ORIGINAL SYSTEMS

ARENA COMMANDER

Pilot's Guide

v0.9.2

◆ ORIGINAL
SYSTEMS

Why recreate reality?

When we first began on the long journey to develop what would eventually be known as *Arena Commander*, it was a question I was forced to consider myself. Why move away from the fantastic people and places we brought to life in *ULTIMATE* to focus on creating the most realistic and visceral flight simulator possible? Don't people play games to escape the confines of the universe around them? I would say escape is only a small part of what games offer. Their true value lays in how they can help us attain a greater understanding of ourselves and the way we see reality.

I, Charlie Bass and Henry Garrity were aboard a chartered flight back to Terra after attending a convention on Jalan to promote *Times of Myth*. Deep in a heated discussion about what direction we should take O.S. next, a siren suddenly blared through the cruiser. Rushing to the cockpit (which in hindsight might not have been the safest decision) to see what the trouble was, we discovered that a navy squadron had intercepted a Vanduul swarm directly on our traffic lane. What struck me in those intense moments that followed wasn't the aerial combat that was taking place outside, but rather the actions of our own pilot (sadly, she has asked to remain anonymous despite my many requests to feature her in *Arena Commander*). Without so much as a panicked glance or a frantic movement, she gracefully guided our ship out of harm's way as the battle raged around our suddenly frail-seeming ship. It is no exaggeration to say that she saved our lives.

When the proximity alarms finally subsided, a collective breath was released. I'm not ashamed to admit that I collapsed to the floor as my adrenaline drained away. What surprised me however was when I looked over to see our brave pilot violently retching up the remains of her inflight meal. If she had been affected by the danger just as much as I had, why had my fear led to near paralysis, whereas hers had led to swift, level-headed action? A few moments later, over a much-needed cup of tea, I got my answer.

She had been flying for over 35 years, and, while she had only had one violent encounter before (a pirate attack her third year out), piloting a ship had moved past the realm of conscious effort. When we walk, we don't calculate the angle of each footfall, or how much to bend our knees. Likewise, she no longer saw flying as a series of complicated and separate actions, she just flew. When we were in danger, it would have taken more thought for her to run out of the cockpit screaming than it had to do what was second nature to her and hang on to the controls. Nodding at this explanation, Henry commented that he had actually seen something like this before with high-level players in *ULTIMATE*. Ask them how they defeated that 100-person Tarkor raiding party and more often than not, they would shrug and say, "I just did it."

So while on the surface *Arena Commander* is about fast-paced dogfighting and blowing up Vanduul, it is also about the amazing capacity of the Human mind to grow and adapt. As you play, I challenge you to reflect on how one day something that seems like a long complicated list of separate tasks and instructions, can change into one simple word — flying.

See you in the black,

Tristan Blair

Contents

NEW IN THIS VERSION

The most important changes in this version include:

A FEW NEW ICONS IN THE HUD

SLIGHTLY REVISED DEFAULT LAYOUTS [PAGES 20-21]

NEW CONTROLS [PAGE 22]

The new controls include:

> Pilot head tracking
>
> Enhanced Stick Precision
>
> Aim-Only Virtual Joystick
>
> Couple Aim
>
> Virtual Joystick (for mouse)
>
> Drag-to-Move mode (Relative Mode)

NEW SHIP [PAGE 24]

The 325a

LARGER MAPS

The Broken Moon and Dying Star maps are now more than twice as large.

GETTING STARTED

1. Launch *Star Citizen.*
2. If you wish, take the helmet off the pedestal, with the 'Use' key ([F]). (This is no longer required.)
3. If you wish, enter your ship and sit down. (Press [F] to enter the pilot's seat.) At this point, the HUD will display the *Arena Commander* logo, followed by the Ship Selection menu.

Quickstart. At any time, simply press [Esc] to get to the *Star Citizen* Main Menu. From the main menu, select:

Options to modify your *Game Settings*, *Graphics*, *Audio* or *Controls*.

Arena Commander to open the Ship Selection menu.

Exit Game to quit.

SHIP SELECTION

Choose a ship. (If you have no cursor, press [Tab].) When you choose your ship, you go to the *AC* Main Menu.

ARENA COMMANDER MAIN MENU

Select *Spectrum Match*, *Drone Sim* or *Return* (to Ship Selection).

SPECTRUM MATCH

This leads to Multi-Player matchmaking. Select *Public Match*, *Private Match* or *Enter Friend Code*.

Public Match. You are matched with any other available players once you choose a simulation mode and arena.

Private Match. After selecting a simulation mode and arena, you are given a Match ID code. Give this code to any other players with whom you want to play this private match.

Enter Friend Code. If you have been given a Match ID, enter it here to join a private match.

Multi-player simulation modes are:
- Capture the Core
- Cooperative Vanduul Swarm
- Battle Royale
- Squadron Battle
- Classic Race

Drone Sim

This leads to the single-player modes. They are:
- Vanduul Swarm
- Free Flight
- Classic Race

Select a mode and a map, and then click on **Launch** to begin play. Press [Esc] during a Drone Sim to pause the match (and return to the Main Menu).

Arenas

Races take place on one of the three race courses. Note the diamond in the upper left corner — the larger the diamond, the higher the degree of difficulty.

All other simulation modes take place in Broken Moon or Dying Star.

Public Match
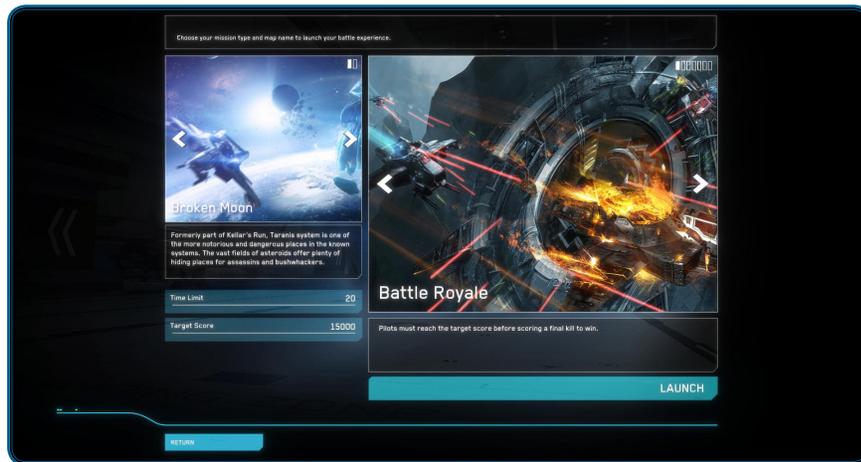
From here, you can select which *map* and *multi-player mode* you wish to play.

Hitting **Launch** will begin a search for a game and other players matching your chosen criteria.

Once a match is found, the game automatically launches.

Private Match
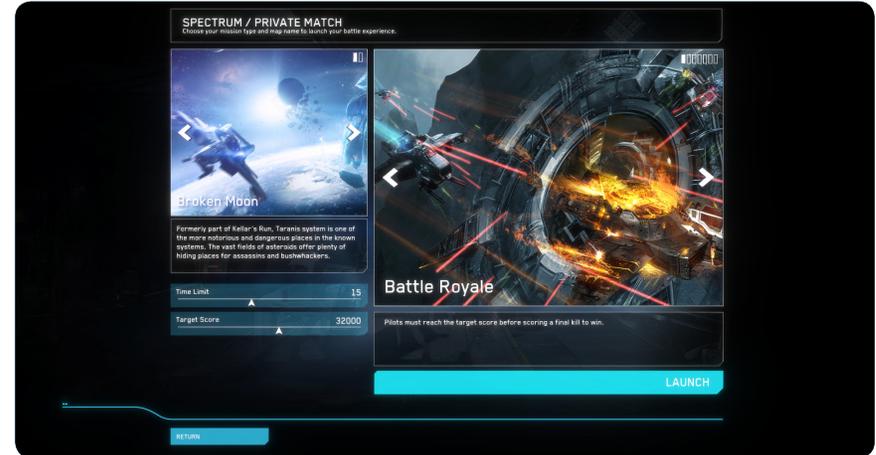
From here, you can select which *map* and *multi-player mode* you wish to play.

You can also set the *Time Limit* and *Target Score* using the sliders.

Hitting **Launch** creates the match and generates a Match ID for you to give to the other players.

Enter Friend Code

From here, you can enter a Match ID code for a private game with your friends.

Game Modes

Introduction

"You can't be prepared for everything, so today, we're gonna practice being surprised."

– Cadet Wing Commander Greg 'Freehand' Luoma , UEES *Ardent*

A pilot can expect to encounter a whole universe of problems when they step behind the helm of a ship. The modes listed below were selected and designed to simulate a wide range of true-to-life experiences. Don't get comfortable perfecting just one. Having a versatile skillset can often be more valuable than even the most expensive components.

Battle Royale

"Know your enemy … even if that enemy happens to be a friend."

– Mary-Louise Outenstratten,
Guild Bounty Hunter

Battle Royale is the classic deathmatch free-for-all scenario. Pilots are pitted against one another with the sole objective of raining destruction down on each other. Points are awarded for damage and kills — there can be only one victor.

Battle Royale

- **Timed Battle.** (Private match: can be scaled before the match.)
- **Score Limit.** (Private match: can be scaled before the match.)
- **Game type.** Free for All — up to 8 players.*
- **Ammo.** Replenishes upon respawn.
- **Respawn Limit.** No limit.

* *Later versions will allow more players.*

Capture the Core

"Remember the three C's: cooperation, coordination, carnage."
– Capt. Allison 'Dozer' Artuvo, UEES *Defiance*

Capture the Core requires a squadron of pilots to seize and secure the enemy team's core whilst trying to defend their own. When the enemy core is returned to your base, your team scores a point. If you're shot down while carrying an enemy core, it is dropped where your ship was destroyed and can be picked up by a teammate. If it is grabbed by an enemy, it will be returned to the enemy base.

Capture the Core

- **Timed Battle.** (Private match: can be scaled before the match.)
- **Score Limit.** (Private match: can be scaled before the match.)
- **Game type.** Team-based Capture and Defense — 4 vs. 4.*
- **Ammo.** Replenishes upon respawn.
- **Respawn Limit.** No limit.

Squadron Battle

"Your best weapon in any dogfight are your buddies. Keep 'em close and cover their asses."

– Lt Commander Lucas 'Gilly' Bramasco, UEES *Constitution*

Squadron Battle is a team deathmatch where cooperation between wingmen is paramount. Points are awarded for damage and kills, until one team has scored enough points to achieve victory.

Squadron Battle

- **Timed Battle.** (Private match: can be scaled before the match.)
- **Score Limit.** (Private match: can be scaled before the match.)
- **Game type.** Team-based — 4 vs. 4.*
- **Ammo.** Replenishes upon respawn.
- **Respawn Limit.** No limit.
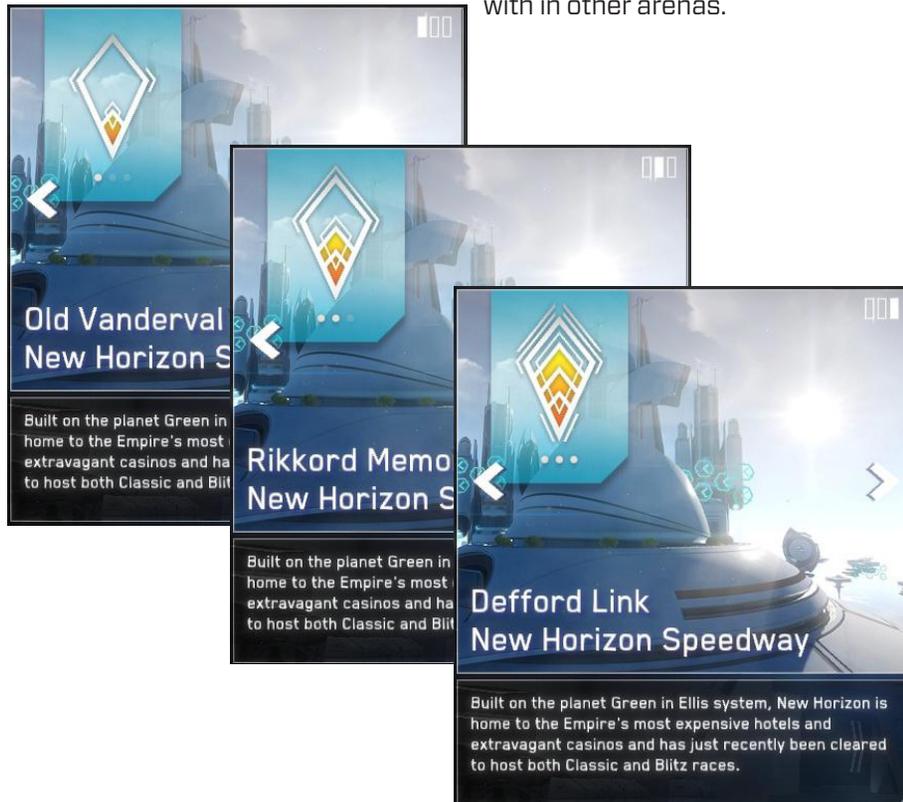
Classic Race (Spectrum & Drone)

"Speed is life."

