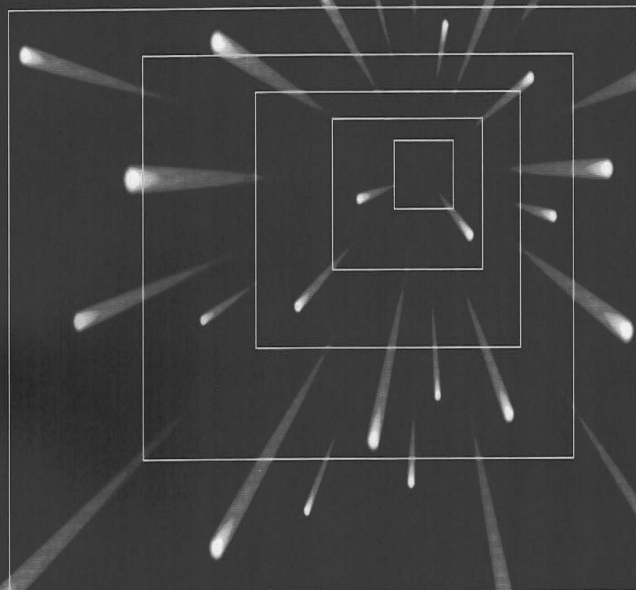


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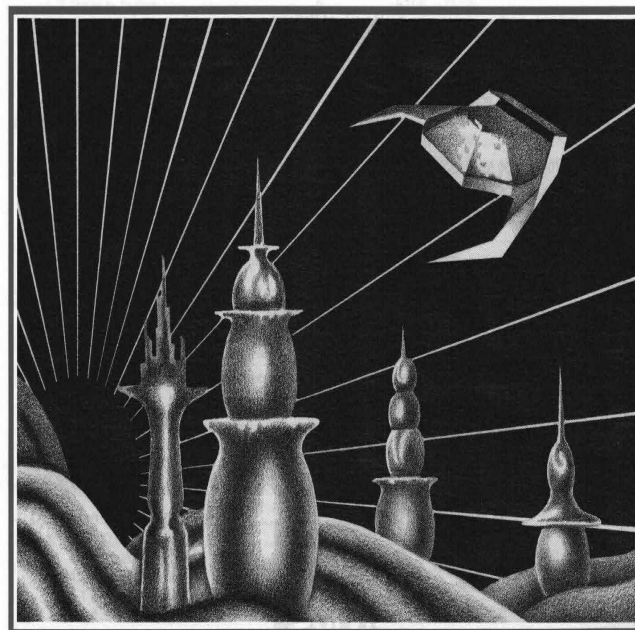
Alien Combat and Role-Playing Adventure



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ALIEN COMBAT AND ROLEPLAYING ADVENTURE



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ALIEN COMBAT AND ROLEPLAYING ADVENTURE

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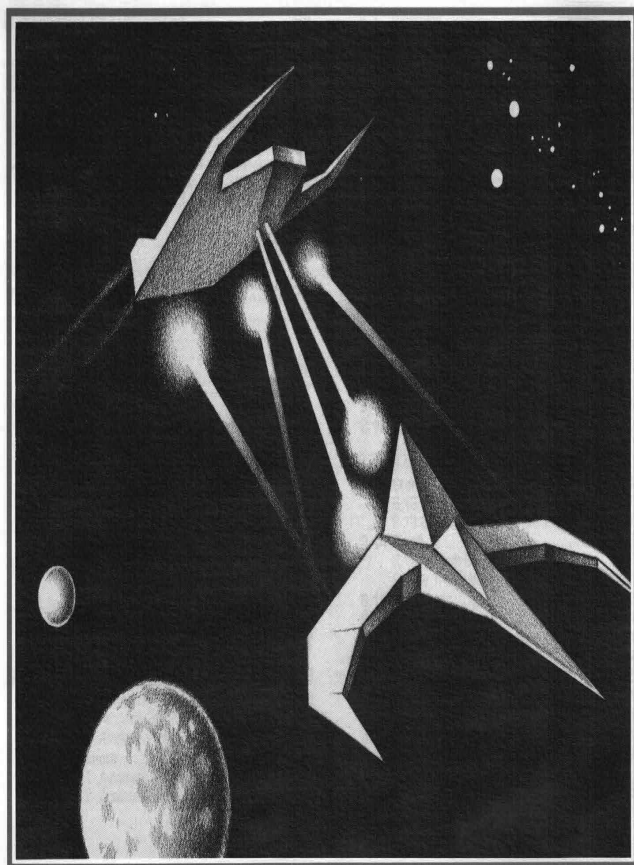
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TABLE OF CONTENTS

1. Introduction to HyperSpeed.....	7	4.2.4 Spindrive Operation.....	36
1.1 Your Mission.....	7	4.2.5 Emergency Spindrive Operation.....	37
1.1.1 The Situation.....	7	4.3 Blaster Turret.....	38
1.1.2 Your Purpose.....	7	4.3.1 Screen Information.....	38
1.2 What to Expect.....	9	4.3.2 Controls.....	38
1.2.1 Political Puzzles.....	9	4.4 Fighter/Kamikaze Controls.....	39
1.2.2 Trading Puzzles.....	9	4.4.1 Screen Information.....	39
1.2.3 Combat Puzzles.....	9	4.4.2 Controls.....	41
1.3 Advice to New Captains.....	10	4.5 Engine Room Display.....	42
2. Start Up & Installation.....	13	4.5.1 Introduction.....	42
2.1 Package Contents.....	13	4.5.2 Thruster Bay.....	44
2.2 Installation.....	14	4.5.3 Spindrive.....	45
2.3 Initial Options.....	15	4.5.4 Main Gun.....	46
2.4 How to Learn the Game.....	16	4.5.5 Blaster Turret Bay.....	46
2.4.1 Play and Reference.....	16	4.5.6 Forward and Rear Screen Generators.....	47
2.4.2 Tutorial.....	16	4.6 Escape Pod.....	48
2.4.3 Study the Manual.....	16	4.7 Home Base.....	49
3. HyperSpeed Tutorial.....	19	4.8 Mission End and Evaluation.....	50
3.1 Starting Out.....	19	4.8.1 Colony Planet.....	50
3.2 Ship Controls.....	20	4.8.2 Resource Requirements.....	50
3.3 Sensors and Information Screens.....	21	4.8.3 Safety Factors.....	50
3.4 Weapons Systems.....	22	4.8.4 Time Requirements.....	50
3.5 Engine Room.....	24	4.9 Save Game Techniques.....	51
3.6 Interstellar Navigation.....	25	5. Exploration & Interaction.....	53
3.7 Mining a System and Returning Home.....	26	5.1 Probing a System.....	53
3.8 Talking With Aliens.....	27	5.2 Unoccupied Systems.....	54
3.9 Trading With Aliens.....	28	5.2.1 System Information.....	54
4. Operating Your Ship.....	31	5.2.2 Mining.....	54
4.1 Main Cockpit.....	31	5.3 Negotiating With Aliens.....	55
4.1.1 Screen Information.....	31	5.3.1 Contact Protocol.....	55
4.1.2 Thruster Controls.....	33	5.3.2 The Translator.....	55
4.1.3 Main Gun Firing.....	34	5.3.3 Trading.....	56
4.1.4 Missile Firing.....	34	5.3.4 Commerce and Planetary Resources.....	59
4.1.5 Jettison Cargo.....	34	5.3.5 Treaties & Alliances.....	60
4.2 Navigation Starmap.....	35	5.4 Battles With Aliens.....	61
4.2.1 Screen Information.....	35	5.4.1 Initiation.....	61
4.2.2 System Data Screen Information.....	35	5.4.2 Escape.....	61
4.2.3 Course Selection.....	36	5.4.3 Victory.....	62

