ASTRA INTERSTELLAR SOLUTIONS
Involuntary Employee Training Guide

Series 6 Deep Surveying Vessel

Field Manual

Series 6 Deep Surveying Vessel Field Manual

Table of Contents

Your Incarceration

"One of the many lessons that one learns in prison is, that things are what they are and will be what they will be." – Oscar Wilde

Astra Interstellar has purchased your debt to society and welcomes you to join our growing company as an Involuntary Nebula Cartographer.

Astra Interstellar has over sixty years of experience manufacturing spacecraft for near-Earth operations. Now we're setting our sights towards the unknown! We are starting to map uncharted nebulae and stellar nurseries, looking to claim mineral resources. You have been assigned to Wayfarer Station V in the MG251 nebula. This will be your new home while you continue to pay your debt to society.

Wayfarer Station V has one living crewmember: and that's you. All the food and drink you need is stored in the commissary. You will be issued a Series Six Deep Surveying Vessel that is equipped with a space-folding Barr-Rivello hyperdrive and a P3000 artificial intelligence unit to facilitate its operation. The artificial intelligence unit is programmed to only facilitate space-folding between Wayfarer Station V and the MG251 nebula -- you will not be returning home until your debt to society is repaid.

Your job will be to use the S6-DSV to scan and map the nebula, noting the location of significant resources and facilitate their collection if safe. In Department of Corrections Memo C-130 Astra Interstellar has negotiated an agreement to pay 215 credits of your debt to society for every parsec you map, and additional credits for resources collected in accordance to Schedule C.

We encourage you to think of this service as an opportunity to develop new skills and improve yourself. Wayfarer Station E is not a prison; it's a secluded research installation. You are not a slave, you are our trusted employee. In fact, when you see how we reward hard work and impressive results...you might not want to go home!

Spacecraft Operations

"When you're in a spacecraft, you need to know what things you can touch and what things you shouldn't touch!" – Buzz Aldrin

T he S6-DSV has eight rooms: five viewing rooms located on the ring-section, all with the same core elements within them (with a few exceptions), a scanning room, a hyperdrive room and a reactor room. The player can change between these rooms using the number keys, or the map tab located on the bottom right of the screen.

The Viewing Rooms

In the viewing rooms, the most important element is the **power allocation monitor**. From this monitor, you can allocate battery power to one of eight ship systems in desirable quantities. Likewise, ship systems can be allocated back to the battery and moved to other systems. The eight systems include, in order:

- The lasers in each of five viewing rooms. More power allocated results in a more deadly beam;

- The ship's deep space scanner. More power allocated results in nearby sectors being scanned faster;

- The ship's hyperdrive. More power allocated reduces the time needed for the hyperdrive to cool down enough to be used again;

- The ship's onboard targeting computer. More power allocated increases the speed of the targeting reticle to catch up with the cursor when firing weapons.

Every viewing room contains a primary computer console that governs local ship systems for that room. Shipwide assets like communications buoys and experimental materials can be deployed from the deploy asset button on the left side of that console.

Rotating the ship activates thrusters located on the yaw axis in order to ensure that room inaccessibility does not impede visibility, at the cost of one unit of battery power.

System drivers are also accessible from this console. The corruption of certain system drivers could potentially pose a danger to the ship.

Lasers

Ultimately, you are going to need to fire your ship's lasers at some point. You fire your lasers by clicking once on the joystick in the viewing room, aiming the reticle, and firing on your target.

The power allocation monitor is essential for your lasers to perform as desired. Your targeting reticle will move more quickly if a lot of power is allocated to the onboard targeting computer from the power allocation monitor, and likewise, your lasers will be significantly more powerful if a lot of power is allocated to the firing laser from the same.

You will usually want to add as much power as you can spare, with the one exception being asteroid mining, which is covered later in this manual.

After four shots from a given laser, you will lose one power unit from the power allocation monitor. This unit can be recovered from the ship's battery. The ship's battery will need to be recharged from time to time, and this is explained later in the manual under The Reactor Room.

Lasers can be fired in one of two configurations -- steady frequency and modulated frequency. They are changed from the laser configuration panel, typically located near the primary computer console. There are two buttons at the at the top of this panel. Creatures, asteroids and spaceborne objects respond differently depending on the type of beam used -- see the Bestiary and Rare Minerals sections of the manual for details.