– Zogat Guul, Tevarin Grand Champion racer

In Classic Race, speed and agility rule the day. No weapons, just adrenaline. Take on the relatively easy Old Vanderval, the mid-level Rikkord Memorial Raceway, or the more difficult Defford Link, all at the spectacular New Horizon Speedway, in Ellis system.

Drone Sim "races" are a good way to practice without anyone else to get in the way.

- **Total Laps.** Three (Spectrum) / Unlimited (Drone)
- **Total Racers.** Up to eight players can challenge each other per race.
- **Respawn Limit.** You have unlimited respawns … if you need them. (You respawn at the last checkpoint you crossed.)
- **Weapons & Missiles.** These will not work during a race.
- **Allowed ships.** You can race using any ship that you can compete with in other arenas.

Old Vanderval
New Horizon S

Built on the planet Green in
home to the Empire's most
extravagant casinos and ha
to host both Classic and Blit

Rikkord Memo
New Horizon S

Built on the planet Green in
home to the Empire's most
extravagant casinos and ha
to host both Classic and Blit

Defford Link
New Horizon Speedway

Built on the planet Green in Ellis system, New Horizon is
home to the Empire's most expensive hotels and
extravagant casinos and has just recently been cleared
to host both Classic and Blitz races.

Vanduul Swarm (Co-op & Drone)

"A Scythe one-on-one ain't nothing to write home about. A pack of 'em? Well, now you've got yerself a party."

– Faisal Kuric, Pirate Captain, Nul System

In Vanduul Swarm you face off against the best of the Vanduul in a series of waves that will test your skills as a combat pilot. The Vanduul attack in waves and it's up to you and your teammates to stop them!

Cooperative Vanduul Swarm

- **Total Waves.** Fifteen
- **Elite Waves.** Every third wave contains an Elite enemy pilot.
- **Teammates.** Co-op: four total. Drone: you have two A.I. teammates (Vixen and Warlord, p. 9) who respawn each time you defeat an Elite Wave.
- **Ammo.** Replenishes upon respawn and after each Elite wave.
- **Respawn Limit.** Three, plus one more per completed wave.

The Vanduul

In 2681, attacking out of the black, the Vanduul slaughtered a small town in Orion System without warning and without mercy. Almost three hundred years later, we haven't learned much more. There have been no diplomatic negotiations. No understanding of their culture. Just violence. Vanduul clans appear to act independently of each other, making it impossible to approach the species as a whole.

Over the years, UEE researchers have struggled to understand exactly how their clans are structured. Among Vanduul pilots, they discern a hierarchy. While the criteria for these divisions seems to be unique to each clan (and the names are purely a Human invention), they tend to exist in some form or another among all clans so far encountered.

Clan Scavenger

The Vanduul Scavenger is the workhorse of the clan. Generally, these young Vanduul are eager to prove themselves to their clan, but tend to be rash and inexperienced. While a lone scavenger doesn't present much of a challenge, pilots should be careful — when one goes down there always seem to be two more.

Clan Hunter

Hunter is the second level of status within Vanduul raiders. The clans will look to the Hunters as candidates for their elite fighters. They will be trained, attempting to replace impulse with cold detachment in combat. Hunters generally prefer to fight from longer range at high speeds. Many pilots have made the mistake of focusing too hard on one hunter; they nearly always have friends nearby.

Clan Alpha

Alphas are far more seasoned than hunters. These Vanduul have elevated themselves through combat, achieving a vicious balance of efficiency and brutality. They are hardened, deadly and spoiling for a fight. Expect these Vanduul to be fast, clever and significantly more dangerous than hunters.

Clan Prime

Over the course of Humanity's long and bloody history with the Vanduul, hundreds of pilots on both sides have captured the public's imagination and fears. Composited from declassified flight logs, Original Systems has recreated some of the Vanduul's most feared and skilled pilots throughout history as the ultimate test of your flying prowess.

Elite Vanduul Aces

Little King

A resilient and brutal killer, Little King is a long-range fighter, often opening up well before it is in range, but with a deadly accuracy born from its experience in clan raids against multiple UEE systems. It has been known to lurk at the edges of a battle and pick off retreating pilots and civilian ships caught in the crossfire. Pilots bestowed its handle at the time of its death: it took two full flights of fighters to take it down and the combatants said it was like taking on a Kingship.

The Priest

The only thing that eclipses the Priest's skill and finesse in the cockpit is its ferocity on the ground. During the Siege of Crion, Priest was not only instrumental in fracturing the defensive line in space, but also landed on the surface to seize a military stronghold. When it was in a Scythe, UEE pilots quickly learned to fear its brutal, close-range fighting style. What ultimately earned the Vanduul pilot its handle were the Naval officers who claimed that it would get close enough to hear final confession.

Bloodhound

First encountered during the Fall of Tiber, this feared Vanduul ace was personally responsible for the destruction of thirty-two UEE fighters. Combat analysis of the engagements showed an experienced pilot in both long- and short-range dogfighting techniques, it was a flawless combination of maneuvering technique and speed that led to its handle. Once Bloodhound had locked onto you, it was impossible to shake.

Payday

First identified in 2683, Payday was one of the first Vanduul aces that the UEE ever faced. It quickly established itself as a brilliant and adaptive foe, and UEE pilots began to collect a pool for the Vanduul ace's death. Needless to say, the ace survived all of those early pilots. The collection continued to grow and the handle was born. Many UEE pilots have been taken in by Payday's apparently slow combat style but when it pulls the trigger every shot goes where it wants it to. Payday's handle eventually took on a different meaning, referring to the death benefits that the Messer Era would pay out to the pilots who misguidedly sought their fortune against him.

Reaper

Simply put, one of the most fearsome Vanduul Warriors ever encountered by UEE pilots. Credited to date with a hundred fifty-seven UEE Naval kills, Repear has wielded its Scythe with unprecedented lethality. The official Enemy Pilot Profile for Reaper suggests that pilots should expect an extreme level of proficiency in all aspects of dogfighting. It offers no weaknesses, no vulnerabilities. The most terrifying thing about Reaper? It's still out there. To date, no one has bested this devastating Vanduul ace.

Baron Von Dool

If taken at face value, the Baron is one of the oldest Vanduul aces that the UEE has encountered. First logged in a battle in 2901 where it single-handedly devastated an advance team, the Baron would have been difficult to miss anyway in its customized symmetrical Scythe. A terrifying adversary with seemingly no single clan affiliation, the Baron seemed to be drawn to combat, wherever it appeared. In 2926, Naval pilots realized that the Baron hadn't been seen in over five years. Many hoped it had died in some appropriately awful way, some lamented not being able to face it themselves, but regardless, the ace seemed to have disappeared ... for a time, at least. In 2936, the Baron's ship reappeared, blasting through UEE security to attack settlers in Centauri system. It's unknown whether it's the same pilot, but if so, the Empire's oldest enemy found a brazen way to announce its return.

Vanduul Swarm Teammates (Drone Sim)

Vixen

Ada 'Vixen' McDonough graduated from the UEE flight school in record time. An exceptional student throughout her youth, her abilities in the field won her early recognition from her superiors and a fast-track to the pilot's seat. During her training a dummy round accidentally shattered a nearby asteroid, pelting her ship with dust and debris. She took shards of rock through the shoulder, abdomen and thigh but miraculously survived. Doctors told her she wouldn't fly again. However, through a combination of cybernetics and sheer pig-headedness, today she holds the distinction of being one of the finest in the UEE fleet.

Warlord

Dao 'Warlord' Wynn has been a stalwart of the UEE fighting force for years. He has passed up countless promotions in order to stay in his cockpit, leading some to speculate that he's not worth their time. However, all naysayers fall silent when they see him fly. Quick, precise and brutal when needed, Warlord has all the qualifications of the UEE Elite . . . he just likes to stay out of the limelight.

Free Flight

"I couldn't cope with open space for the longest time — the scale, the beauty . . . now I can't get enough. I just spend hours staring out of the window at the colours and shapes in the silence . . ."
— Dr. Verity Longbridge, Terra Astrographic Institute

Free-Flight mode allows you to simply drop in and explore the wonders of space. Many pilots use this simulation to get familiar with their chosen ship.

- **No rules, just freedom.**

Free Flight

9

2944

Scout
Explorer

Transporter
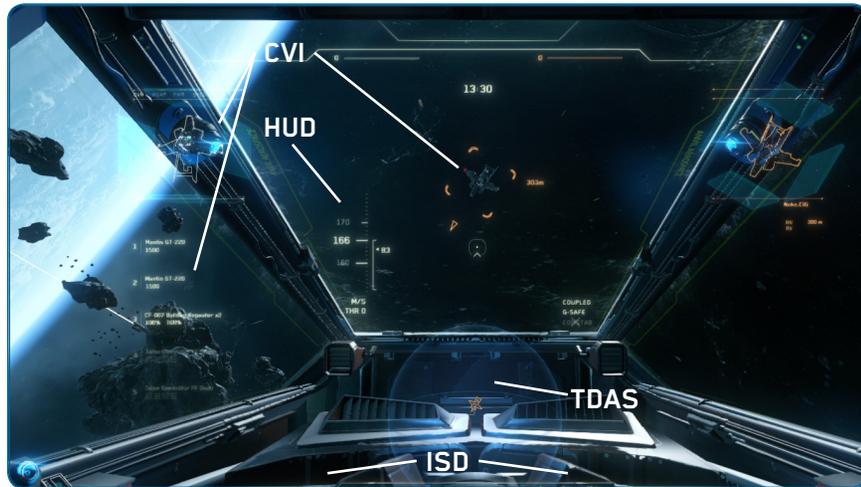# Protector

The RSI Aurora is known by many names. What will you call it?

Visit your local authorized RSI dealer for current deals and options.

RSI

ROBERTS SPACE INDUSTRIES

Your Cockpit

UI Components Overview

There are several key components that exist in the overall cockpit user interface:

Combat Visor Interface (CVI)

Optimized for strategic military combat, the CVI provides the advantage of being able to track hostile targets in any direction and through the hull of the ship by augmenting information and markers onto the surrounding environment. The CVI displays information and warnings critical to the pilot's survival front and center – such as the current state of the ship, weapons and targets. The CVI also features a modular context window system that can be populated with various management screens by interfacing directly with the ship and interpreting the systems installed within (e.g., shield, power and weapon systems).

The CVI is a helmet-mounted display that is operated by receiving brain impulses as input instructions sent to the visor software. These in turn are the inputs necessary to facilitate general interaction and context window navigation, as well as systems and target management within the CVI.

Fixed Heads-Up Display (HUD)

The HUD sits in a fixed position front and center to the ship and is holographically projected. Information relevant with respect to the current orientation of the ship, general flight information and IFCS modes/indicators reside within this display.

Interchangeable Status Displays (ISDs)

The peripheral ISDs sit further away from the pilot's center line of sight and are integrated into the cockpit instrumentation dashboard. The purpose of the ISD is to convey second priority information not needed immediately in the center line of sight. Examples include current TDAS configuration, thruster output & monitoring and current power configuration.

Each ISD is designed to be able to cycle between various display modes. This allows the pilot to configure what and where to display a particular set of information, hence the term "interchangeable." Display modes can also be duplicated across multiple screens if desired.[1]

Transdirectional Awareness System (TDAS)

The TDAS is a multifunctional radar which is capable of processing information on surrounding signals and displaying distance and relative position of external contacts in 3D space. The TDAS is able to interface with the ship's targeting computer in order to overlay additional targeting-specific markers and indicators within the TDAS Holosphere. The TDAS is also designed to switch between various modes of scanning such as omnidirectional and focused, depending on the desired fidelity and range of signal detection.[2]

[1] *Interchangeability not implemented in current revision (0.9.2).*

[2] *Only omnidirectional mode is available in current revision (0.9.2).*
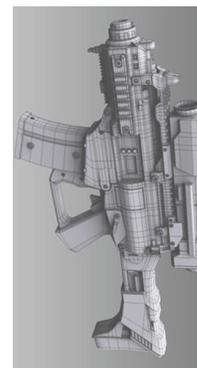
Combat Visor Interface (CVI)

The CVI is separated functionally into two distinct "panes" that reside on either side of the visor workspace (main area between top and bottom):

G-Force Indicator. The G-Force indicator is currently inactive.

Your Ship's Pane

On the left side of the CVI is the own-ship pane. This area of the CVI displays data on your own ship.

Ship Status Display. This is a holographic 3D representation of the ship shown in a top-down configuration. Damage and general status of various ship components are indicated through color variation and iconography on the specific ship components. Shield segment status is indicated by the blocks surrounding the ship. A segment will shrink in size when hit.

If a specific component is damaged, that component's location on the hologram will switch to one of two colors: Moderate (if the component has sustained damage but is still able to operate) or
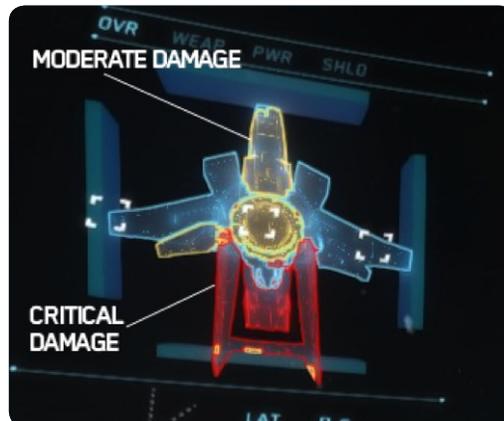
Example of damage states of individual components on the Anvil Hornet

Critical (if the component has sustained enough damage to render it inoperable). If a component becomes completely detached from the ship, the component part will be removed from the hologram. For information about the default color configuration, see *UI Colors*.