6. Technical Specifications	65	8.3 Balathide	89
6.1 Introductory Material	65	8.4 Broodmasters	90
6.1.1 Design History	65	8.4.1 Broodmaster General Information	90
6.1.2 Technical Specifications	66	8.4.2 Broodmaster Warships	90
6.2 Thruster Subsystem	67	8.5 Cicisbeo	92
6.3 Spindrive Subsystem	68	8.5.1 Cicisbeo General Information	92
6.4 Main Gun Subsystem	69	8.5.2 Cicisbeo Warships	92
6.5 Blaster Turret Subsystem	71	8.6 Collectors	94
6.6 Screen Generators	72	8.7 Dacians	95
6.7 Remote Chassis	73	8.7.1 Dacians General Information	95
6.7.1 Guided Missile	73	8.7.2 Dacian Warships	95
6.7.2 Kamikaze	73	8.8 Didinium	96
6.7.3 Fighter	73	8.8.1 Didinium General Information	96
		8.8.2 Didinium Warships	96
7. Tactical Manual	75	8.9 Fel	97
7.1 Combat Tactics	75	8.9.1 Fel General Information	97
7.1.1 The Main Gun	75	8.9.2 Fel Warships	97
7.1.2 Guided Missiles	76	8.10 Lutin	98
7.1.3 Kamikazes	76	8.10.1 Lutin General Information	98
7.1.4 Fighters	77	8.10.2 Lutin Warships	98
7.1.5 Blaster Turret	77	8.11 Moon Chi	99
7.1.6 Screens	77	8.12 Rill	100
7.1.7 Emergency Maneuvers	78	8.12.1 Rill General Information	100
7.2 Defeating Enemy Craft	79	8.12.2 Rill Warships	100
7.2.1 Defeating Enemy Fighters	79	8.13 Stantor	101
7.2.2 Defeating Enemy Warships	79	8.13.1 Stantor General Information	101
7.2.3 Defeating Enemy Starbases	80	8.13.2 Stantor Warships	101
7.3 Defeating Specific Enemy Systems	81	8.14 Thoth	102
7.3.1 Defeating Laser Turrets	81	8.14.1 Thoth General Information	102
7.3.2 Defeating Screen Generators	81	8.14.2 Thoth Warships	102
7.3.3 Defeating Armor	81	8.15 Trajan	103
7.3.4 Special Systems	81	8.16 Venge	104
7.4 Notes	82	8.16.1 Venge General Information	104
		8.16.2 Venge Warships	104
8. Alien Species & Warships	85	8.17 Vorc	105
8.1 Athdalde	85	8.17.1 Vorc General Information	105
8.1.1 Athdalde General Information	85	8.17.2 Vorc Warships	105
8.1.2 Athdalde Warships	86	8.18 Vorticella	106
8.2 Automata	87	8.19 ZDR	107
8.2.1 Automata General Information	87		
8.2.2 Automata Warships	87		
9. Designer's Notes	109		



1. INTRODUCTION TO HYPERSPEED

1.1

YOUR MISSION

1.1.1

THE SITUATION

The time: the distant future.

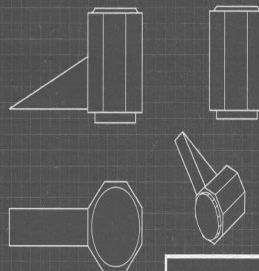
The place: alien space.

The situation: Earth is an ecological wasteland. Nuclear meltdowns, climate alteration, species extinction; all have taken their toll. Humanity must evacuate its mother world, to give Earth time to recover from the devastation wrought by past civilizations.

The solution: The human species has left Earth in immense transport ships of the *Conestoga* class. Each *Conestoga* transport vessel must find a habitable planet to colonize or every family aboard will die, lost forever in space.

Your mission: save *Homo sapiens*. You are the pilot of a *Trailblazer* class dreadnought. Your ship has been sent ahead of a *Conestoga* transport to prepare an alien star cluster for human colonization. A robot base station is already there, prepared to assist you. If you take too long to finish your task, the colonists aboard the grossly overcrowded *Conestoga* transport will begin to die. Eventually, they will all die. Their only hope is you and your *Trailblazer*.

TRAILBLAZER PROBE



TRAILBLAZER PROBE
Type: Warship
Hull Length: 3400 meters
Speed: 1030 meters/second

1.1.2

YOUR PURPOSE

You must find a planet suitable for humanity and obtain the raw materials the fledgling colony requires to survive. Worlds habitable by humans are quite rare. It is often helpful to question aliens about such habitable worlds.

The new colony requires resources to thrive. You must obtain these resources by mining them from unclaimed worlds or through interplanetary commerce with friendly aliens.

You must make the cluster as safe as possible for human families by making friends. The new colony will only prosper if humanity has allies in the star cluster. To obtain allies, you can befriend some of the aliens in that cluster. The only way to assure their friendship is to sign peace treaties. The more peace treaties you possess in a cluster, the safer humanity will be in future years.

Some aliens are not amenable to peace. Others may not be willing to sign a treaty if you have already signed with one of their enemies. If there is an alien which you believe will be actively harmful to the human colony, you must weaken or destroy this alien species. For instance, if you encounter an alien species that eats planets like popcorn, rid the cluster of them. It would be extremely unsafe to leave them in the same cluster as a world full of humans.

1.2

1.2.1

POLITICAL PUZZLES

WHAT TO EXPECT

Every alien species has its own goals and plans. Usually, the aliens are forthright about telling you what they want and what they think about the other aliens in the cluster. Almost every action you can take will change some alien's opinion of you, for better or worse. These actions need not be taken against the alien itself — for instance, if you attack and destroy an Automata ship in the Cerberus cluster, the Venge will be angry with you. On the other hand, if you destroy a Lutin ship in the Hyades cluster, the Broodmasters will actually be pleased. You must decipher the web of alien relationships and seek a place to fit into the cluster's political intrigue.

1.2.2

TRADING PUZZLES

The best way to maintain your ship is by trading with aliens. If you want success, you must learn to make a profit in these trade deals. Once you know which aliens will deal with you, you should carefully plot your trade routes.