Regularly using the lasers will cause them to become misaligned and inefficient, shown by the two needles on this panel. An efficient laser has the smaller needle close to the 0 mark. An inefficient laser has the smaller needle closer to -2.0 or +2.0. Firing misaligned lasers is very dangerous and can cause serious damage, so you will have to keep an eye on these needles periodically. The process for doing this is detailed later in this manual under Recalibrating Lasers.

Over time, your lasers may also receive a power surge as a result of inefficient power flow. You may need to clean and/or replace power nodes to decrease the frequency of these power surges. The process for doing this is detailed later in the manual under Regulating Power Flow.

SUMMARY

- **Make sure you have a lot of power allocated to the lasers and targeting**, from the power allocation monitor in the viewing room. You lose a power unit with every four shots.

- **Lasers come in two types: steady and modulated.** You can switch between them from the **laser configuration panel**.

- **Lasers need infrequent maintenance, in the form of Recalibrating Lasers and Regulating Power Flow.**

The Scanning Room

The scanning room contains the technical equipment responsible for the operation and maintenance of the deep space scanner, a cargo hold and the ship's battery.

The Hyperdrive Room

This room holds the hyperdrive and some of the ship's integral life support systems including the radiation scrubber and ventilation interface.

The Reactor Room

This room contains the ship's power reactor, power-related system and depressurization controls. For the most part, the two things you'll be doing the most in this room is refuelling the reactor and identifying the source of power shorts in viewing rooms.

To refuel the reactor, take fuel from the fuel box, open the round "reactor door" on the reactor in the middle of the room, and feed the fuel box into the reactor. Close the door when you're done, or you'll start to flood the room with radiation -- bad times!

EXPERT'S NOTE
Additional reactor fuel can only be ordered from Wayfarer Station V between missions and takes time to be delivered. We recommend always taking the opportunity to order fuel whenever possible.

Life Support Systems

There are four immediate threats that can interfere with pilot safety: radiation, atmosphere, temperature and hull integrity.

All rooms contain a radiation detector. They indicate the accumulation of radioactive particles in that room. Over time, consistent exposure to radioactive particles will have negative health effects.

All rooms are self-contained but share an operating ventilation system. A crack in the window of a room is only going to affect that room, but a failure in the ventilation systems could affect multiple rooms. Every room has an atmosphere detector to alert you to a crisis.

The nebula is very cold. The reactor is very hot. Onboard climate control systems will keep the pilot from being too cold or too hot.

When any of these life support systems fail, the result can be devastating for you. Failures in these systems are repaired by closely following the Troubleshooting steps in this manual.

In addition to the above, severe impacts can damage or destroy your ship. Every room has a hull integrity monitor to inform you how close your ship is to destruction. Hull repairs are only possible at Wayfarer Station V.

Troubleshooting Guide

"The time to repair the room is when the sun is shining." – John F. Kennedy

The industrious cartographer must be prepared to conduct field repairs when ship systems do not perform as intended. To help with these repairs, we have detailed common ship failures below, along with the critical steps to address them in the field.

This manual assumes you have certain materials in your possession before you begin, detailed in the "needed" tabs by every repair. In all cases, needed items are located either in lockers (every viewing room plus the scanning room has a locker) or in the toolbox in the hyperdrive room, or is in use with another piece of equipment (universal controller boards and quantum cabling, for example).

Power Outage

NEEDED

Cable Repair Kit

Viewing rooms may experience a sudden loss of power, making weapons, local radar and other major systems inoperable. Power outages in viewing rooms are definitely among the most annoying issues to occur on the ship, but fortunately, they are not lethal if unattended.

REPAIR PROCEDURE

1. Check if lights are blinking on the **power relay box** in the affected viewing room.

2. If they **ARE NOT**, jump ahead to step 10, otherwise continue.

3. Check if there is a scorched cable inside then go to the **power diagnostic panel** in the **reactor room**. Click on the affected viewing room number.

4. One of the wires should appear to be dead or damaged according to the panel display. Note the color.

5. Go to the circuit breaker and ensure that the breaker for the affected viewing room is **OFF**.

6. Go back to the affected viewing room and open the power relay box.

7. Drag and drop the wire cutters (next to the window that has just opened) over the dead or damaged wire to remove it.

8. Click on the color of that wire that you noted, then drag a new cable from one newly exposed port to the other. A new wire will pop into place.