The ship status display gives you quick feedback on the state of your ship, to help you decide what to do next.

Your Ship's Display Windows

Your default display is the **Overview** window. In *Arena Commander*, there are three additional displays available for your ship: **Weapon Group Management**, **Power Management** and **Shield Management**. These displays are detailed below.

Overview Display. Overview is usually the most important display to have open when engaged in heated combat. It primarily consists of what is known as the "Docking Slot Manager." This shows your current equipped weapons. While in Focused mode, you can turn weapons on and off by clicking on the power icon at the far right of the weapon box.

Docking Slot Manager (DSM). The DSM holds an array of what are known as "docking slots." They are containers in which items of any type can be "docked" in order for the pilot to have quick access to a particular item's functionality and/or information. Examples of items that can be "docked" in the DSM include individual weapons, turret mounts, missile racks, subsystem preset configurations, and wing-man information. The DSM allows you to configure which particular items should be displayed in the Overview display according to your preference.*

Docking items within the DSM can save critical steps in certain UI sequences. Functionality and display of information for a docked item is contextual depending on the type of item. For example, a docked missile rack will display its equipped missiles, current armed missile, and the type of target tracking each missile uses. A docked gun item would contain a different set of information, such as its ammo count and indicators for damage, power and heat levels.

Many pilots use the DSM to create shortcuts that activate ship subsystem configurations — or a group of configurations — on the fly, without the need to navigate to other displays.

Items docked in the DSM have two potential display modes, *Idle* and *Focused*. Press [Home] to toggle between them.

* As of the current revision (0.9.2), only weapons may be docked to the DSM.

Powered

1 CF-117 Ball Turret
1500 1500

H ▮▮▮▮▯

Unpowered

2 NN-14 Neutron Gun
67%

H ▮▮▮▮▮

Destroyed

3 ~~Behring 9A Laser~~

4 NN-14 Neutron Gun
100%

5 Talon Missile Rack

HEAT LEVEL
(the more red,
the hotter)

1500 rounds remaining
for each gun

Energy weapon at
67% of full power

4 missiles, one of
which is armed
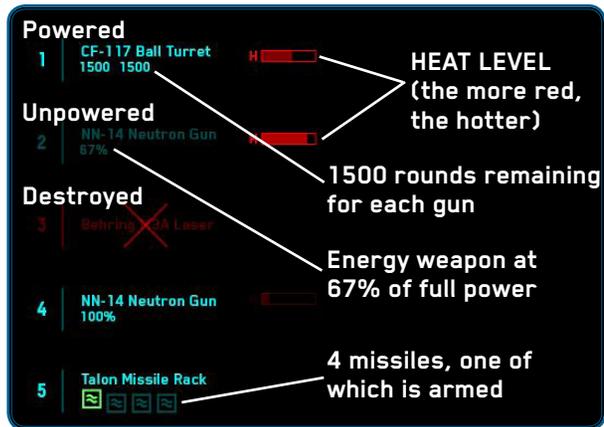
Example showing docked items in the idle mode

Idle. The Idle mode of a docked item only displays the necessary information when that item is not currently open. This usually includes the dock number and name of the item. For weapon items, ammo count(s) will also be displayed in addition to damage, power and heat indicators.

Focused. In both Idle and Focused modes you can inspect your ship's status, but you can only adjust that status while in Focused mode. In 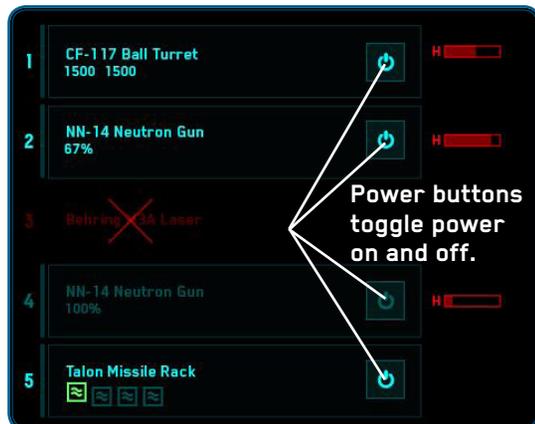Focused mode, your cursor becomes a blue arrowhead. You may adjust various aspects of your ship's status, depending on which display you have selected.

1 CF-117 Ball Turret
1500 1500

2 NN-14 Neutron Gun
67%

3 ~~Behring 9A Laser~~

4 NN-14 Neutron Gun
100%

5 Talon Missile Rack

Power buttons
toggle power
on and off.

Example of docked items in the Focused mode

While in either mode, you can select management displays by pressing F1 through F4 :

F1 **OVR** Overview Display

F2 **WEAP** Weapon Group Management

F3 **PWR** Power Management

F4 **SHLD** Shield Management

Overview display is described on the previous page and here (above).

Weapon Group Management Display. The weapon management display shows your ship's weapons, sorted by weapon groups. Weapon group assignment can be managed within this display. It can be accessed by pressing F2 .

You have three weapon groups. In *Idle* mode, you can see which guns are in which groups. (Missiles and countermeasures can't be assigned to a group, while a gun can be in more than one group.

In *Focused* mode, select a group with your cursor, then click on each gun that you want include in that group. (A gun is in a group when the small box under its icon is filled in.)

1

2 100%   Group 2

3 1500 1500   Group 3

MR Missiles
(can't be assigned to a weapon group)

CM 12   8   Countermeasures
(can't be assigned to a weapon group)

These weapons are in Group 1

The weapon group management display window

Power Management Display Window. The power management display allows the pilot to prioritize power distribution among all of the ship's various components and subsystems that require power to operate. Power is distributed among three generic groups (or "axes") using the high-level distribution triangle. Components are not strictly bound to a particular group however, and can be rearranged into other groups if desired, providing an extra layer of flexibility in the pilot's preferences for power distribution among the ship's components.*

By default, ship components are grouped in the following manner:

G1 (Group 1): Weapon Components

G2 (Group 2): Shields & Avionics

G3 (Group 3): Engines & Maneuvering Thrusters

Individual components can also be powered on/off. To toggle power on a component, click on it while in Focus mode. "OFF" means that power is off, while a row of boxes indicates that it is powered and how much power it currently has. The more boxes in the power meter, the better.

High-level distribution triangle

G1   G2

P

G3

G1 ▬▬▬▬ 50
G2 ▬▬ 25 → **Current division of power**
G3 ▬▬ 25

Current power needs (red indicates a need not fully met)

G1   OFF   OFF

G2   **Green highlight box indicates your selected component**

G3   **Yellow bolt indicates a component low on power**

THE POWER MANAGEMENT DISPLAY WINDOW

* Rearranging of components is not yet supported in the current revision (0.9.2).

Shield Management Display Window.
The shield management display allows you to prioritize shield level distribution between all of the ship's various shield segments, with the number of segments dependent on the shield system currently installed in the ship.

F   T   **This setting gives slightly stronger shields on the Left and Front.**

L   R

B   B

SEGMENT STATUS

FRONT ▬▬▬▬▬▬▬▬▬▬ 100%   **All six possible shield segments are displayed above, but this shows that the ship has only four segments.**
BACK   ▬▬▬▬▬▬▬▬▬▬ 100%
LEFT   ▬▬▬▬▬▬▬▬▬▬ 100%
RIGHT ▬▬▬▬▬▬▬▬▬▬ 100%

THE SHIELD MANAGEMENT DISPLAY WINDOW

The default status for your shields is that all shields have the same power. To shift power to a shield that will need it more, use your cursor to move the balance point toward that shield. Shields are **F**ront, **B**ack, **L**eft, **R**ight, **T**op and **B**ottom. Not all ships have all six shield facings. Only your actual shield facings are highlighted.

If a shield face takes fire, the shield level will decrease. If the shield face is actively recharging, the shield face health indicator (the row of green boxes) will be visibly increasing.

OVR   WEAP   PWR   SHLD

THE SOLID "PLATES" AROUND YOUR SHIP IMAGE AT THE TOP OF THE SCREEN INDICATE THE RELATIVE STRENGTHS OF YOUR SHIELDS.

Targeting Pane

Opposite the own-ship pane is the targeting pane. Elements in this area pertain to objects and contacts outside of your ship that are being targeted/locked onto. The types of objects that can be targeted and locked include enemy fighters, large capital ships, subcomponents of capital ships, wingmen, and even inanimate objects such as asteroids, etc.

Elements in this area behave in much the same way as the own-ship pane does. Depending on the capability of the ship's installed targeting system, the focus target hologram could potentially convey per-component damage states and hit impulses, allowing the pilot to track current weak spots present on the target ship. The targeting pane also features a targeting-specific DSM, in which docked targets have functionality and information contextual to the type of target.

The larger hologram area represents the current focused (or "selected") target. Having a target focused allows the ship's ITTS (explained further down) to properly offset based on the focus target's speed, distance and relative direction of travel. Targets can be selected in a variety of ways: by using the TDAS Holosphere, directly looking at the object and making a selection, or through the targeting DSM.

Scanning Procedure. Upon selection of an unidentified contact, your targeting computer will attempt to scan that contact to acquire information as to its pilot, name of vessel and general allegiance. Once the scan has completed, your target selection and hologram will switch to the appropriate color to indicate the target's allegiance, if detectable.

Depending on the performance of the targeting computer and other general factors, the scan may take longer or shorter to complete. Once completed, the targeting DSM may be used to "dock" the target for multi-tracking.

Using the Targeting DSM. The targeting DSM can be used to track multiple targets simultaneously. The number of targets that can be tracked at once is dependent on the performance of the installed targeting computer. Targets docked in the DSM will display their relative distance and velocity, as well as a smaller holographic representation of the target that shows current damage states. Targets docked on the DSM are considered to be "locked" targets.
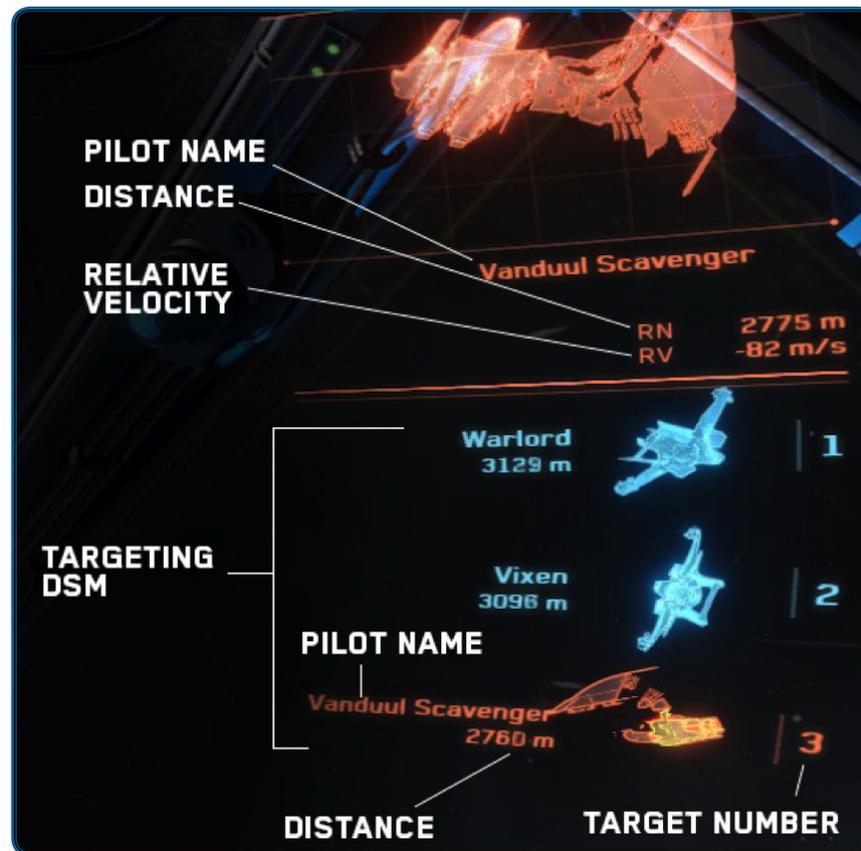
The targeting pane

To "lock" a target to the DSM, first ensure that a focus target has been selected and scanned, then press Ⓖ on the keyboard. Press Ⓖ again while the target is selected to detach the target from the DSM.

Once a target has been locked, a reference number will be assigned to that target that will correspond to its position within the DSM. The reference number will then display beside the augmented targeting reticle so that locked targets can be properly differentiated.

Press numpad Delete + <target number> to select that target from the targeting DSM.

Augmented HUD

One of the primary functions of the CVI is to augment the pilot's vision with targeting reticles and other auxiliary indicators. The CVI's augmented markers allow the pilot to look in any direction and still be able to track extraneous targets as well as retain visibility on the ship's total velocity vector when pulling strenuous maneuvers.

Targeting. Extraneous contacts can be in various states. A special reticle is designated to represent each state a contact may be in.

