want it to play in F3, type '3'. Type your message exactly as you would if you were using the channel normally.

Comm Line Commands

command	description
/bounty	Displays your maximum possible bounty.
/cargo	Displays your current cargo loadout.
/credits	Displays your current amount of credits.
/give	Transfers funds while in flight, to targeted pilot.
/mission	Displays your current mission details.
/exp	Displays your current amount of experience.
/ignore [callsign]	Adds callsign to your local ignore.txt
/q	Quick logout. Counts as a death if you are in space.
/time	Reports how long you have until your pilot account expires.
/voice [callsign]	Removes callsign from your local ignore.txt.
/hear [callsign]	Removes callsign from your local ignore.txt.

Official Comm Channels

channel	purpose
:help	The default channel all new recruits join automatically. Used for general help questions and responses.
:new	This is an alternate help channel, used when there is too much traffic on the default :help channel.
:newb	This is an alternate help channel, used when there is too much traffic on the default :help channel.
:chat	This is a general chat and conversations channel. This can be used for all forms of general discussion.
:sol	This is an alternate help channel for help specific to the Solrain faction.
:oct	This is an alternate help channel for help specific to the Octavian faction.
:quan	This is an alternate help channel for help specific to the Quantar faction.
:flux	Conlux infestation channel , information on current Conflux whereabouts, hunting strategy, & anything Conflux related.
:jobs	Offering services and hiring assistance for all manner of odd jobs, this is the jobs channel.
:roid	Asteroid farming intelligence, conversations, locations of valuable asteroids, mining tips, and anything asteroid related.

To join one of these booths, type: <f5>:name where name is replaced with the name of the booth you wish to join.

Chat Color Key

color	description
Grey	echo galaxy
Red	Octavian faction sector
Green	Quantar faction sector
Blue	Solrain faction sector
Aqua	squad galaxy
Orange	public sector
White	whisper galaxy
Lime	booth galaxy
Purple	system galaxy
Yellow	system you