9. Go to the circuit breaker in the reactor room and set the breaker for the affected viewing room to **ON**.

Scanner Failure

N E E D E D
Universal Controller Chip
(some cases)

REPAIR PROCEDURE

1. If the scanner stops working, it will display an error code on the screen in the scanning room.

2. Based on the following error codes, the following steps should be taken to repair the deep space scanner:

a. **CODE 102** - Terminal motherchip failure. You will need a universal controller chip. Open the scanning hardware located near the deep space scanner monitor, carefully remove the malfunctioning universal controller chip and replace it with an identical part.

b. **CODE 103** - Fragmented system disk. Select **DEBUG**, then **INITIATE** to run disk defragmentation process.

c. **CODE 104** - Software virus. Select **SYS_ADMIN**, then **ANTIVIRUS** to run the antivirus process.

d. **CODE 105** - Terminal failed to cycle correctly. Select **RESET**, then **RESET_TERMINAL** to clear memory.

e. **CODE 106** - Terminal motherchip failure. You will need a universal controller chip. Open the scanning hardware located near the deep space scanner monitor, carefully remove the malfunctioning universal controller chip and replace it with an identical part.

f. **CODE 107** - Calibration Error. Select **CONTROL**, then **CALIBRATE** to recalibrate the spectroscope.

g. **CODE 410** - Array Boundaries Exception. Select **DEBUG**, then **SCAN** to run retool disk parameters.

h. **CODE 500** - BIOS Corrupted. Select **SYS_ADMIN**, then **BIOS_RESTORE** to revert to factory settings.

i. **CODE 501** - Connection Not Detected. Select **RESET**, then **RESET_CONNECTION** to reconnect terminal.

Stalled Hyperdrive

NEEDED

Quantum Cabling

(some cases)

There are two reasons the hyperdrive might not be working and they are pretty easy to diagnose.

REPAIR PROCEDURE

1. First, go to the **hyperdrive monitor** in the hyperdrive room. If one cube is colored red and spinning at a different rate than the white cube, you will have to speed up or slow down the cube's rotation until the two spinning cubes are perfectly aligned.

2. If the cubes are perfectly aligned but pressing the hyperdrive button is resulting in the AI forbidding departure, the AI is malfunctioning.

3. Go to the scanning room and connect the quantum cabling from the scanning computer to the AI Server.

4. From the scanning computer, click on the **AI Interface button**.

5. Follow the logic paths by clicking on the squares until you find the path that is broken. Click repair and the AI will be repaired.

Dead Battery

N E E D E D

Reactor Fuel

While recharging the battery is more of an act of maintenance than a legitimate malfunction, however it is listed here for convenience. If you are receiving alerts that the battery is "draining power", you should go to the Draining Battery troubleshooting entry later in the manual instead.

REPAIR PROCEDURE

1. Go the reactor room and take fuel from the fuel box.

2. Open the round "reactor door" on the reactor in the middle of the room, and feed the fuel box into the reactor.

3. Close the door when you are done, or you'll start to flood the room with radiation.

Jittery Reticle

N E E D E D

Nothing

REPAIR PROCEDURE

1. Go the reactor room and flip all the circuit breakers off and on again.

Corrupted Reticle

N E E D E D

Nothing

Sometimes, the reticle will display incomplete, inaccurate or bizarre information over the target.

REPAIR PROCEDURE

1. Ensure no power is allocated to the targeting systems.

2. Go to any viewing room and access the primary console.

3. Press the **Drivers button** and select the **targeting submenu**. If a driver is displaying an error, it should be suspended and reinstalled.

Shield Failure

N E E D E D

Nothing

If the shields in a viewing room are no longer responding, you will need to reset the shield harmonics. This is a relatively simple procedure.

REPAIR PROCEDURE

1. Note the original and desired shield harmonic colors when the error occurs.

2. Go to the reactor room and click on the shield interface until its monitor turns the desired color.

Low Atmosphere

N E E D E D

Duct Tape (some cases)

Wrench (some cases)

A loss of ship atmosphere is usually a result of ventilation malfunction or a window breach in a viewing room. It can also be a result of a fire, in which case you should review the Fire troubleshooting procedures.

REPAIR PROCEDURE

1. To repair a window breach, you will need to apply duct tape liberally to the crack until it is sealed. A more permanent repair can be conducted from Wayfarer Station V.

2. To correct a ventilation malfunction, go to the hyperdrive room and access the **hyperdrive monitor**.

3. Select the **Ventilation button**, click on the red fan icon and select **Diagnose**.

4. If the alert icon is replaced with a gear-and-wrench icon, it means there is a mechanical failure. If the alert icon is replaced with a computer chip icon, it means there is a software failure.