Unscanned Contact

Scanned Contact

An *unscanned contact* is an object that has not been scanned for additional information and is essentially an unknown contact. The reticle marker is shaped as a cut-through hexagon and is fairly translucent.

A *scanned contact* refers to a target that has been previously scanned, but is not the current focus target nor locked. The shape is simplistic and features a protruding marker pointing in the target's relative direction of travel.

Focused Target & Acquisition. The focus target, as described above, is essentially the primary "selected" target. The focus target reticle is comprised of four individual brackets which align along the longitudinal axis of the target ship, along with a forward cone and range readout. This will give a clear indication of the target's relative orientation. As the target draws nearer, the brackets will expand out along the bounding box of the ship.

Focused Target Selection

The initiation of a target scan is indicated by the four corner bracket components that fly in from the edges of the CVI to form a reticle around the focus target, with the progress of the scan being indicated by how long the brackets take to compose the reticle. When the scan is complete, all brackets will have locked into place to form the reticle, which will then orient itself with respect to the target's longitudinal axis, indicating its relative direction of travel. The reticle will also switch to the appropriate color to indicate

allegiance, if detectable (Friendly or Hostile). If the scan takes longer, a greater number of segments may be needed to complete the reticle.

Locked Target. A locked target has the DSM reference number just above the range readout. When the locked target is unselected, it will display a similar shape to the scanned target marker, but with a solid line and DSM reference number alongside it.

The Locked Target Marker

Missile Locking. Acquiring a missile lock uses the same concept as the target scanning reticle. A series of segments will fly in to form a special "missile-lock" reticle that floats within the scan reticle. A missile lock will be achieved once all components of the reticle are assembled onto the target. The time it takes for the reticle to assemble can be shorter or longer depending on the targeting computer installed and the type of missile armed. The missile locking reticle is the same color as the critical marker.

Line-of-Sight (LOS) Marker. The line-of-sight marker indicates the precise point in space where the pilot is looking. If the ship has gimbaled weapons, their direction will try to align to the pilot's LOS marker, with the projectile convergence based on the range to the target.

Line-of-Sight Marker — 'Target Focus' Mode. The line-of-sight marker indicates the precise point in space where the pilot is looking. If the ship has gimbaled weapons, their direction will try to align to the pilot's LOS marker, with the projectile convergence based on the range to the target.
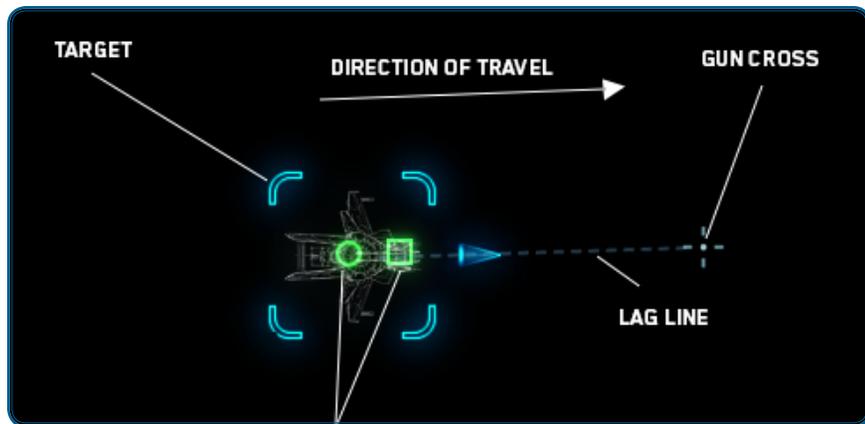

The LOS Marker

Example of a gimbaled weapon not yet properly aligned to the LOS marker

Intelligent Target Tracking System (ITTS) for gimbaled weapons.

TARGET　　DIRECTION OF TRAVEL　　GUN CROSS

LAG LINE

Simplified example of how the gimbaled weapon ITTS works.

If there is an active focus target, the ship's ITTS will attempt to paint Predicted-Impact-Point (PIP) markers corresponding to each type of weapon equipped on the ship. These PIPs lag behind your fixed gun cross or line-of-sight (LOS) reticle depending on if the weapon has fixed or gimbaled convergence.

The lagged PIPs refers to where the projectile of that particular weapon will intercept given the distance, vector, and speed of the target ship, as well as the projectile speed of that weapon. Pilots should direct these PIPs to be over the target ship before firing.
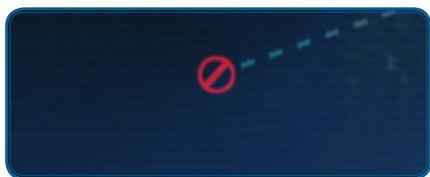
The Weapon Out-of-Range Marker

Each PIP also conveys weapon status through different visual states. If the color of the pip is in the critical color space with a line through it, that means that particular weapon is out of range and will not be able to intercept the target. The pip will also switch to the positive color space if it is in range and has been placed directly over the target and is therefore certain that the projectile of that weapon will intercept.

When you fire a weapon, an icon just outside of the PIP will flash to indicate that particular weapon is currently firing. If the projectile fired from that weapon intercepts the ship, a hit impulse will briefly display

in place of the PIP to indicate that the target was hit by that weapon's projectile. Finally, the shape of the PIP is different for each weapon type. This helps you decide which firing groups to engage at certain times, in order to minimize heat output and wasted ammo.

Weapon Firing Indicator　　Hit Impulse Indicator　　Laser Repeater PIP


Laser Cannon PIP　　Ballistic Repeater PIP　　Ballistic Cannon PIP

Total Velocity Indicator (TVI). A velocity vector indicator is displayed in the CVI, and is indicated by a small ring with an arrow pointing inward through the ring's cutout (indicating forward direction). The TVI shows where the ship is currently heading, even though the front of the ship may be pointed elsewhere. The TVI is useful for determining the exact flight path vector of the ship, especially when drifting between and around other objects.
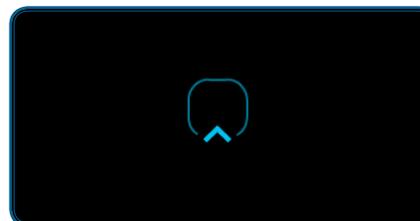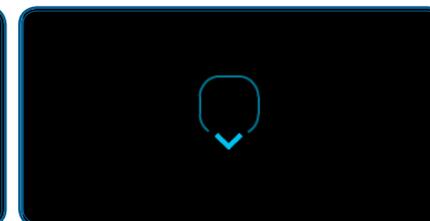
Total Velocity Indicator　　Anti Total Velocity Indicator

Anti-TVI. An anti-TVI is also displayed in the CVI, which indicates where the ship is currently heading away from. The anti-TVI is displayed as a ring with an arrow pointing away from it. The anti-TVI is useful to visualize when the ship is flying in a decoupled flight control mode, where the front of the ship is rotated opposite of its forward vector.

FIXED HEADS-UP DISPLAY

The fixed HUD sits front and center to your point of view and is used to communicate information relevant with respect to the current orientation of the ship, general flight information, and flight control modes / indicators.

Velocity Ladder. The velocity ladder measures your current velocity heading toward the forward TVI.

Thrust Force. Thrust force, displayed in kilonewtons, represents the force being applied to the forward axis of the ship.

Main Engine Throttle. The main engine throttle displays the current power level being delivered to the main engine thruster.

Gun Cross. If the ship is equipped with non-gimbaled fixed forward-facing weapons, the gun cross represents the pointed direction of those weapons — which is also the position of your ship's longitudinal axis.
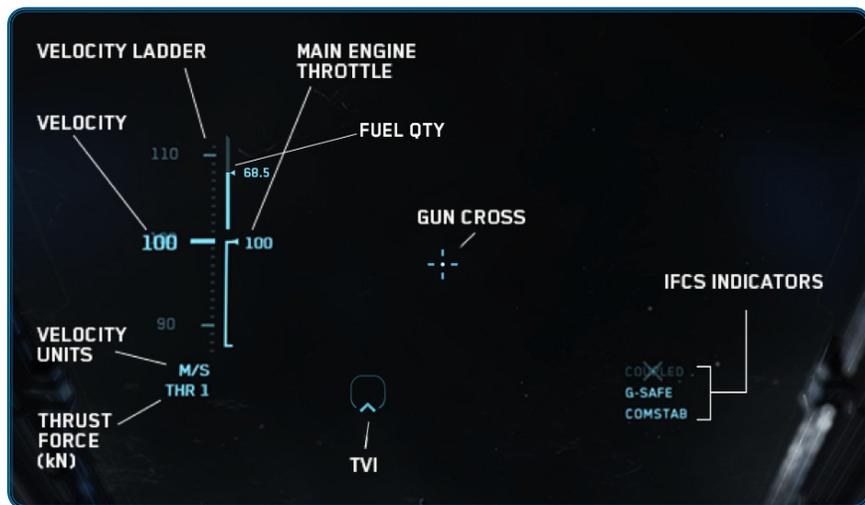
FIXED HUD LAYOUT

Intelligent Flight Control System (IFCS). Flight control indicators are displayed in the lower right-hand side of the HUD. A flight control that has become disengaged will be more translucent with an "X" through it.

Coupled / Decoupled Mode. There are two flight control modes, coupled and decoupled. In coupled mode, flight is always nose-forward,

like an atmospheric jet. When turning, the ship continues to move at a set velocity in the direction the nose is pointing.

While in coupled mode, you can strafe side-to-side (Q and E) and up-and-down (R and F).

When coupled flight is disengaged (decoupled mode), the direction and speed the ship is moving at is essentially "decoupled" from the nose direction, allowing the ship to rotate freely without changing the direction of flight. When in decoupled mode, the ship is allowed to strafe forward and backward, side-to-side, and upward and downward. When coupled mode is re-engaged again, the ship will begin moving at the current speed but in the new nose-forward direction.

This mode is indicated by the "**COUPLED**" indicator on the HUD.

IFCS Safety Modes. There are two IFCS safety modes:

G-Safe. The first is the G-force safety mode that attempts to limit your exposure to head-to-toe G-forces to keep you from blacking/redding out. If this mode is enabled and you attempt to move the ship in a way that would generate greater than two head-to-toe Gs, the IFCS will limit that movement. If you are strafing, the IFCS will limit upward / downward acceleration to within the safe range.

G-Safety mode is indicated by the "**G-SAFE**" indicator on the HUD.

Command-Level Stability (COMSTAB). The second safety mode is the turn control system (TCS, sometimes called Command-Level Stability or Comstab). Often, when the ship is turned when moving at a high velocity, it will slide in the original direction before eventually settling into the new direction. Comstab will limit this sliding behavior by slowing the ship's velocity during extreme maneuvers. It is similar to the traction control system of ground-based vehicles. (If you are turning, the IFCS will slow the ship to keep the turning acceleration from being greater than the safety threshold.)
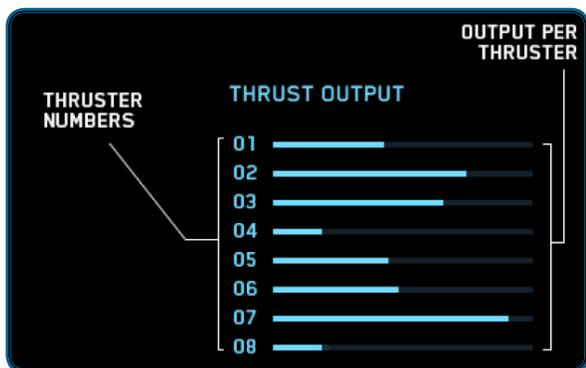
Command-Level Stability is shown by the "**COMSTAB**" indicator on the HUD.

The default status is G-Safe on and COMSTAB off.

Interchangeable Status Displays

There are two functional ISDs available:

Thruster Output Display. The thruster output ISD displays per-thruster output levels from the ship's main engine as well as maneuvering thrusters.

Thruster Output ISD

Throttle & Boost Display. The throttle & boost ISD displays the current power level being delivered by the main engine (which is duplicated on the HUD), as well as an afterburner capacity indicator.
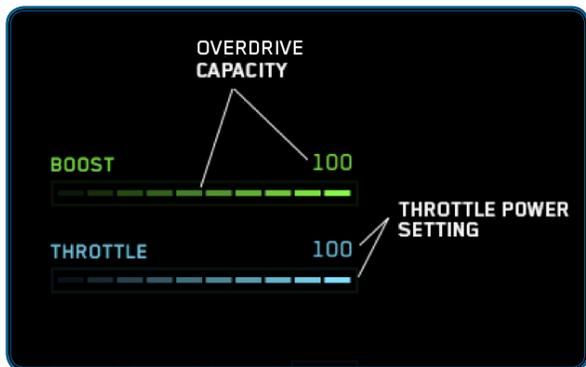

Throttle & Boost ISD

As the overdrive expends fuel, the boost meter decreases and flashes, indicating the overdrive is currently engaged. When the boost meter falls below 50%, the meter switches to the critical color to warn that the boost capacity is low. You can't regain boost capacity until you respawn.