For example, you can purchase a blaster at the Didinium for two data casings. Trade the blaster to the Broodmasters for a Vespucci navigator. A Vespucci navigator is worth two accelerators to the Fel. You can then take those two accelerators to the Didinium, and get two blasters in exchange. Complete the trade circle again, and you have four blasters, then eight. Meanwhile you invest nothing but time, fuel, and the original two data casings.

Of course, you may encounter obstacles. Space pirates may harass you, or an alien may demand that you help it in some way before it will trade with you.

1.2.3

COMBAT PUZZLES

To succeed at the political game, and to protect yourself, you must periodically fight alien ships. Every alien species has its own unique types of ships. Many aliens have secret weapons, unknown to other species. All aliens have combat strategies based on their ship's strengths and weaknesses. You must figure out the correct technique to best each type of alien ship in combat.

1.3

ADVICE TO NEW CAPTAINS

You are an explorer first, a warrior second. It is not necessary to attack every ship you see. Relax, sail through the star cluster, visit strange worlds, and talk to their inhabitants. Don't pilot your ship in a continuous state of armed tension — enjoy the sightseeing. *Homo sapiens* is a curious animal; give free reign to that curiosity while exploring a cluster. If you make it your business to find out everything because you want to know, you are certain to find out what you need to know.

Don't be concerned with "solving" the mystery of the star cluster. Just like real life, there is no one correct way to complete your mission. In essence, "the means justify the end." You can do almost anything you like, just because you feel like it. You won't destroy your chances of success because you forgot to perform some minor deed early in your exploration.

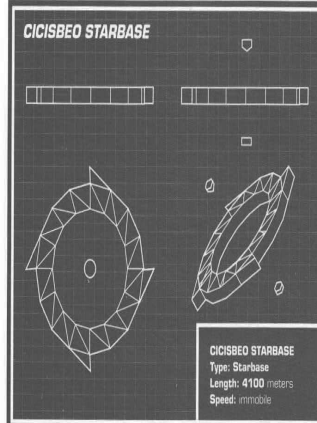
2. START UP & INSTALLATION

2.1

PACKAGE CONTENTS

Your *HyperSpeed* package should contain the following:

- this manual
- a technical supplement
- 2 5.25" high density disks, 7 5.25" double density disks, or 3 3.5" disks
- a quick reference card
- a registration card
- a backup disks order card



13

2.2

INSTALLATION

To run *HyperSpeed*, you must have a hard drive, a pair of floppy drives (any size), or a single high-density disk drive (1.2 megabyte or 1.44 megabyte). You should not play *HyperSpeed* off of the original (distribution) disks. If you intend to play off floppies, make copies of the original disks and play off the copies.

If you plan to play off of your hard drive: Create a subdirectory on your hard drive entitled *HYPERSPD*, and make that your current directory. Copy all the files from each of the original disks into this directory. Type *HYPERSPD* <Enter> to run the game.

If you plan to play off of floppies: If you have two 5.25" drives or two 3.5" drives, make copies of each of the original disks (using *DISKCOPY*). To run *HyperSpeed*, insert Disk A in drive A, make that drive current, and type *HYPERSPD* <Enter>.

If you have any other combination of disk drives, see the technical supplement.

2.3

INITIAL OPTIONS

When the game starts, it first goes through an introductory sequence. Use the space bar to skip to the next part of the sequence, or use the Escape key to bypass it entirely. After the opening sequence, you are confronted with a menu of options, as follows:

ENTER NEW CLUSTER
PLAY SAVED GAME
PRACTICE COMBAT — HYADES
VIEW STARSHIPS — HYADES

Use the joystick, mouse, or arrow keys to select one of these options, then click on it with the Enter key, joystick button one, or the left mouse button.

Enter New Cluster: This produces the "SELECT CLUSTER" menu:

HYADES
CERBERUS
SASSANID
RAGNAROK

Choose the name of the cluster you wish to play in. The Hyades cluster is best for a beginner. The game now asks you a question, answerable from the manual. Answer it correctly and you enter play at once.

Play Saved Game: If you have previously saved a game and wish to return to it, select this response. The game will ask a question, answerable from the manual. Answer it correctly to go to the saved game screen.

Practice Combat — Hyades: If you want to brush up on your combat skills, select this response. A menu of alien names from the Hyades cluster appears. Choose the alien you wish to battle. Press Escape at any time to leave the battle and go back to the starting options. If you win the battle, you also return to the starting options.

View Starship — Hyades: This option displays the spaceships native to the Hyades cluster, as well as your own craft. Press any key to move to the next alien ship, or press Escape to finish viewing and return to the starting options.

2.4

HOW TO LEARN THE GAME

2.4.1

PLAY AND REFERENCE

There is no "one true way" to learn to play a computer game. You must follow the technique that works best for you.

Many gamers feel that the best way to learn a game is to plunge in headfirst, without reading anything but the loading instructions and the key summary card. When you run into a snag, consult the manual, find out what you are doing wrong, then back to the game. *HyperSpeed* is certainly playable in this manner.

We do recommend that you at least skim through section 4 (Operating Your Ship).