5. To address a mechanical failure, you will need a wrench from a locker or a toolbox.

6. Go to the affected room and use the wrench on the ventilation fan until it operates again.

7. To address a software failure, go to any viewing room and access the primary console.

8. Press the **Drivers button** and select the **ventilation submenu**. If a driver is displaying an error, it should be suspended and reinstalled.

Radiation

Radiation typically comes from one of four sources:

• The ship's reactor door was left open. In which case, it should be closed. (If stuck, you should hit it a few times with a wrench until it becomes unstuck.);

• The ship's radiation scrubber has failed;

- You are carrying radioactive ores among your cargo and can choose to eject that cargo if the radiation proves to be too great;

- You are in a radioactive sector and should leave.

REPAIR PROCEDURE

1. To address a radiation scrubber failure, go to the hyperdrive room and open the radiation scrubber.

2. If the universal controller chip is damaged, you will need to find a replacement in a locker or toolbox.

3. If the universal controller chip is undamaged, try hitting the radiation scrubber with a wrench.

4. To purge any accumulated radiation (aside from what is being carried in cargo), go to the reactor room and select the **Pressurization Interface** from the temperature and pressurization monitor.

5. Click on the reactor room and select **Purge Radiation**. You will have ten seconds to leave the room.

Window Breach

NEEDED

Duct Tape

See Low Atmosphere, repair step 1.

AI Refusal to Comply

NEEDED

Quantum Cabling

If the AI is insisting to leave the sector immediately, or insisting to stay in spite of your instructions, the AI is malfunctioning. The means of repair is the same in either case.

See Stalled Hyperdrive, repair steps 3-5.

Draining Battery

If you are idle battery power is being drained, you should address this immediately so your fuel is not wasted. Go to the battery in the scanning room.

REPAIR PROCEDURE

1. Inspect the battery. If the universal controller chip is damaged, you will need find a replacement.

2. If the universal controller chip is not damaged, try hitting the battery with a wrench.

Yaw Control

If the ship is in an uncontrolled spin, you'll need to fire the counter-thrusters manually.

REPAIR PROCEDURE

1. Go to viewing room 4.

2. Unscrew the right panel.

3. Use the wrench to turn the valve to manually fire the counter-thrusters.

Cabin Temperature

You may discover some sections of the ship are too hot or too cold. Both issues can be dangerous and should be addressed immediately.

REPAIR PROCEDURE

1. From the monitor in the reactor room, temperature issues should be immediately apparent. A computer chip icon indicates a software failure. A wrench icon indicates a mechanical failure, and where it is located.

2. To address a software failure, go to any viewing room and access the primary console.

3. Press the **Drivers button** and select the **temperature submenu**. If a driver is displaying an error, it should be suspended and reinstalled.

4. To address a mechanical failure where a room of the ship is too cold, go to the affected room and use the screwdriver to remove the thermostat cover.

5. Replace the defective thermostat with the replacement.

6. <u>To address a mechanical failure where the ship is too hot</u>, go to the hyperdrive room and open the service panel.

7. If there is a coolant leak, it can be temporarily addressed with duct tape. Alternatively, the pipe can be completely replaced.

8. <u>To replace the pipe</u>, first turn off the coolant shutdown valve.

9. Use a wrench to remove the damaged pipe.

10. Put the replacement pipe in its place.

11. Turn the coolant shutdown valve again.

Cabin Fire

REPAIR PROCEDURE

N E E D E D

Fire Extinguisher (some cases)

1.   Smaller cabin fires can be addressed by using a fire extinguisher.

2. Larger cabin fires will require room depressurization. Go to the reactor room and go to the large monitor.

3. Select **Pressurization Interface** and depressurize the affected room. Note, depressurizing the room you are currently in will start a ten-second countdown to leave first. This is also an effective means to remove accumulated radioactive particles.

Routine Maintenance

"The major difference between a thing that might go wrong and a thing that cannot possibly go wrong is that when a thing that cannot possibly go wrong goes wrong it usually turns out to be impossible to get at and repair." – Douglas Adams

I n addition to ship repairs, your ship will need maintenance in the "down time" (which will be increasingly hard to come by) in order to keep it operating in the best of health. There are three straightforward maintenance activities that you should consider doing whenever you can.

Refueling the Reactor

See "Dead Battery" in the Troubleshooting section.