Transdirectional Awareness System (TDAS)

The TDAS is a spherical radar used to indicate the positions of contacts in three dimensions.
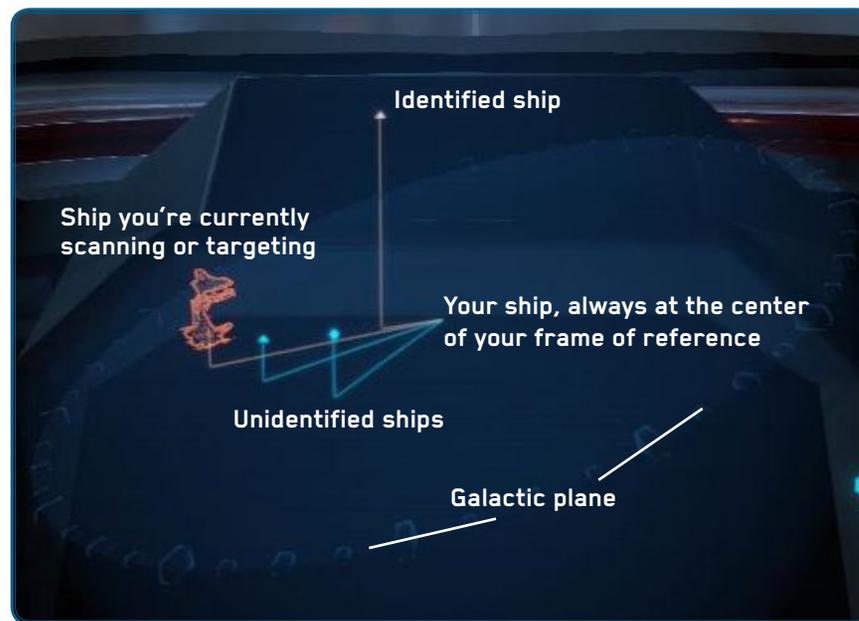
TDAS Holosphere

The TDAS displays the galactic plane as a standard reference for your ship's orientation in space. An unscanned target is marked as a small sphere.

Objects in the radar display a relative distance indicator (line and stalk) that is designed to communicate the distance to the target both horizontally and vertically. The current focus target is represented as a 3D holo-image of the target object. The color of the relative distance indicator and 3D hologram changes to indicate allegiance, if it can be determined.

Unselected targets that have been scanned will show as a small triangle that points either upward or downward depending on whether the target is above or below.

TDAS Zoom Level

The TDAS supports cycling through various levels of zoom. To cycle through the zoom levels, press ⌨ (the comma key).

UI Colors

All elements in the HUD user-interface are a specific color upon creation (but can be switched by the pilot*). These colors can be changed to suit your visual needs and preferences, and changes will be reflected in all of the various UI components in the cockpit. The following list outlines the categories that are assigned specific colors, along with their functional purposes:

HUDNEUTRAL. This color is used for all HUD elements if they don't strictly pertain to a specific function in conveying information through color. It also serves as the neutral / "okay" state if it is a part that can sustain damage.

POSITIVE. This color is used to indicate positive feedback — completion messages and highlighted / selected elements.

MODERATE. Indicates second priority severity, whether it is a "notice" message or a moderately damaged subpart. This is the color used to indicate the intermediate state between "okay" and "critical."

* Color switching is not yet supported in the current revision (0.9.2).

CRITICAL. This color indicates a negative or critical element that needs utmost attention — first priority severity. This is used to indicate severely or completely damaged parts on your ship — critical warning messages, etc.

UNKNOWN. Unknown or neutral allegiance.

FRIENDLY. Friendly allegiance.

HOSTILE. Hostile allegiance.

The default color mapping can be seen in the image below:

| HUDNEUTRAL UNKNOWN FRIENDLY | POSITIVE | MODERATE | HOSTILE | CRITICAL |
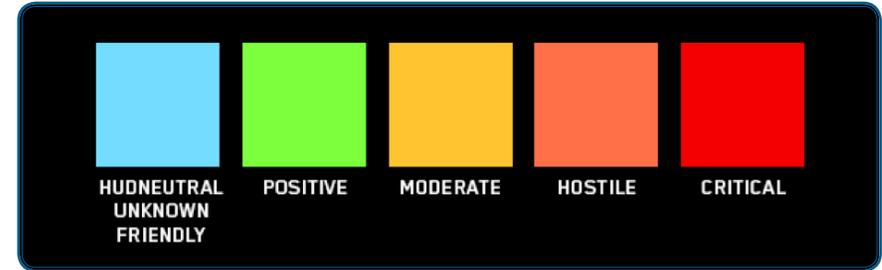
Default color definitions

LIFE IS A RACE
BE FIRST

FINISH

PRESENTING THE
ORIGIN M50

only from
ORIGIN
JUMPWORKS

Color Key

FCS	HUD	EJECT	RADAR	SYSTEM	CAMERA

Keyboard Default

ESC — MENU
- — CONSOLE
1 — ADD TO POWER GROUP 1
2 — ADD TO POWER GROUP 2
3 — ADD TO POWER GROUP 3
0 — EQUALIZE POWER GROUPS
BACK — VELOCITY 0/100

F1 — OVERVIEW
F2 — WEAPONS
F3 — POWER
F4 — SHIELDS

INSERT — CHANGE CAMERA
HOME — HUD FOCUS MODE
PGUP — VIEW MODE

TAB / HUD — INTERACTION MODE/HEAD LOOK
Q — STRAFE LEFT
W — THROTTLE UP/STRAFE FORWARD (DC)
E — STRAFE RIGHT
R — STRAFE UP
T — CYCLE HOSTILES
Y — CYCLE ALL TARGETS
O — TOGGLE LIGHTS
P — ZOOM OUT
(— ZOOM IN
BACK — (VELOCITY)
ENTER — INTERACT WITH HUD

CAPS / TOGGLE DECOUPLED (DC) FCS /DISABLE IFCS SAFETY*
A — ROLL LEFT
S — THROTTLE BACK/STRAFE BACK (DC)
D — ROLL RIGHT
F — INTERACT/STRAFE DOWN
G — PIN TARGET
H — CYCLE FRIENDLIES BACK
J — CYCLE RADAR FOCUS FORWARD
K — CYCLE RADAR FOCUS BACK
L — TARGET FOCUS
; — CYCLE HUD MODE BACK
' — CYCLE HUD MODE FORWARD

SHIFT — BOOST
Z — LAUNCH CM
X — CYCLE CM
C — RELATIVE MODE* / NEAREST HOSTILE
V — FOCUS TARGET RETICULE
M — MATCH TARGET VELOCITY / RADAR ZOOM
SHIFT — HOMAS/UNLOCK MOUSE AIM

CTRL — MODIFIER (*)
ALT — WEAPON GIMBAL LOCK
SPACE — SCOREBOARD* / SPACEBRAKE / NEWTONIAN BRAKE (DC)
ALT+L / EJECT
ALT+M / LOOK AHEAD MODE
CTRL

7 — TOP SHIELDS
8 — FORE SHIELDS
9 — BOTTOM SHIELDS
4 — LEFT SHIELDS
5 — EQUALIZE SHIELDS
6 — RIGHT SHIELDS
2 — REAR SHIELDS

LEFT — NAVIGATE HUD
UP — NAVIGATE HUD
RIGHT — NAVIGATE HUD
DOWN — NAVIGATE HUD

Mouse
(SCROLL) ZOOM
(CLICK) ACQUIRE MISSILE LOCK
(CLICK) FIRE MISSILE
FIRE GROUP 2
(SPECTATOR MODE) CYCLE NEXT TARGET
FIRE GROUP 1
(SPECTATOR MODE) CYCLE PREV TARGET
FIRE GROUP 4
FIRE GROUP 3
PITCH/YAW

Joystick

(UP) FOCUS TARGET RETICULE
(DOWN) CYCLE TARGETS FORWARD
(LEFT) TARGET NEAREST HOSTILE
(RIGHT) CYCLE HOSTILES
(SPECTATOR MODE) CYCLE PREV TARGET
FIRE GROUP 1
(SPECTATOR MODE) CYCLE NEXT TARGET
LAUNCH COUNTERMEASURE
FIRE GROUP 3
FIRE GROUP 2
LOCK MISSILE/FIRE MISSILE
PITCH/YAW (NORMAL MODE)
PITCH/YAW ORIENTATION (DECOUPLED MODE)
LOCK SELECTED TARGET
AFTERBURNER
MATCH TARGET VELOCITY
TARGET FOCUS
SET THROTTLE

Controller Default

LEFT TRIGGER (LT)
(SPECTATOR MODE) ZOOM CAMERA OUT
(LB+RB) SPACEBRAKE
FIRE GROUP 1
(SPECTATOR MODE) ZOOM CAMERA IN
STANDARD FCS MODE
DECOUPLED FCS MODE
THROTTLE DOWN
(DOUBLE TAP) 0% THROTTLE
STRAFE BACK
(+LT) NEWTONIAN BRAKE
(SPECTATOR MODE) CYCLE PREV TARGET
(BACK→DPAD) NAVIGATE HUD
(+LT) EJECT
THROTTLE UP
(DOUBLE TAP) MATCH TARGET VELOCITY
STRAFE FORWARD
(SPECTATOR MODE) CYCLE NEXT TARGET
YAW/PITCH
(+LT) ROLL
(CLICK+LT) VECTOR DECOUPLING
YAW/PITCH
(CLICK) STANDARD FCS
MENU
LOCK MISSILE/FIRE MISSILE
(+LT) LAUNCH CM
BOOST
(+LT) HUD BACK
FIRE GROUP 2
(+LT) FIRE GROUP 3
INTERACT COCKPIT
(+LT) INTERACT HUD
(UP/DOWN+LT) ZOOM
(UP) FOCUS TARGET RETICULE
(DOWN) CYCLE TARGETS FORWARD
(LEFT) TARGET NEAREST HOSTILE
(RIGHT) CYCLE HOSTILES
(LEFT+LT) COMSTAB ON/OFF
(RIGHT+LT) G-SAFE ON/OFF
HEAD LOOK/CAMERA ORBIT
(+LT) STRAFE
(CLICK+LT) CHANGE CAMERA
(CLICK) TARGET LOOK

HOTAS

SAITEK X52

- STRAFE (UP/DOWN/LEFT/RIGHT)
- MATCH TARGET VELOCITY
- BOOST
- STRAFE FWD/BACK
- SPACEBRAKE
- THROTTLE
- (UP) CAMERA ZOOM IN (DOWN) CAMERA ZOOM OUT
- COUPLE/DECOUPLE
- G-SAFE
- COMSTAB
- SCAN/CYCLE TARGETS
- EJECT
- (UP) TARGET FOCUS
- FREE LOOK
- FIRE GROUP 2
- MISSILE LOCK/FIRE
- CAMERA ANGLE
- CHANGE COUNTERMEASURE
- LAUNCH COUNTERMEASURE
- FIRE GROUP 1
- FIRE GROUP 3
- PITCH/YAW LEFT/RIGHT (TWIST) ROLL

SAITEK X55 RHINO

- CHANGE CAMERA (PRESS)
- OVERDRIVE/BOOST
- MATCH SPEED
- SPEED BRAKE
- ZOOM
- THROTTLE
- FWD/BACK STRAFE
- (UP) TARGET FOCUS
- EJECT
- DECOUPLE
- G-SAFE
- COMSTAB
- TOGGLE LIGHTS
- LOCK/FIRE MISSILES
- CYCLE NEAREST/ALL TARGETS
- HEADLOOK
- FIRE COUNTERMEASURES
- FIRE GROUP 2
- STRAFE (UP/DOWN/LEFT/RIGHT)
- FIRE GROUP 1
- CHANGE COUNTERMEASURES
- FIRE GROUP 3
- ROLL (TWIST) YAW (TURN) PITCH (TILT)

THRUSTMASTER WARTHOG

- THROTTLE
- SPACEBRAKE
- TOGGLE CAMERA
- (UP/DOWN) STRAFE FORWARD/BACK
- (PRESS) AFTERBURNER (LEFT/RIGHT) YAW
- FIRE GROUP 2
- MATCH VELOCITY
- COUPLED MODE
- TOGGLE FORWARD: COMSTAB TOGGLE BACK: G-SAFE
- EJECT
- (UP) TARGET FOCUS (DOWN) CYCLE COUNTERMEASURE
- FIRE MISSILE
- STRAFE UP/DOWN/LEFT/RIGHT
- FIRE GROUP 3
- FIRE GROUP 1
- LAUNCH COUNTERMEASURE
- PITCH/YAW

LOGITECH G940

- BOOST
- SPACEBRAKE
- DECOUPLED MODE
- THROTTLE
- STRAFE (UP/DOWN/LEFT/RIGHT)
- CYCLE COMSTAB/G-SAFE
- EJECT
- CYCLE CAMERA VIEWS
- TARGET FOCUS
- MATCH TARGET SPEED ON/OFF
- LOCK/FIRE MISSILE
- FIRE GROUP 2
- CYCLE COUNTERMEASURES
- LAUNCH COUNTERMEASURES
- FIRE GROUP 3
- FIRE GROUP 1
- CYCLE TARGETS
  - (UP) NEAREST HOSTILE
  - (DOWN) NEAREST FRIENDLY
  - (LEFT) HOSTILE UP
  - (RIGHT) HOSTILE DOWN
- (X-AXIS) ROLL RIGHT/LEFT
- (Y-AXIS) NOSE UP/DOWN
- MAIN RUDDER CONTROLS YAW LEFT/RIGHT

Control Notes

Gamepad or Joystick

Target Focus. Your character looks at current target and attempts to keep the target in field of view. Once the target has moved out of the field of view, the head look will reactivate if you are able to get the target back in view within 3 seconds.