2.4.2

TUTORIAL

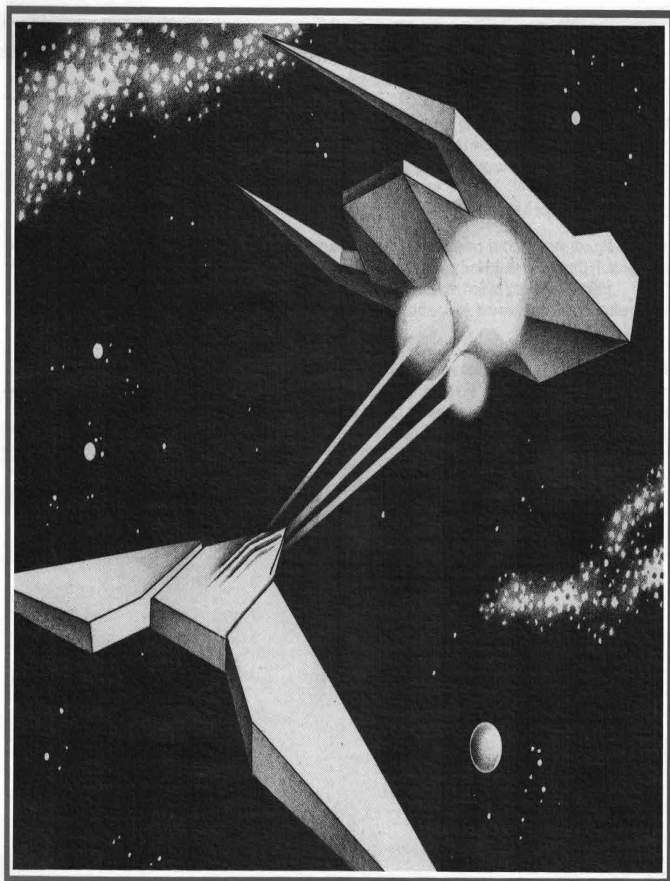
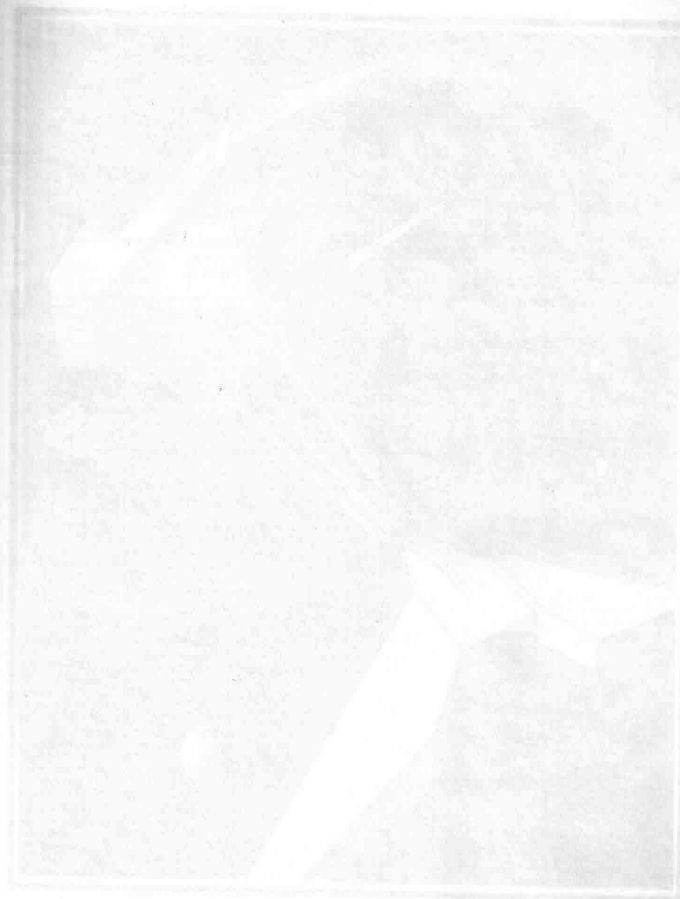
If you like to know a little about a game before playing, but quail at the thought of plowing through an entire manual, try the hands-on approach of following section 3 (Tutorial). This teaches you about the basics of your starship, and how to interact with aliens.

After playing the tutorial, you can go into the game. You may need to refer to the manual periodically if something seems confusing.

2.4.3

STUDY THE MANUAL

Some players find they derive the most satisfaction from carefully perusing the entire manual until they understand almost everything before starting the game. Good luck. The *HyperSpeed* manual has been organized to make learning the game's rules as easy as possible. If you don't wish to play the tutorial, you can skip section 3, and go right to section 4 (Operating Your Ship).

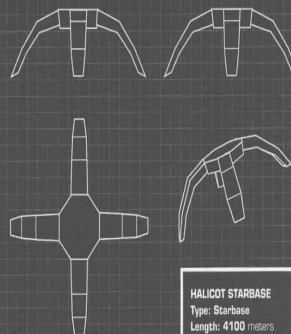


3. HYPERSPEED TUTORIAL

3.1

STARTING OUT

HALICOT STARBASE



HALICOT STARBASE
Type: Starbase
Length: 4100 meters
Speed: immobile

Before beginning this tutorial, follow the instructions given in section 2.2 and 2.3 of Starting Up to install the game and to start it running. When you get to the starting options, choose ENTER NEW CLUSTER. On the next menu, select HYADES.

Once the cluster has loaded, you are immediately confronted by a small attacking ship. The easiest way to eliminate this enemy is to tap *Missile* [the "G" key]. This launches a guided missile which homes in on the enemy vessel. Sit back and enjoy the pyrotechnics as it explodes.

Now that the threat is past, you can sit back and examine your ship. You are in the Main Cockpit. Most of the view is taken up by the large central Main View Screen. This viewscreen lets you see out the front of your ship. At the moment it should be empty, except for a few stars.

First, let's get used to driving your ship. Press **Maximum Speed** to start moving (hold down "Shift" and tap the "+" key). Now try steering your ship left and right. If you have a joystick or mouse, just push it left and right to steer. On a keyboard, use the arrow keys instead (or the appropriate keys on your numeric keypad).

Notice that moving the joystick or mouse up (or pushing the "up" arrow key), noses down your ship, and vice-versa. These are airplane-style controls, and seem more "natural" to many players. If you dislike this style of control, press the **Airplane-Style Controls** toggle (hold down "Alt" and tap the "A" key) to reverse the settings. You may wish to go back and forth between the settings a couple of times until you decide which feels best for you.

Once you feel comfortable guiding your ship in empty space, stop it by pressing **Stop** (hold down "Shift" and tap the "-" key).

If at some time during a battle you need more precise speed control than **Maximum Speed** and **Stop** permit, use **Increase Speed** and **Decrease Speed** keys ("+" and "-" keys, respectively) to incrementally adjust your speed.

Beneath your Main View Screen is a darkened hollow section of the cockpit. This is split into the Holographic Viewer and the Radar Scope.

The Holographic Viewer (on the left) gives you a close-up view of the enemy you are currently targeting. Right now, the Holographic Viewer is dark, because there are no enemy vessels present. Remember when you first entered the cluster, an image of the attacking ship was in this viewer, only to vanish when you destroyed that ship with your guided missile.

The Radar Scope (on the right) has three green ellipses. When enemy ships are present, they will show up on the Radar Scope as dots. Your own ship is always at the middle of the Radar Scope.

The lights up the left-hand side of the Main View Screen are your Ship Systems readouts. If your ship's systems are damaged, one or more of the lights here will flash.

On the right side of the screen, just under the Main Gun Gauge, is the Missile Chassis readout. There are ten little missile icons here, nine of which should be bright, and one (the first) which is dark. At game start, you had ten missiles. You launched one to destroy the incoming ship, so now you have nine. If you accidentally hit **Guided Missile** more than once in the heat of action, you may have even fewer.

Just beneath the Missile Chassis readout are two bar holograms. The left hologram, which measures speed, is currently at the bottom of the scale, and the right hologram, which measures fuel, is at the top. Tap **Maximum Speed** to watch the left hologram (speed) rise. Tap **Stop** to see it drop back to zero. The right hologram (fuel) only drops if you turn on your spindrive for interstellar travel.

The *Trailblazer* has five different weapon systems: the main gun, a defensive blaster, missiles, fighters, and kamikazes. The main gun and missiles are fired from the Main Cockpit. Fighters and Kamikazes are launched from the Main Cockpit, but once launched, immediately shift you "into the cockpit" of the fighter or kamikaze, which you then control instead of your big ship. The Blaster Turret has its own wide-angle view from the turret.

Now it is time to learn how to fight. Tap **Fire** (hit Return; you can also hit joystick button one or the left mouse button). Notice that when you fire, the Main Gun Gauge in the upper right-hand corner of the screen drops, then starts moving back up. You cannot fire the main gun again until the Gauge reaches the top of the scale.