Regulating Power Flow

N E E D E D
Screwdriver
Rag
Upgraded power nodes (optional)

Your lasers draw power from battery reserves through a complex network of power nodes. Over time these nodes get dirty and need to be cleaned or replaced. Failing to do this will increase the likelihood of a POWER SURGE error when firing the laser. If you get a lot of these errors, it may be time to regulate your power flow.

1.   Each viewing room has its own power node network, located behind the left panel next to the console. You will need to use a screwdriver to access it.

2. Power flows from the particle accelerator, through eight nodes, to the laser capacitor. You control how much power flows through each node.

3. Over time, nodes become inefficient, transferring less power to the next.

4. The less power that makes it to the capacitor, the more likely a laser will fail to fire when triggered. Inefficient nodes can be cleaned with a rag.

5. Nodes may only receive a limited quantity of power at once before they fail.

6. This node limit also deteriorates over time.

7. You can route power around weak nodes, but sooner or later you will need to consider replacing them.

8. Upgraded nodes have perfect efficiency and a higher than normal maximum load.

9. Keeping a very efficient power flow may even save you the power cost of firing your lasers.

Recalibrating Lasers

Regularly using the lasers will cause them to become misaligned and inefficient, shown by the two needles in the laser configuration panel. An efficient laser has the smaller needle close to the 0 mark. An inefficient laser has the smaller needle closer to -2.0 or +2.0. Firing misaligned lasers is very dangerous and can cause serious damage, so you will have to keep an eye on these needles periodically. Slightly misaligned lasers are less powerful, but firing a laser that is very misaligned can destroy it.

1. In the laser calibration panel, if the small needle is too far away from the large needle, you may need to recalibrate it.

2. You need to manipulate the large needle so it is as close as possible to the small needle. Sometimes this means losing µHz, sometimes this means gaining µHz.

3. Look up the switch configurations below needed to made the µHz increase or decrease needed to make the large needle meet the small needle..


```
+0.5µHz        +1 µHz         +1.5 µHz        +2 µHz

-0.5µHz        -1 µHz         -1.5 µHz        -2 µHz
```
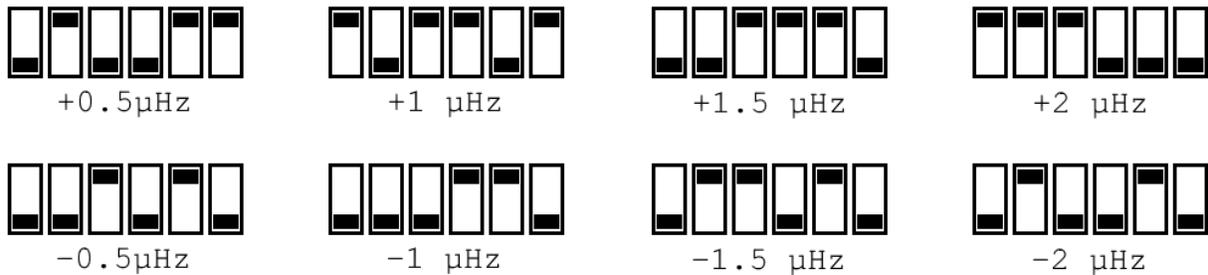
FIGURE 4.1 Laser recalibration table..

4. Flip the required switches needed to recreate that color configuration and realign your laser.

Mission Objectives

"Here is the test to find whether your mission on Earth is finished: if you're alive, it isn't." – Richard Bach

Astra Interstellar Solutions pilots may be tasked with a variety of mission objectives to advance our strategic agenda of mapping the MG251 nebula, identifying and collecting resources within, protecting our assets from the encroachment of local xenofauna and identifying points of interest. This guide will help you make sense of your mission objective, and provide pointers to ensure success.

Surveying Missions

Surveying missions are common and among the easiest to accomplish. Pilots should use their deep space scanner to scan a given number of sectors. Keeping the scanner fully powered will be essential, and pilots should be prepared to make multiple hyperspace jumps to fulfill the scanning requirement.

Where surveying missions also require that pilots "identify" a given mineral, they simply need to either positively identify that mineral on the deep space scanner (a scanner upgrade would be needed to accomplish this) or by visiting a sector with that mineral within.

Mineral Collection

The MG251 nebula contains several rare ores that have considerable value in terrestrial markets.