R3   gamepad
Button 11   joystick

Enhanced Stick Precision (ESP). This scales stick input as lag pips approach target, in order to reduce the tendency to overshoot. In this version (0.9.2), ESP is automatic for gamepad or joystick controls.

Aim-Only Virtual Joystick. *Intended for use with joystick and mouse combination; is off by default.* Locks/unlocks gimbaled weapons for mouse aim while also using joystick for flight control. While locked, the aim reticle follows current move input.

Right [Shift]   Toggles on and off

Mouse & Keyboard

Weapon Gimbal Lock. *Can toggle on and off, or can maintain it while holding* Left [Alt] *until released.* Locks gimbaled weapons to fire straight ahead.

Left [Alt]   Toggles on and off, or holds on until released

Target Focus. Your character looks at current target and attempts to keep the target in field of view. Once the target has moved out of the field of view, the head look will reactivate if you are able to get the target back in view within 3 seconds.

[L]

Drag-to-Move Mode (Relative Mode). *Can toggle on and off, or can maintain it while holding* [Control][C] *until released.* Gimbled weapons locked forward during mouse movement.

[Control][C]   Toggles on and off, or holds on until released

22

TIME TO FLY

AEGIS

DRAKE INTERPLANETARY

MISC musashi industrial and starflight concern

ORIGIN

RSI ROBERTS SPACE INDUSTRIES

ANVIL AEROSPACE

Names you trust Prices you want

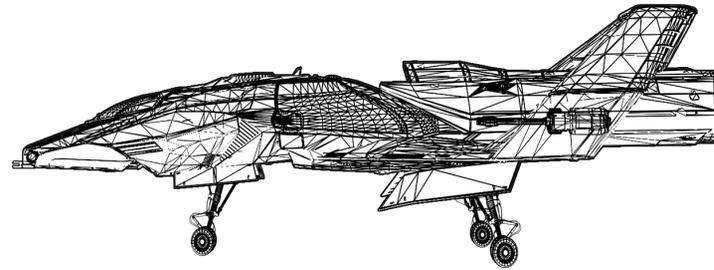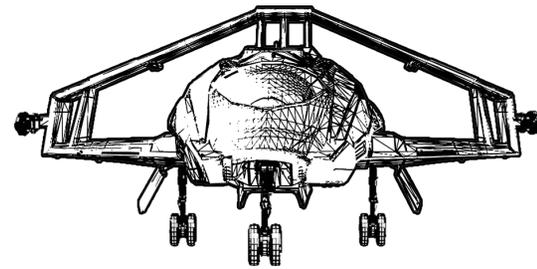Stop by your local

ASTRO ARMADA

300i

Origin's 300 series favor speed and agility over power. The Scalpel™ Precision Maneuvering thrusters, originally designed for Murray Cup contenders, have become standard for the 300i, making it as maneuverable as the Scythe. That nimbleness comes at a cost. The 300i lacks the armor and shield complement that a Hornet has, requiring the pilot to be more surgical in his attacks. Pilots will often opt for hit-and-run tactics to compensate, choosing the angle and place of the dogfight rather than engaging in battles of attrition.
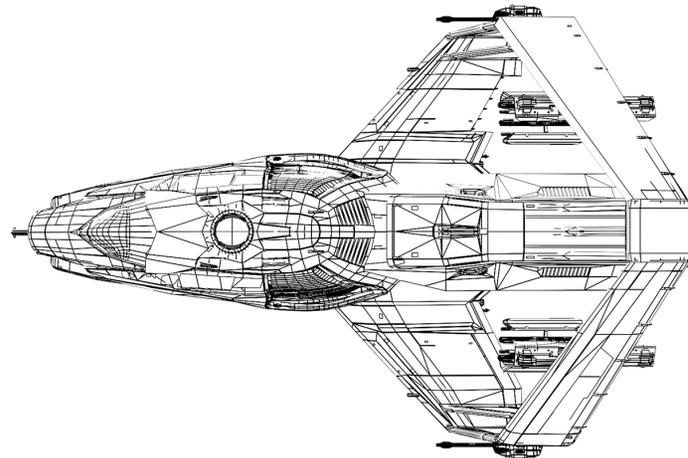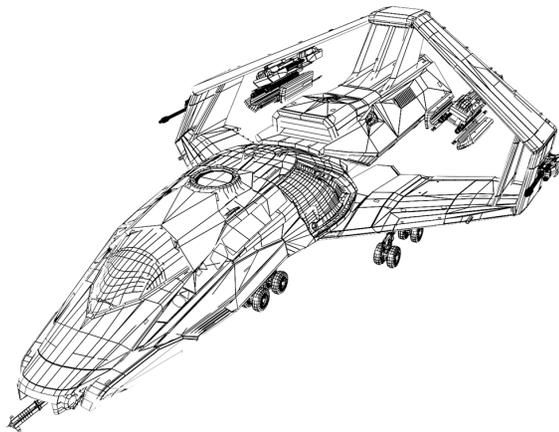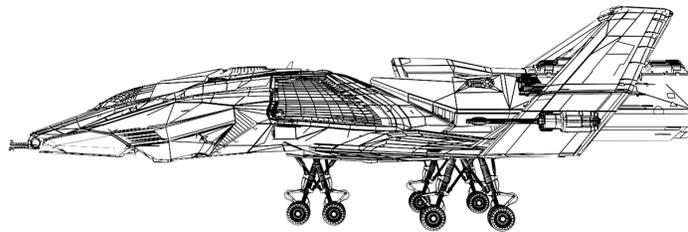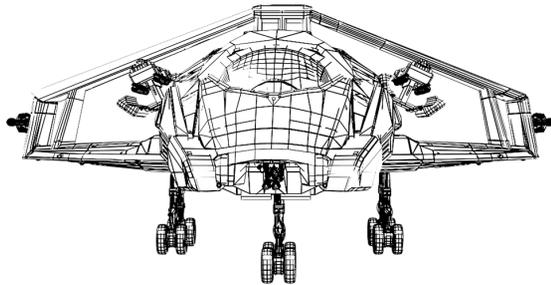
Race	Human
Role	Touring
Manufacturer	Origin Jumpworks
Length (m)	24
Beam (m)	16
Height (m)	7
Mass (kg)	20,000
Max Crew	1
Max Power Plant	3
Factory Power Plant	ACOM StarHeart III (2)
Max Engine (Primary Thruster)	1x TR4
Factory Engine	Hammer Propulsion HE 5.3 (TR3)
Maneuvering Thrusters	12x TR1
Factory Maneuvering Thrusters	10x Origin Scalpel Precision 2x Origin Omni Precision
Max Shield	3
Factory Shield	Gorgon Defender AllStop
Cooling System	(none)

LOADOUT

Class 2 Hardpoints	1x Klaus & Werner CF-007 Bulldog Repeater 2x A&R Omnisky VI Laser Cannon
Class 3 Hardpoints	2x Behring Marksman HS Missile Platforms (2x2 Behring Marksman HS Missiles)
Class 4 Hardpoints	(none)
Countermeasures	2x Origin Countermeasure Launchers

325a

The combat variant of the popular 300 series from Origin, the 325a was built to fight. Mostly commonly found in high-end security details, the 325a offers a complete weapon package, featuring a lethal array of gun hardpoints with a pair of inner-wing missile mounts, allowing a variety of possibilities to suit your combat needs. As most trained fighters will attest, the key to winning a fight isn't throwing a punch, it's being able to take one. Engineers increased the ship's ability to withstand punishment by adding thicker armor and a more powerful shield generator. While this buffed endurance decreases the ship's overall acceleration, pilots around the 'verse have praised the 325a as a robust dogfighter and an unrelenting opponent.

Race	Human
Role	Interdiction
Manufacturer	Origin Jumpworks
Length (m)	24
Beam (m)	16
Height (m)	7
Mass (kg)	20,000
Max Crew	1
Max Power Plant	3
Factory Power Plant	Wei-Tek VHT2 Plus (2)
Max Engine (Primary Thruster)	1x TR4
Factory Engine	Hammer Propulsion HE 5.3 (TR3)
Maneuvering Thrusters	12x TR1
Factory Maneuvering Thrusters	10x Origin Scalpel Precision 2x Origin Omni Precision
Max Shield	3
Factory Shield	Gorgon Defender ForceWall
Cooling System	(none)

LOADOUT

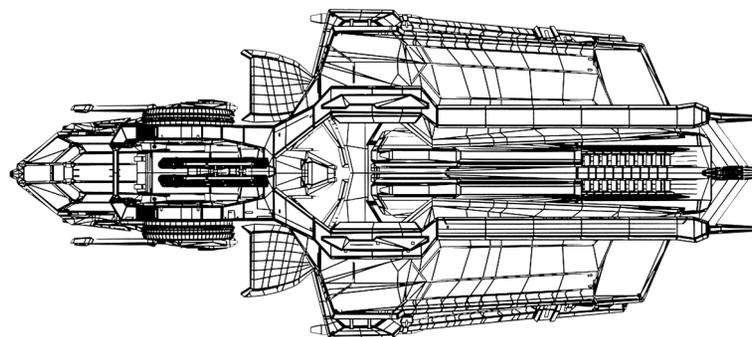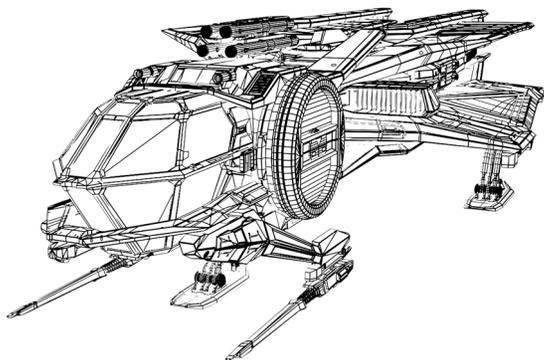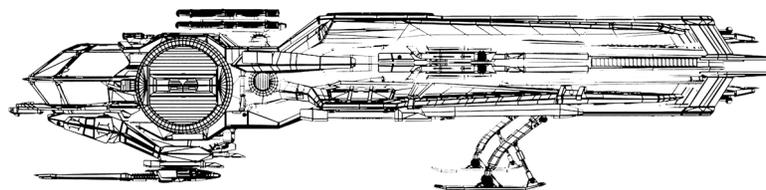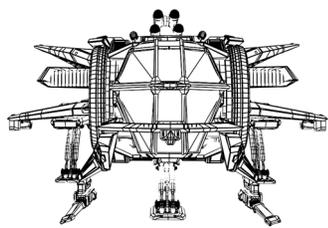|	
Class 2 Hardpoints	1x K&W Sledge II (2) 2x A&R Omnisky VI Laser Cannon
Class 3 Hardpoints	2x Missile Platforms (2x2 Talon Stalker IR Missiles; Size 3)
Class 4 Hardpoints	(none)
Countermeasures	2x Origin Countermeasure Launchers