Next, press **Go to Next Cockpit** (the space bar). This takes you from the Main Cockpit to the Blaster Turret. You can't alter the speed or motion of your ship from the Blaster Turret, but you can move your point of view very quickly. Use your joystick, mouse, or arrow keys to slew around the turret in various directions for moment, then take some practice shots. The **Fire** command is the same as in the main cockpit (Return, joystick button one, or left mouse button). Fire off some shots as you swing your turret back and forth. The Blaster Turret is your final line of defense against incoming fighters and missiles. Don't confuse the light quick-firing defensive gun here with the powerful main gun available from the Main Cockpit.

When done with the Blaster Turret, tap **Next Cockpit** (the space bar) to return to the Main Cockpit.

You have already used a Guided Missile (to destroy your original attacker). If you try to tap **Guided Missile** again, nothing will happen — your ship cannot fire such a missile without a target.

You can, however, launch kamikazes and fighters.

Let's launch a fighter. Tap **Fighter** (the "F" key), and your screen instantly switches to the fighter's cockpit, as it launches at top speed from your ship's underbelly. The fighter is much faster than your big ship and is much more responsive. However, the controls of the fighter work just like the big ship. You can **Increase Speed** and **Decrease Speed** with the "+" and "-" keys, and can go to **Maximum Speed** or **Stop**, as with the big ship. The fighter is automatically launched at its top speed, so there is no point in pressing **Maximum Speed** unless you have slowed down.

Fire the fighter's blasters using the same keys you used to fire the main gun when in the Main Cockpit (Return, joystick button one, or the left mouse button).

Turn your fighter's nose around until you can see your mother ship. It is large, pale, and somewhat disk-shaped. Fly over and buzz it a few times. Be careful not to crash into it. If you *do* crash, note that the red line on the far right-hand side drops a little. This red line indicates how much damage your fighter has taken. The lower this line goes, the greater the damage to your fighter. When you are finished cruising around in your fighter, tap **Return Chassis** (the "R" key). This automatically returns you to the Main Cockpit and returns the fighter chassis to your ship for future use (and repairs any damage the fighter has taken).

The **Kamikaze** key ("K") permits you to launch a kamikaze missile, which is piloted in the same way as a fighter. However, the kamikaze is much slower, has no blasters, and explodes if it hits another ship. Kamikazes pack quite a punch, and are the weapon of choice in many situations.

Tap the space bar to leave a fighter or kamikaze cockpit and return to the Main Cockpit. When you leave a cockpit in this way, you abandon the fighter or kamikaze, which holds to its course at its last speed. Once back in the Main Cockpit, tapping the space bar once takes you to the Blaster Turret, but tapping it *again* takes you to the cockpit of the first fighter or kamikaze that you launched (if it has not been destroyed). If you have more than one fighter or kamikaze in flight, repeatedly tapping the space bar takes you successively through the cockpits of each one, in the order they were launched. Once you have gone through each fighter or kamikaze cockpit, you can return to the Main Cockpit.

3.5 ENGINE ROOM

Tap **Engine Room** (the "E" key). This view is full of pulsing, spinning components. The Engine Room controls the capabilities of your warship. Move your cursor around the Engine Room using the joystick, mouse, or arrow keys. The display in the lower right-hand part of the screen tells you the general function of that sector (Main Gun, Blaster Turret Bay, etc.).

Managing the Engine Room is complex, and we won't get into all the details of it here (for more information, see section 4.6). In general, the more components you have in a sector, the more effective that sector is.

You can move components around the Engine Room, enhancing some parts at the expense of others. A component can fit only into a slot designed to accept it. Try clicking on some components and moving them around. To do this, put your cursor over a component and tap **Return**, joystick button one, or the left mouse button. The component is removed from that site and popped into the hold (the pale area on the far right-hand side of the screen) and is available for placement. To move a component, put your cursor over an empty slot and press **Return**, joystick button one, or the left mouse button. If you have an appropriate component in your hold, it will zap into the slot. If you remove the central Navigator from your spindrive, be sure to return it before leaving the Engine Room, because you can't go faster than light without it. As you experiment, notice that when certain key components are removed, other components cease functioning until the key component is restored.

Initially, your ship has many empty slots. It can be more powerful than its starting configuration — if you can find more components. In battle, damage to your ship is expressed as destroyed (burnt-out) components. To make repairs, you remove a ruined component and replace it with a new one. To upgrade your ship, put new components into previously-empty slots.

You can get additional components in two ways. First, you can attack alien ships and scavenge components from their wreckage. Second, you can negotiate and trade with friendly aliens.

When you are done with the Engine Room, tap **Escape** to return to the previous view. In general, use the **Escape** key to leave any screen for a previous one. However, the **Escape** key will not get you out of the Blaster Turret, the Main Cockpit, a fighter, or kamikaze. To leave those areas, you must use the space bar.

3.6 INTERSTELLAR NAVIGATION

Tap **Navigation** (the "N" key). Your main viewscreen changes to a rotating 3-D representation of the Hyades star cluster. Each glowing dot represents a different star system. Your own vessel is a different-colored dot with a small square around it. Notice that a line extends from your ship to a nearby star. Tap **Select Next Star System** (the ">" key, joystick button Two, or right mouse button), and the line switches to another star. Tap **Select Previous System** (the "<" key, joystick button one, or left mouse button), and it switches back to where it was before.

The star system that the line is heading towards is your ship's currently selected destination. If you go into spindrive (your ship's faster-than-light system), your ship will target on that star system.

In the lower right-hand corner of this screen you see your remaining fuel. In the lower left-hand corner is the fuel needed to reach your current target destination. Never, never, never go to a system that costs more fuel to reach than you currently possess! This will strand your ship in space! You're then reduced to using the **Escape Pod** (Shift-Escape) to get an entirely new vessel.

Now tap **Select Next Star System** several times in a row to watch the line go wandering throughout the stars. Using the **Next** and **Previous** keys, select the system that requires exactly 102 units of fuel to reach — it has a sun and two small planets. Once you have found it, tap **Spindrive** (the "S" key) to start you on your way.

It is possible that you may encounter an alien ship while in spindrive. If the message just under your main viewscreen reads "UNKNOWN ALIEN ATTACKING," use **Emergency Spindrive** (hold down "Alt" and tap the "S" key) to continue without a fight. If you get the message "PROXIMITY OVERLOAD. PRESS ANY KEY TO ATTACK," do nothing. Just sit quietly. In a few seconds the proximity overload goes away and you can begin traveling again.

3.7 MINING A SYSTEM AND RETURNING HOME

Now you have arrived at a star system. Nothing appears to be here. This usually means that the system is uninhabited. Tap **Probe** (the "P" key) to make sure. Your probe will go spinning away. Soon the main viewscreen will display what the probe encounters in the Information Screen. You'll see that, in fact, nobody was living here. You can mine the planets with impunity. However, if an alien race were present, you would not be allowed to perform mining operations.

Move the joystick, mouse, or use arrow keys to select one of the system's two planets. When you have done so, tap **Mine** (the "M" key) to mine that world. The image of the planet in the main viewscreen now states that you are mining its supply of water. Now select the other planet and mine it too, following the same procedure. You have now mined two units of water. Since your ship can only carry three mining complexes, you can only mine one more world before needing to return to your home base to get more colonies.