Cosmonite is a lightweight but sturdy metal has done much to reduce the costs associated with breaking free of Earth's gravitational field, though its rarity and price remains high enough to exclude utility within the automotive and aviation industries. Kreusocite is critical for the manufacture and maintenance of the Barr-Rivello space-folding hyperdrive. Lycanium and lycanium-alloy batteries are capable of storing incredible quantities of power produced from nuclear sources for future use. Yellow Davirite is a powerful, exciting metal that is so highly unstable that all terrestrial attempts to isolate it have failed.

Acquiring these resources is not only essential for Astra's continued dominance of the space logistics industry, but it will also provide your own spacecraft with unique advantages. Acquiring these resources requires a retrieval probe.

Once you are in the same location as a mineral deposit, you will need to review the in-game manual as the correct laser configuration to mine each given mineral changes with every playthrough.

From the manual, select Rare Minerals. Select your mineral and note the suggested laser configuration and power level. Then, configure your lasers according to the manual suggestion (steady or modulated) and configure your laser power according to the manual suggestion (one to five units of power). You can then safely shoot the asteroid to break it up.

From the viewing room local radar, select a mineral fragment and click send probe. Protect the vulnerable probe until it returns with the mineral fragment.

Some minerals are radioactive, and will constantly increase the ambient radiation in the ship.

SUMMARY

* **Mineral collection is only possible if you have unlocked a retrieval probe.** Retrieval probes are unlocked from the ship upgrades menu in Wayfarer Station V.

* **Check the laser type and strength before firing.** Otherwise you risk destroying the asteroid you're trying to collect.

* **Be careful of radiation.** Some minerals are radioactive, and will require radiation mitigation measures if you're going to hold onto them for a while. Minerals can be ejected into space at any time from the cargo manifest in the scanning room.

Deploy Communications Buoy

Astra Interstellar Solutions depends on communications buoys to transmit and receive signals from our spacecraft. You can help by deploying them in marked sensors.

After arriving at the sector, go to the Primary Console and select the Deploy Cargo button. Click on the Communications Buoy.

After deployment, buoys must be calibrated to work. Use quantum cabling to connect the scanner to the broadcasting system port. From the scanning computer, select Broadcasting. From the broadcasting menu, you will need to broadcast a calibration tone.

Experiment with the waveform, frequency, filter and resonance until the buoy starts to calibrate.
The buoy will light up when it is operational.

Compound Manufacturing

It is sometimes both cheaper and easier to manufacture what is needed in-situ, rather than have it shipped from light-years away. With this in mind, most Deep Survey Vessels are equipped with manufacturing equipment needed to synthesize certain high-demand compounds. When the demand presents itself for our logistics experts on Earth, we may ask cartographers like yourself to use the elements found naturally in the MG251 nebula to create compounds for facilities in demand.

All sectors in the nebula contain gaseous elements (typically hydrogen and helium), but we have noticed some sectors with unusual star formations have higher concentrations of more rare elements that will be needed in compound manufacture. We call those star formations, "mercurial stars" due to their unstable nature and peculiar composition.

To assess what elements can be acquired in a given sector, you must first go to the primary console in a viewing room, then select the Compound Manufacture button on the top right of the console.

Choose an empty canister and click the fill icon. The spectrographic analysis should tell you exactly what proportions of elements were collected in each canister. It is often prudent to collect a canisters in different sectors to maximize possible compound products.

By clicking on the Manufacturing button, you can review the total volume of each element collected, and select new compounds to manufacture if you have the requisite quantity of each element. To fulfil mission requirements, any quantity of a demanded compound will suffice.

Xenofauna Culling

Some missions call on the pilot to eliminate a certain number of creatures, or a certain number of creatures of a certain type (see the Bestiary below). Creatures are more likely to appear in sectors where there have been sightings on the map.

EXPERT'S NOTE
Upgrading your deep space scanner so it can remotely identify the types of creatures in other sectors makes these missions significantly easier.

Xenofauna Study

Some missions call on the pilot to take photographs of creatures or record the sounds they make. In the top left corner of the viewing room window there is a button to switch between the lasers, the camera and the microphone. In the top right corner of the screen there is a button to switch between regular and infrared vision (if the mission demands it). The whole creature must be in the camera frame for photography

missions. To record creature sounds, you must select the directional microphone and hold the reticle over the creature patiently until it makes a sound. The reticle must stay on the creature for the duration of the sound for it to be recorded.

Some particularly grizzly missions may call for retrieval of specific organs from creatures. In this case, creatures must be culled and you must be fortunate enough for the appropriate organ to appear intact in the debris. They are recovered using a retrieval probe, much like minerals. (See Mineral Collection, above.) Like minerals, creature organs can provide powerful benefits to your spacecraft so long as you are not too squeamish.