350r

Developed by their multi-Cup-winning Racing Team, ORIGIN released the 350r as the dedicated racing model of their 300 series. Offering more protection and offensive options than the M50, the 350r is a natural and devastating competitor in Blitz class races, while the twin Hammer Propulsion engines redefine the nature of speed in a spaceship. However, operators would be ill-advised to use the 350r in a straight-up brawl. Although it's capable of withstanding more punishment than the M50, they should still utilize the 350r's speed to engage in hit-and-run attacks, choosing the time and angle of their attacks.
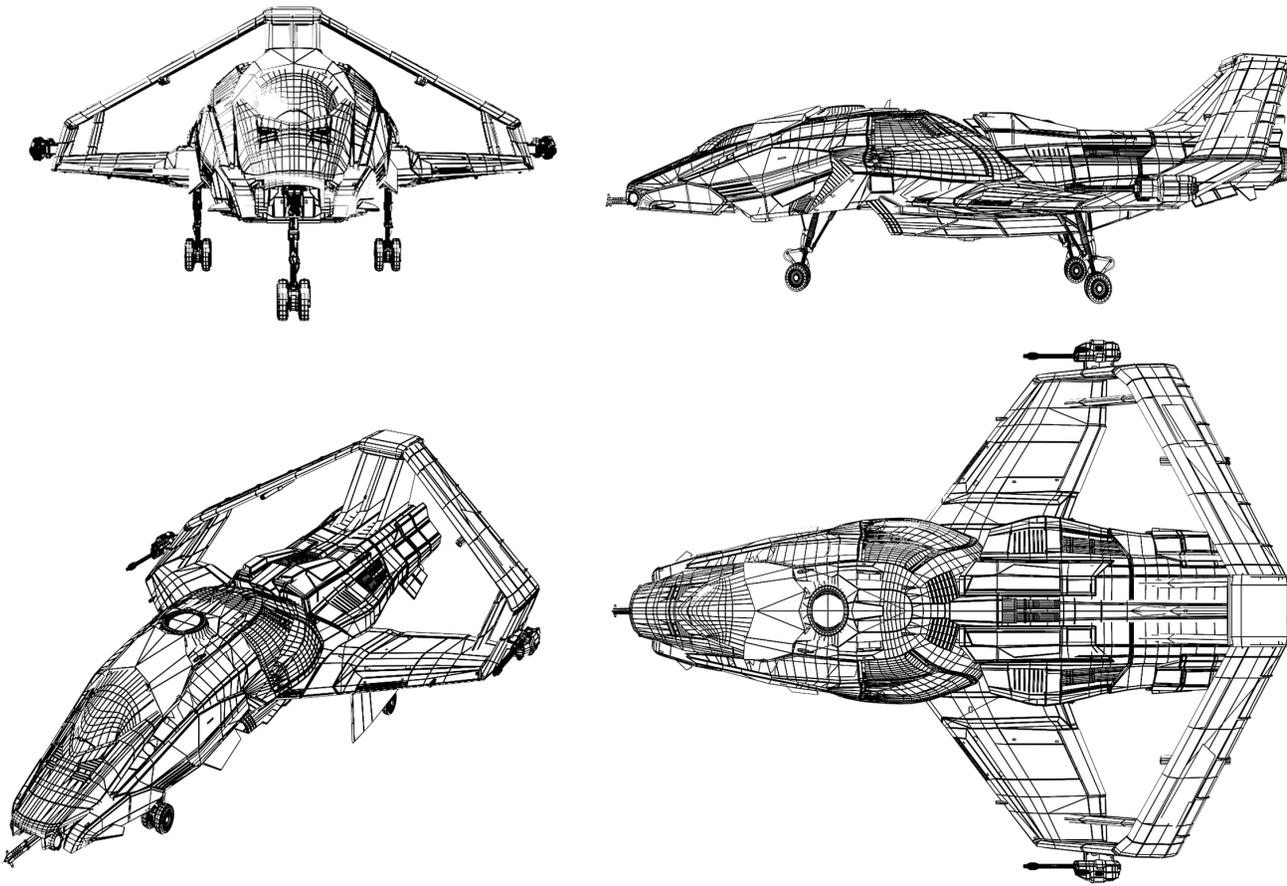
Race	Human
Role	Racing
Manufacturer	Origin Jumpworks
Length (m)	24
Beam (m)	16
Height (m)	7
Mass (kg)	21,000
Max Crew	1
Max Power Plant	3
Factory Power Plant	ACOM StarHeart IV (2)
Max Engine (Primary Thruster)	2x TR4
Factory Engine	2x Hammer Propulsion HM 4.3 (TR3)
Maneuvering Thrusters	12x TR1
Factory Maneuvering Thrusters	10x Origin Scalpel Precision 2x Origin Omni Precision
Max Shield	3
Factory Shield	Gorgon Defender AllStop
Cooling System	(none)

LOADOUT

Class 1 Hardpoints	2x A&R Omnisky VI Laser Cannon
Class 2 Hardpoints	1x Klaus & Werner CF-007 Bulldog Repeater
Class 3 Hardpoints	(none)
Class 4 Hardpoints	(none)
Countermeasures	2x Origin Countermeasure Launchers

Aurora MR

RSI's Aurora has enjoyed success as an affordable, multirole civilian ship and can be found in most corners of the UEE. Its range of options and general versatility make it an ideal starter ship for new pilots as well as aspiring haulers and local law enforcement. While all Aurora have a smaller target profile [than the 300i and Hornet], the offensive and defensive capabilities will vary based on the model and operator's choice in loadout. In short, the discerning combatant would be wise to not discount the small modular ship as a threat until he knows exactly what he's dealing with.

Race	Human
Role	Interdiction
Manufacturer	RSI
Length (m)	18.5
Beam (m)	8.3
Height (m)	4.1
Mass (kg)	7,550
Max Crew	1
Max Power Plant	2
Factory Power Plant	Alliance Startech KS-9 Enhanced (1)
Max Engine (Primary Thruster)	1x TR3
Factory Engine	Dragon STC Red (TR3)
Maneuvering Thrusters	6x TR1
Factory Maneuvering Thrusters	6x KDK TM-4 Slider (TR1)
Max Shield	2
Factory Shield	Seal INK-1 (S1)
Cooling System	J-Span Omni-Cool Reduction Bar

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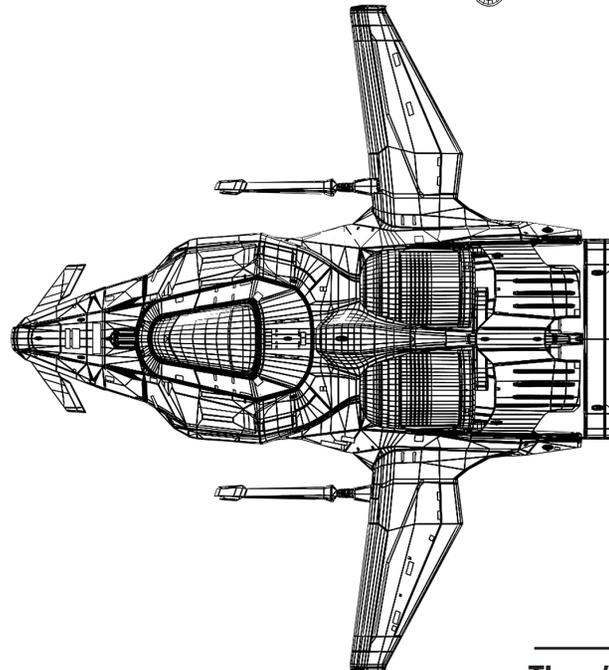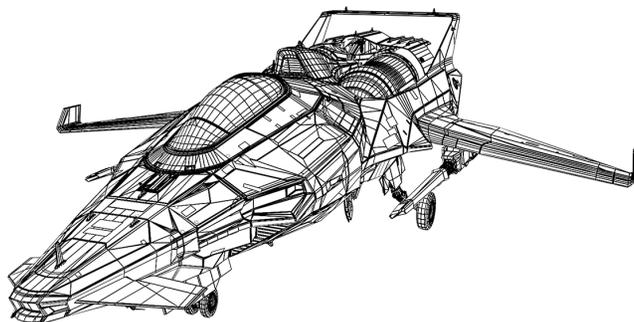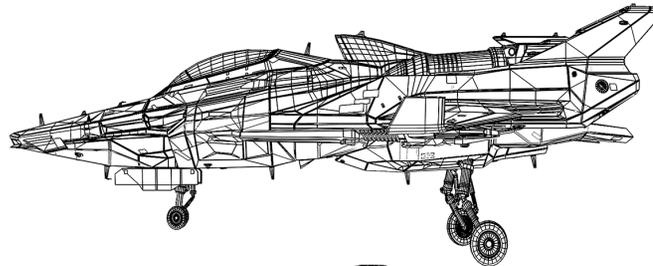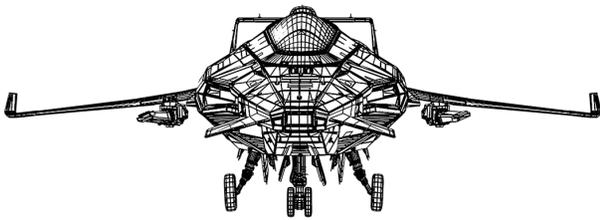|	
Class 1 Hardpoints	2x Behring M3A Laser Cannons
Class 2 Hardpoints	(none)
Class 3 Hardpoints	1x Behring Marksman HS Missile Platform (1x4 Behring Marksman HS Missiles)
Class 4 Hardpoints	(none)
Countermeasures	2x RSI Countermeasure Launchers

Hornet F7C

In the 28th century, Anvil Aerospace unveiled their prototype Hornet as a replacement for the carrier-based fighters in the UEE Navy. Over the next two hundred years, the Hornet and its variants have effortlessly handled a myriad of operational duties from assault/interdiction to defense to recon, making it one of the most versatile ships in active service. Some have criticized the military Hornet for their inability to perform long-range missions, but Anvil has repeatedly claimed that redesigning the ship to accommodate that role would compromise its immediate applications. Regardless, the UEE High Command have entrusted the Hornet as their frontline attack dogfighter and they seem unlikely to change their mind anytime soon.
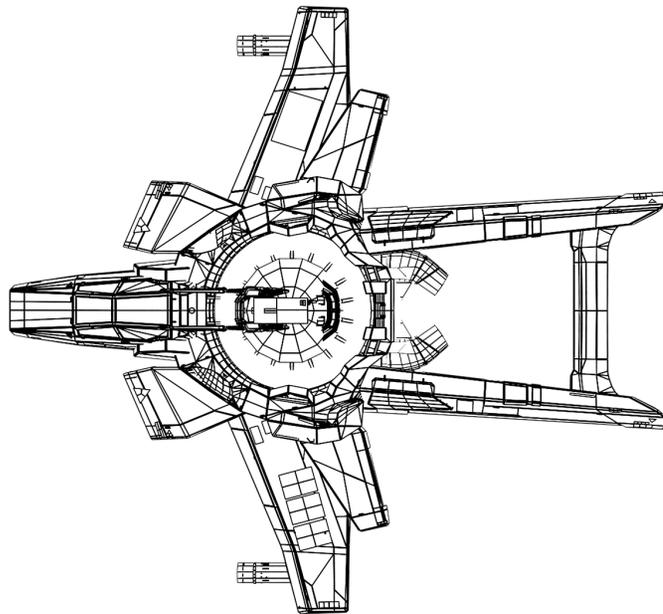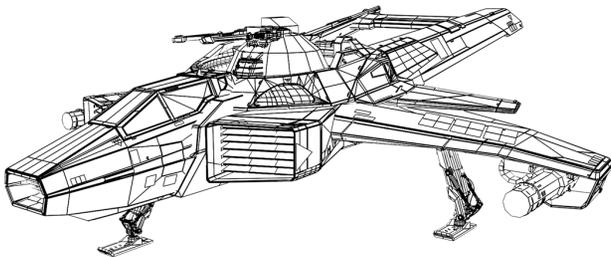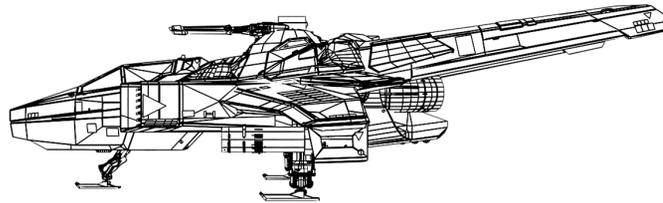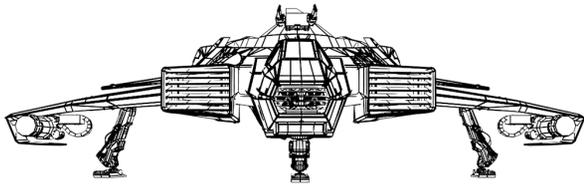
Race	Human
Role	Civilian Close Support
Manufacturer	Anvil Aerospace
Length (m)	22.5
Beam (m)	21.8
Height (m)	5.3
Mass (kg)	21,949
Max Crew	1
Max Power Plant	3
Factory Power Plant	Lightning Powerbolt (2)
Max Engine (Primary Thruster)	1x TR4
Factory Engine	Hammer Propulsion HM 4.3 (TR3)
Maneuvering Thrusters	8 x TR2
Factory Maneuvering Thrusters	4x Anvil Flex MK2 4x Anvil Joint MK2
Max Shield	4
Factory Shield	Gorgon Defender AllStop FR
Cooling System	

LOADOUT

Class 1 Hardpoints	(none)
Class 2 Hardpoints	2x Gallenson Tactical Mantis GT-220
Class 3 Hardpoints	2x Behring Marksman HS Missile Platforms (2x4 Behring Marksman HS Missiles)
Class 4 Hardpoints	1x B&R Hornet Ball Turret (2 Klaus & Werner CF-007 Bulldog Repeaters)
Countermeasures	2x Anvil Countermeasure Launchers