Now let's go home. Returning will fill your tanks with fuel and replace all missile chassis you used. First, leave the Information Screen by pressing **Escape** (the universal "leave-this-screen" key). You are now in Navigation. As long as you're there, tap **Home** (the "H" key). This zeros your navigation line to your home base. Tap **Spindrive** to get back home. Once more, use **Emergency Spindrive** to evade aliens that try to stop you.

There is a remote possibility that too much use of the **Emergency Spindrive** could damage your Navigator, leaving you lost in space, unable to escape. If this happens, use your **Escape Pod** (Shift-Escape) to go back to the start and get a whole new ship.

3.8 TALKING WITH ALIENS

When you finish the automatic ship refit at your base, return to the Navigation screen (via the "N" key), and, using the **Next** and **Previous** keys, find the system that costs exactly 201 fuel units to reach. Now, use your **Spindrive** to get there, using **Emergency Spindrive** as needed to avoid intruders.

When you arrive at the alien system, you will see the alien starbase come whirling up out of the gloom. BE CAREFUL! If you launch any weapon, even a fighter, they will attack. Also, if you try to move closer, they may assume you are maneuvering to attack. If you actually want to attack, that's fine — but usually (like right now), you just want to talk and maybe trade.

To talk to the aliens, launch a **Probe** (the "P" key). Within moments, you will see a new screen, the Translator Screen. An alien appears at the top or side of the screen. His message is displayed on the central readout.

Your possible responses are listed below, with a button by each response. If you have followed the Tutorial instructions correctly, you should be at the home of the Fel, a rather protoscoidean species. He is saying:

"WE ARE THE FEL. WHAT DO YOU WISH?"

Underneath are your possible responses:

- | | |
|----------------|---------|
| • Information | • Leave |
| • Trade | • Fight |
| • Peace Treaty | |

To communicate, use your joystick, mouse cursor, or arrow keys to highlight the buttons next to each response. Click on that button (using **Enter**, joystick button one, or the left mouse button) to activate that response. Experiment by pressing "Information" and "Peace Treaty" and going through some choices. Whatever screens you reach, try not to press "Trade," "Leave," or "Fight." When you've learned what you can by exploring your options, then press "Trade." This shifts you to the universal trading display (see next page).

The trade screen is used to trade with aliens. You use the same interface with all. At the right side of the screen are listed the components which the alien is able to sell to you. On the left side of the screen are the components that you have in your ship's hold. At the moment, you probably only have *data casings*, worth 1 "trade unit" each. At the bottom of the screen are a number of buttons used to enact trade or get information.

As you move your mouse or joystick (or use arrow keys), a selection box appears around the various components. If you are not using a mouse, tap the space bar to shift your control from the top half of the screen (where the components are) to the bottom half of the screen (where the control buttons are). When the selection box is around a component, or one of the buttons is highlighted, use Return, joystick button one, or the left mouse button to select that component or button.

Click on your data casings once. The total number of data casings in your hold decreases by one and an image of that data casing appears to the right, in the central trading area. Now click on the lowermost item the alien has for trade — fuel. The fuel icon will vanish, and appear in the central trading area, but on the alien's side of the screen. Now click on **ACCEPT TRADE DEAL**. You will lose the data casing, and your fuel tanks are topped off. Buying fuel from an alien always "fills" 'er up" to the top, no matter how much or how little fuel you have.

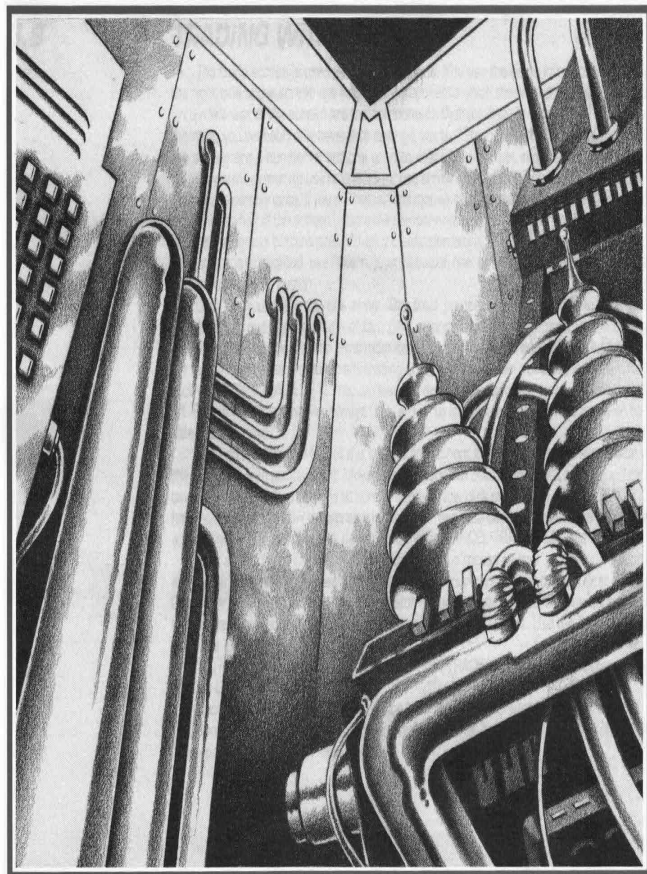
Let's do some more! Select the second component from the top of the alien's side of the screen (it is an accelerator). Move your selection box over to your data casings and click twice, moving two data casings to screen center. Now click on **ACCEPT TRADE DEAL**. You have now acquired a new accelerator in return for two data casings. If you make a mistake, you can get rid of the potential deal by clicking on **CANCEL TRADE DEAL** and start over.

Now select **VIEW ENGINE ROOM**, and you will be moved to your ship's engine room, where you can install your new component. Move your cursor over to your Rear Screen Generator, and click once on the accelerator-shaped empty slot therein (the accelerator should pop into place). You have now enhanced your rear screens. Use the Escape key to leave the Engine Room as normal.

You have now successfully traded. Click on **EXIT TRADE** to leave the Trade Screen, then click on **LEAVE** to depart the Fel.

Once back at the Main Cockpit, notice that your fuel level has returned to normal.

Congratulations! You have now completed the tutorial. You may either restart the game or keep playing from here. Good luck!



4. OPERATING YOUR SHIP

4.1

MAIN COCKPIT

4.1.1

SCREEN INFORMATION

Main Viewscreen: Located right in the middle of the cockpit, and filling almost half the screen, this gives you a view out of the front of your vessel. For maximum efficiency and minimum confusion, it only points straight ahead. To look all around your ship, switch to your Blaster Turret and spin around (see 4.3.2 for details).

The crosshairs in the center of the screen show where your Main Gun's blast will strike if you fire. They also indicate that you are out of range. If the ship near the crosshairs comes within range, the crosshairs change to a flashing reticule. Place the reticule over the target ship to aim your Main Gun at it.

Also usually visible on the main viewscreen are the Targeting Brackets. These indicate which enemy ship is currently targeted.