EXPERT'S NOTE
Creature calls are actually saved on your ship in the scanning computer. By connecting the scanning computer to the broadcasting port (using quantum cabling), you can broadcast sounds you have recorded for…*interesting* effects.

Investigate Anomaly

Occasionally, pilots will be called to a place of interest that even we don't fully understand. Keep your guard-up and be prepared for anything to happen if these missions are selected.

Bestiary

"Look deep into nature, and then you will understand everything better." – Albert Einstein

As you discover new creatures, the in-game bestiary is updated with information about them. As you use different weapon configurations on them, that bestiary is updated with insight into how effective that configuration is. Creature strengths and weaknesses to different weapon configurations change with every playthrough and must be reviewed through the in-game manual. However, this physical manual can give you some additional insights for each creature, and some seasoned advice.
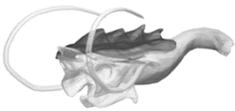
Armored Knasher

Highly territorial, Armored Knashers have two long tentacles that it uses to grasp prey, ward off threats and draw food into its mandibles. They are apex predators that will hunt several other species. They have soft vulnerable zones, but also sport a lot of laser-resistant armor.

Astral Reaver

Reavers are curious, but typically aloof to the presence of our spacecraft until any deep-scanning occurs, after which point the larger members of the species go into a frenzy, using thick tentacles inside their jaws to swat at the intruder, packing a very powerful punch. Pilots who have survived violent Reaver encounters have suggested that cutting power to the ship's scanners may have reduced the overall aggressiveness of the creatures. They have a soft spot on the underside of the beast between the head and first two flippers.
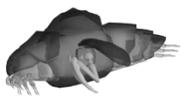
Chittareph

These creatures have chitinous shell around its body to help it blend in with nearby asteroids. They are indistinguishable from those asteroids until they are hit with laser fire, and that

chininous shell provides strong armor against laser attacks. Hitting a Chittareph where it's vulnerable will be a challenge, but the good news is the creature does not appear to be aggressive unless provoked.

Clubberlang

The Clubberlang, affectionately named by some of Astra's more imaginative biologists, is a more aggressive nebula-dwelling species. Propelled by its tentacle appendages, the Clubberlang can swiftly encircle its prey, making forceful impacts against joints and points of weakness with claws made of an unidentified chitin. They're armored, they hunt in packs of two or three, and they're very dangerous.

Goliath

Goliaths have a thick carapace surrounding their heads that they will use to ram spaceships that have entered their territory. Some have hypothesized that they subsist on spaceborne minerals rather than other nebula fauna, but we have yet to substantiate this theory with evidence. Pilots should exercise caution in the collection of rare minerals, as activity in these regions has been known to provoke territorial behavior.

Great Maw

The Great Maw will be completely disinterested in your ship, but their very existence will send all the fauna around it into a complete frenzy, increasing their aggressiveness. They also can teleport themselves freely around the sector if they feel threatened.

Mantipus

This bell-shaped creature appears to be a lower-order scavenger, that latches onto the window and grinds against it with its teeth. We don't know if this behavior is driven by territorialism or hunger. Activating the shields appears be highly effective in driving it off the hull.

Obnubilate

The meaning of obnubilate becomes clearer when you know that its ancestors are the Latin terms ob- (meaning "in the way") and nubes ("cloud"). The Obnubilate is an amorphous entity, or possibly a combination of entities, whose presence can only be identified in the infrared spectrum. It does not have a defined skeletal or nervous system, but it does fire sharp projectiles (from where, we don't fully understand) at perceived threats. It reacts to lasers the same way everything else does.

If you're under attack and can't see the creature, try switching to IR view and look for a heat signature. Visible light passes right through an Obnubilate, but they do still generate a heat signature.

Spore Mine

Unlike many of the other fauna, this one appears to be more fungal in complexity and has not yet demonstrated any form of intelligence. It has a mouth so presumably it is capable of eating, but we have no idea what its diet is composed of. We theorize that it might be a scavenger that consumes necrotic matter, but this is just a guess from limited information. They're usually found in clusters and when other creatures get too close, they defend themselves with omnidirectional projectile bone spikes that appear to be camouflaged either behind or underneath its skin. Pilots are advised to avoid getting accidentally caught in the crossfire -- these bone spikes are typically both large, dense and sharp. Engaging the spore mine from a distance should be safer as they have only been observed to eject these spikes as a reaction to proximity.