M50

"Catch me if you can" seems to be the challenge thrown down by M50 pilots everywhere. Crafted by Origin with years of racing know-how, the M50's lithe frame presents the smallest of targets while still managing to pack a punch, albeit a small one. Powered by massive twin Hammer Propulsion HM 4.2 engines, the M50 carries a light but comprehensive weapons and defensive package. Not to be underestimated in a fight, this nimble craft gives a whole new meaning to the phrase "run and gun." The M50 counts on speed and maneuverability, not armor, to see it through battle.
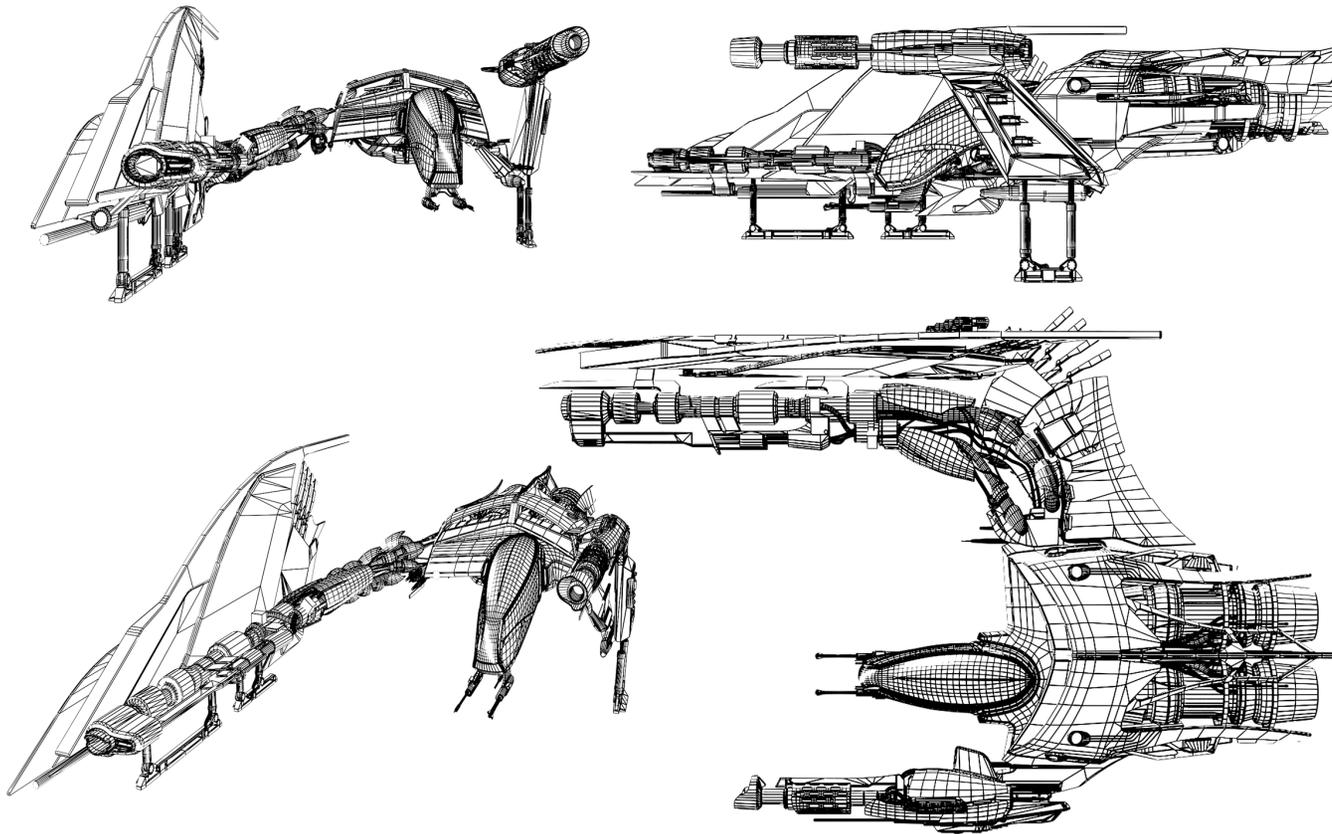

Race	Human
Role	Racing / Interception
Manufacturer	Origin Jumpworks
Length (m)	11
Beam (m)	10
Height (m)	3
Mass (kg)	12,000
Max Crew	1
Max Power Plant	3
Factory Power Plant	2x ACOM StarHeart II (1)
Max Engine (Primary Thruster)	2x TR2
Factory Engine	2x Hammer Propulsion HM 4.2 (TR2)
Maneuvering Thrusters	12x TR1
Factory Maneuvering Thrusters	10x Origin Scalpel Precision 2x Origin Omni Precision
Max Shield	3
Factory Shield	Gorgon Defender AllStop FR
Cooling System	2x Wen/Cassel ST-Arc A

LOADOUT

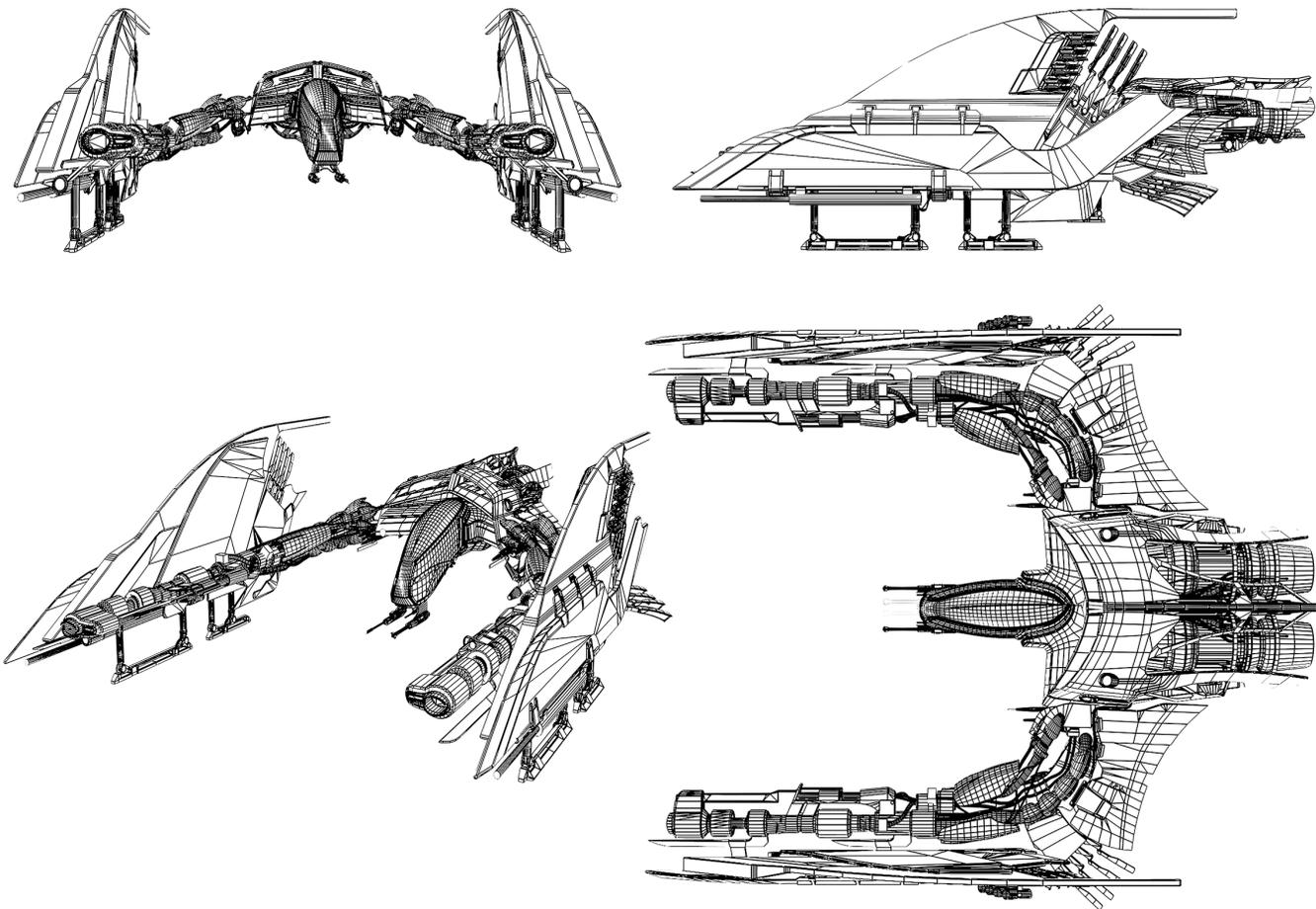|	
Class 2 Hardpoints	2x Behring M3A Laser Cannon
Class 3 Hardpoints	4x Talon ASIM-20/c Stalker I
Countermeasures	2x Origin Countermeasure Launchers

Scythe

The face of the enemy. Vanduul Scythes are singularly focused in their design. There is not a single allowance for comfort, cargo or anything that would dilute the ship's function as a dedicated dogfighter. UEEN combat assessments classify the Scythe as an agile, resilient opponent with both light and heavy weapons. To many, it seems that the Vanduul built the ship with mostly strengths and few weaknesses, but the real discerning factor in defeating the Scythe lies with its pilot. A ship is, after all, simply a tool. It's the operator who dictates its level of effectiveness.

Race	Vanduul
Role	Combat
Manufacturer	Unknown (Clans)
Length (m)	30.8
Beam (m)	17.8
Height (m)	8.5
Mass (kg)	29,387
Max Crew	1
Max Power Plant	1
Factory Power Plant	Unknown (Clans)
Max Engine (Primary Thruster)	2x TR4 thrusters
Factory Engine	Unknown (Clans)
Maneuvering Thrusters	2x TR2 fixed retro thrusters 2x TR2 joint thrusters 8x TR1 joint thrusters 4x TR1 vector thrusters
Factory Maneuvering Thrusters	Unknown (Clans)
Max Shield	2
Factory Shield	2
Cooling System	2x spoilers on body structure

LOADOUT

Class 1 Hardpoints	1x IM Neutron Cannon 1x IIG Heavy Plasma Cannon 2x Laser Cannon
Class 2 Hardpoints	(none)
Class 3 Hardpoints	1x Scythe Missile Platform R (1x4 Vanduul HS Missiles) 1x Scythe Missile Platform L (1x3 Vanduul HS Missiles)
Class 4 Hardpoints	(none)
Countermeasures	2x Countermeasure Systems

Glaive

A long-rumored version of the iconic Scythe fighter, the UEEN-designated Glaive has now appeared in a variety of systems. Initially attributed to one of the more notorious Vanduul aces, military intelligence has confirmed that there are indeed multiple versions of the symmetrical fighter in a number of clans. Analysts theorize that only the top pilots are given these powerful and resilient spacecraft, indicating that it may even be a recognition of rank within the Vanduul clans. Pilots are advised to exercise extreme caution should they encounter a Glaive and its pilot.

Race	Vanduul
Role	Combat
Manufacturer	Unknown (Clans)
Length (m)	33.3
Beam (m)	20.1
Height (m)	8.5
Mass (kg)	31,000
Max Crew	1
Max Power Plant	1
Factory Power Plant	Unknown (Clans)
Max Engine (Primary Thruster)	2x TR4 thrusters
Factory Engine	Unknown (Clans)
Maneuvering Thrusters	2x TR2 fixed retro thrusters 2x TR2 joint thrusters 8x TR1 joint thrusters 4x TR1 vector thrusters
Factory Maneuvering Thrusters	Unknown (Clans)
Max Shield	2
Factory Shield	2
Cooling System	2x spoilers on body structure

LOADOUT

Class 1 Hardpoints	2x IIG Heavy Plasma Cannon 2x Laser Cannon
Class 2 Hardpoints	(none)
Class 3 Hardpoints	1x Scythe Missile Platform R (1x4 Vanduul HS Missiles) 1x Scythe Missile Platform L (1x4 Vanduul HS Missiles)
Class 4 Hardpoints	(none)
Countermeasures	2x Countermeasure Systems

A&R Omnisky VI Laser Cannon

Damage: Medium

An upgraded version of their already impressive series V laser, the latest in Omnisky's line manages to charge quickly, impact a wide variety of energy fields and armor types, and hit "clean."

Broad & Rabiee Hornet Ball Turret

Class 4   **Damage: per mounted weapons**

With advanced hydraulics and an integrated targeting interface, the turret offers a wide arc of protection. Experienced pirates will plan their approach based on the turret's arc of fire.

K&W Sledge II Mass Driver Cannon

Damage: High

While the Sledge II can penetrate deeply through most shields, it comes at the cost of magazine space. Frequent reloading should be accounted for when utilizing this mass driver cannon.

Behring M3A Laser Cannon

Damage: Medium

One of the first Behring designs to be made widely available to the public, this laser has been depended on by generations of civil and military pilots for its consistent efficacy.
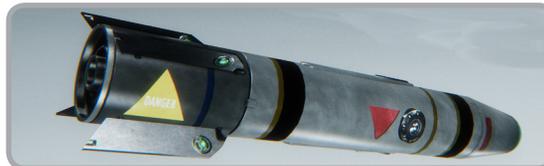
Gallenson Tactical Mantis GT-220

Damage: Low

A hydraulically-driven hard ammo cannon, the 220 features an extremely high rate of fire that compensates for its reduced range.

Talon Stalker I IR Missile

Damage: Medium

Although the detailed optical tracking results in an increased lock time over other missile types, Stalker IR are much more difficult to shake once they have found a target.

Behring Marksman HS Missile

Damage: High

With the addition of Behring's signature thermo guidance system, the Marksman heatseeker has earned a reputation for its ability to track all but the lowest signatures.

K&W CF-007 Bulldog Repeater

Damage: Low

No one has engineered a laser that does the kind of damage that a neutron gun or a kinetic weapon can inflict, instead CF series of laser repeaters relies on an alternate solution: deliver as many hits to a wide area as quickly as possible.

Scythe Laser Cannon
Imperial Designation: WEAK

A capable weapon that appears to have been based on a very early Xi'an design. While not particularly noteworthy, it is not to be ignored.

Scythe IIG Heavy Plasma Cannon
Imperial Designation: WRATH

Vanduul technology in the field of plasma weapons is significantly beyond what the UEE has been able to reverse engineer from captured ships. The plasma will stick to ship hulls and deliver devastating damage as it burns through armor and plating.

Scythe IM Neutron Cannon
Imperial Designation: WAR

Neutron guns have greater damage potential than lasers, but reduced ranges; their slow projectile velocity making them difficult to effectively use against more nimble fighter craft.

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ORIGINAL SYSTEMS

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There's more white-knuckle flying on the way with the first *Arena Commander* expansion, the **Avenger Mission Pack**. Get behind the stick of a fabled Aegis Avenger and experience firsthand why this 28th-century classic is still beloved by the Advocacy and criminals alike.