Main Gun Gauge: Located in the upper left-hand corner of the screen, the left side of this gauge is a simple readout of your Main Gun's current status. See "Ship Systems" below for details.

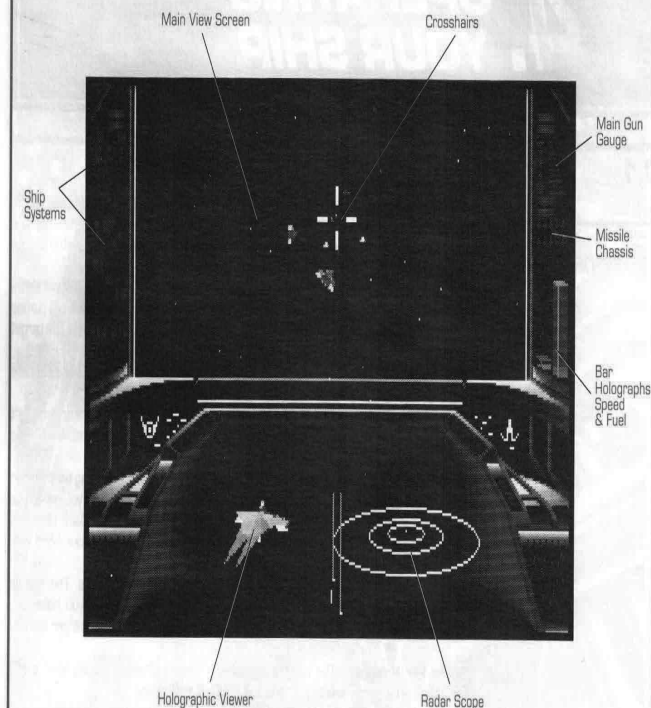
When your Main Gun fires, there is a delay of 3 to 13 seconds (depending on your gun components) before it is ready to fire again. The right side of the gauge shows you how close your main gun is to fire capability. When you fire, the display goes dark. As it recovers energy, the display lights up, from bottom to top. When the top line is lit, your Main Gun is ready to fire.

Missile Chassis: Your ship can carry a maximum of 10 missile chassis. This simple readout located under the Main Gun Gauge tells you how many chassis you have left. Launching a kamikaze, a fighter craft, or a guided missile uses up one chassis per launch. As you fire them off, the little chassis icons go dark.

Speed Bar Hologram: The left bar (under the Missile Chassis) shows your ship's current speed. The higher the bar, the faster your ship is moving.

Fuel Bar Hologram: The right bar (under the Missile Chassis) tells you how much fuel you have left. The higher the bar, the more fuel you have. If you need an exact number for your remaining fuel, go to the Navigation starmap (the "N" key) and look in the lower right-hand corner.

MAIN COCKPIT



32

The Radar Scope: It is beneath the main viewscreen, a little to the right. This shows all the objects around your ship. The scope is always centered on your current ship, and faces the same direction as your ship.

Other ships or significant objects (such as missiles) appear as dots on the viewer. The ship you have currently targeted has a box surrounding its dot. Ships above or below your ship's plane have a line extending up or down from your central plane to the ships. The largest ships are signified by slightly larger dots than lesser vessels. Guided missiles and weapons fired in combat are signified by dots of a different color, and have no line extending from the central plane.

Holographic Viewer: It is located beneath the main viewscreen, and a little to the left. When you are facing alien ships, one of them is always targeted. When you first enter a combat, your ship's computer automatically selects one alien ship as the target. You can alter the targeted ship by pressing **Target Change** (the "T" key). The targeted ship appears in the holographic viewer, which is under the main viewscreen, to the left of the radar scope. Above the target ship is a glowing line. The length of this line indicates that ship's hull strength. As the target ship takes damage, a flashing color creeps in from the outer ends of the hull-strength line, showing how much damage it has taken. For instance, if the line is half-consumed by the flashing color, then the ship has taken approximately half the damage needed to destroy it. Keep an eye on this line to see how weak or strong your foe is.

When the target ship is destroyed, your ship's computer immediately switches to another target.

Ship's Systems: Up the left side of the Main Cockpit is a representation of your ship's internal systems. Once you are familiar with the layout of your engine room, these diagrams will be instantly recognizable. From top to bottom, the systems represented are Screen Generators, Spindrive, Blaster Turret Bay, and Thruster Bay. The Main Gun is on the right side of the screen, just left of the main gun gauge (see above). Each component in these readouts is a bright color when present, and dark when absent. If a component is inactive, it remains visible, but is darker than an active component. If a component is destroyed and burnt-out, it flickers brightly until replaced.

You cannot replace or adjust components from the Main Cockpit. The ship systems display is solely informational. To fix your systems, you must go to the Engine Room.

4.1.2

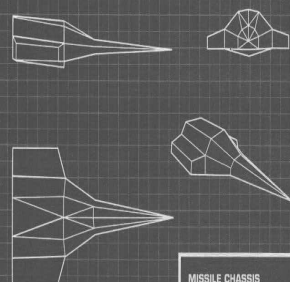
THRUSTER CONTROLS

Your ship is equipped with rearward-firing thrusters for sublight maneuvering. Their operation is quite simple. To start moving, press **Increase Speed** (the "+" key). To further accelerate, press **Increase Speed** again. If you wish to get to top speed as soon as possible, use **Maximum Speed** (hold down "Alt" and tap the "+" key). To slow down, use **Decrease Speed** (the "-" key), or **Stop** (hold down "Alt" and tap the "-" key).

Steer your ship with the arrow keys, joystick, or mouse. Your ship is initially set for airplane-style controls, so when you push up, the ship actually noses down. If this is counterintuitive to you, use the **Airplane-Style Controls** toggle (hold down "Alt" and tap the "A" key).

33

MISSILE CHASSIS



MISSILE CHASSIS
Type: Missile
Hull Length: 380 meters
Speed: 6100 meters/second

You can make your ship "barrel roll" by holding down joystick button two or the right mouse button while simultaneously trying to turn left or right. Your ship's nose will remain pointing in the same direction while it turns on its long axis.

4.1.3

MAIN GUN FIRING

Fire the Main Gun by pressing Enter, joystick button one, or the left mouse button. The Main Gun takes several seconds to recover between shots, so may not respond if you try to fire again too quickly after the first shot.

The Main Gun requires cleverness and preparation to use successfully. You should carefully line up your shots, not simply pump out the pellets as fast as you can.

4.1.4

MISSILE FIRING

Launch a guided missile by pressing "G." Launch a kamikaze by pressing "K." Launch a fighter by pressing "F."

Each time you launch a guided missile, kamikaze, or fighter, your supply of missile chassis is reduced by one.

The hostile electronic environment of deep space combat is severe. Your ship cannot control more than four chassis at once.

A guided missile homes in on the enemy targeted in your Holographic Viewer (see 4.1.1 above). If the enemy vessel is destroyed before the guided missile strikes, the missile self-destructs.

A kamikaze or fighter is controlled by yourself. See section 4.4 for details.