Tarbat

The Tarbat is a fast-moving ranged attacker with a highly corrosive acidic spit that it can project from a distance. This substance can obscure your vision from that window for some time, making it harder to see the Tarbat, or other threats.

Zephryling

They appear to exist low on the food-chain in the nebula, and have shown little interest in spacecraft until the hyperdrive starts to power up. Could it be that these creatures are sensitive to the gravitational distortions created by the Barr-Rivello drive? This much we do know -- when they're agitated, they emit an extremely powerful electromagnetic pulse that can disrupt ship operation. We advise shutting down the hyperdrive immediately when first observed to see if that affects their behavior. They seem highly coordinated, travelling like schools of fish.

Driver Reference Guide

FAN.1.010_SYS.dvv - Ventilation driver for the Viewing Room One fan.

FAN.1.011_SYS.dvv - Ventilation driver for the Viewing Room Two fan.

FAN.1.012_SYS.dvv - Ventilation driver for the Viewing Room Three fan.

FAN.1.013_SYS.dvv - Ventilation driver for the Viewing Room Four fan.

FAN.1.014_SYS.dvv - Ventilation driver for the Viewing Room Five fan.

FAN.2.00_SYS.dvv - Ventilation driver for the Scanning Room fan.

FAN.2.01_SYS.dvv - Ventilation driver for the Reactor Room fan.

TransferRed.cl - Ventilation driver essential for moving air between viewing rooms in the ring.

OXY.1.5.dvv - Ventilation driver essential for oxygenation of the air supply, vital for operation of all fans.

LSR_000.dvv - Essential driver for laser operation in all viewing rooms.

LSR_001.0_SYS.dvv - Connects laser system to targeting system in Viewing Room One.

LSR_001.1_SYS.dvv - Connects laser system to targeting system in Viewing Room Two.

LSR_001.2_SYS.dvv - Connects laser system to targeting system in Viewing Room Three.

LSR_001.3_SYS.dvv - Connects laser system to targeting system in Viewing Room Four.

"LSR_001.4_SYS.dvv - Connects laser system to targeting system in Viewing Room Five.

LSR_limit_1.3.dvv - Limits laser operation to defined warranty parameters. Caution: While suspending this driver will increase the overall power of lasers, it also risks causing severe damage to the ship's defensive systems and voids the warranty on their use.

align_0.dvv - Essential driver for preventing targeting jitter.

align_1.dvv - Essential driver for preventing targeting jitter.

3dprj_mx.dvv - Essential driver for preventing targeting jitter.

2dprj_mx.dvv - Essential driver for preventing targeting jitter.

target_alg_2.1.dvv - Essential driver connecting the targeting system to the window heads-up display.

SCAN_alg_00x.dvv - Essential driver connecting the onboard deep space scanner to the ship's power distribution framework.

SCAN_alg_002.dvv - Essential driver for the interpretation of received deep space scanning data.

SafetyCheck.dvv - Essential driver responsible for identifying the presence of dangerous hyperdrive destinations, including singularities. Caution: Disabling this driver may improve maximum scanning speed, but pilots risk missing the cartography of dangerous gravitational pockets in doing so.

HEAT.06.11.dvv - Driver responsible for the thermostat in Viewing Room One.

HEAT.06.12.dvv - Driver responsible for the thermostat in Viewing Room Two.

HEAT.06.13.dvv - Driver responsible for the thermostat in Viewing Room Three.

HEAT.06.14.dvv - Driver responsible for the thermostat in Viewing Room Four.

HEAT.06.15.dvv - Driver responsible for the thermostat in Viewing Room Five.

HEAT.7.1.dvv - Driver responsible for monitoring and regulating the temperature of the ship's reactor.

Exchanger.proxy - Essential driver responsible for regulating the temperature in all viewing rooms.

FILTERS.go - Driver responsible for interpreting data from thermostats in all viewing rooms.

HYPR_coolant_3.14.dvv - Essential driver responsible for the hyperdrive safety cooldown systems.

HYPR_safety.dvv - Driver responsible for prohibiting the hyperdrive from operating while the safety cooldown window is in effect. Caution: Although disabling is driver will permit hyperdrive jumps within the safety cooldown period, these kinds of jumps are highly dangerous and risk incomplete re-materialization.

HYPR_activate.cl - Essential driver responsible for the activation of the ship's hyperdrive.