4.1.5

JETTISON CARGO

When you are attacked by space pirates, they demand a certain number of components. If you **Jettison Cargo** (tap the "J" key), your ship's hold loses that number of components and the pirates leave without attacking. If you do not have enough in your hold to satisfy the pirates, they take components from your Engine Room instead.

Jettison Cargo costs less components than Emergency Spindrive (q.v. at 4.2.5), but is not useful against some aliens.

34

4.2

4.2.1

SCREEN INFORMATION

NAVIGATION STARMAP

Before you can claim a world for humanity or set up mining colonies, you must find suitable worlds. From the Main Cockpit, tap **Navigate** (the "N" key) to see the Navigation starmap.

The Navigation starmap shows the entire cluster spinning slowly in space. You can use **Zoom** and **Unzoom** (the "Z" and "X" keys, respectively) to move the view in and out on it, plus you can use the arrow keys or joystick to change the direction in which it is spinning. The system in which you are currently located has a box around it.

Once you have been to a star system, future examination of your starmap displays already-visited systems in a new color.

4.2.2

SYSTEM DATA SCREEN INFORMATION

When you select a star system, and then press **Information** (the "I" key), the starmap is replaced by detailed information about that system. By using the arrow keys, joystick, or mouse, you can select individual planets in that system, and see detailed information about them.

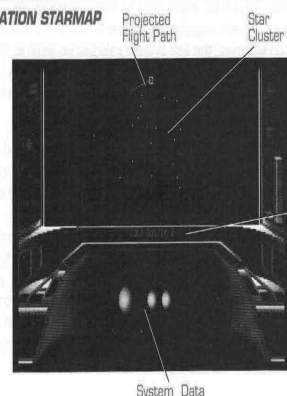
The Information screen gives you each world's type, temperature, and atmosphere, as well as any resources that world possesses, and whether or not the world is habitable. It is possible for a world to have equitable temperature and a breathable atmosphere, and yet not be habitable for humans, for any number of reasons. In one famous case, a world was perfectly livable except that the air stank! The cause of the stench was never discovered, and the world was never colonized.

The exact amount of information you receive on a system varies. If you have never been to a system, the Information screen only tells you the number of planets and the type of sun.

If you have visited a system, but not probed it, you can know everything about that system except for any resources it contains. If a system is inhabited, you cannot probe it — any probes you launch are intercepted by the inhabitants and used to communicate with you.

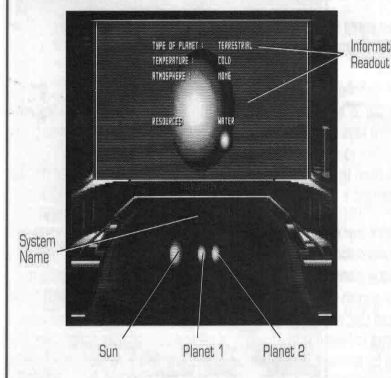
Only if you have probed an uninhabited system do you receive full information about it.

NAVIGATION STARMAP



35

INFORMATION SCREEN



4.2.3

COURSE SELECTION

When you press the **Select Solar System** keys, a linear flight path (in three dimensions) is projected from your current system to other systems. As you select through these other systems, a simple diagram of each system appears in your video monitor (just below the Navigation starmap). To see more information about a that system, tap **Information** (the "I" key) for more data (this only works, however, if you have already visited the system and probed it).

The Navigation starmap also has a fuel usage display. The lower right corner of the screen shows you how much fuel you are carrying, and the lower left corner of the screen shows how much fuel it costs to travel to the system indicated.

Press **Spindrive** (the "S" key) to travel to the selected system. **Emergency Spindrive** (hold down "Alt" and tap the "S" key) can also be activated from the Navigation starmap, if you need to flee a losing combat.

Press the Escape key to leave the Navigation starmap and return to the Main Cockpit. When you leave the Navigation starmap, the last system selected remains in the memory of your ship's navigation system. Whenever you press **Spindrive** (the "S" key), your ship automatically heads toward that system. Beware of leaving the wrong destination "in memory," especially a destination beyond your current fuel supply!

4.2.4

SPINDRIVE OPERATION

Normal travel via Spindrive is uneventful. You simply zip through space to the selected system, expending fuel as needed. However, if another ship is near your route, its Spindrive may interfere with yours. If any ship crosses your path, you'll see an image of the alien ship appear in the holographic viewer.

If the alien ship is hostile, under the main viewscreen will appear the message "[alien name] SHIP ATTACKING," and you will be forced to pop out of Spindrive and fight.

Sometimes the alien waits to see what you are going to do. In this case, you receive the message "PROXIMITY ALERT. PRESS A KEY TO ATTACK." You may now choose whether you wish to attack the alien ship or not. If you choose to attack, tap any key and the enemy ship is forced out of spindrive to fight you. If you do not wish to attack, do nothing, and after a few seconds, the opportunity will vanish.

4.3

BLASTER TURRET

Your Blaster Turret can be reached from your Main Cockpit by hitting the space bar. Strike the space bar again to return to the next active cockpit. If you have no active fighters or kamikazes, the space bar takes you back to the Main Cockpit. If you have active fighters or kamikazes, the space bar takes you into the cockpit of the first-launched boat. Hitting the space bar will then cycle through all active boats until you get back to the Main Cockpit again.

4.3.1

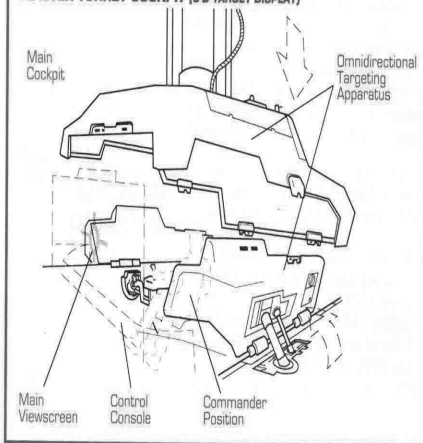
SCREEN INFORMATION

The Blaster Turret is almost devoid of clutter, for maximum visibility. At the bottom of the screen is a radar scope, which works just like the Main Cockpit's radar scope. See 4.1.1 for details.

The crosshairs in the center of the screen show where your blasters are aimed. They are also an indication that you are out of range. When a ship or missile comes within range, and is more-or-less close to the crosshairs, the crosshairs change to a flashing reticule. Center the target within the reticule to aim at it.

Your blasters have an additional feature associated with the rangefinder. The blaster bolts are aimed so that they automatically converge at the nearest target's exact range.

BLASTER TURRET COCKPIT (3-D TARGET DISPLAY)



4.3.2

CONTROLS

To aim your blaster turret, just slew it around using the arrow keys, joystick or mouse. Fire the blasters using the Enter key, joystick button one, or the left mouse button.

You can spin the turret in place without changing your point of aim by holding down joystick button two or the right mouse button as you turn left or right.

4.4

FIGHTER/KAMIKAZE CONTROLS

A fighter is a small spaceboat armed with blasters. Its function is to destroy enemy fighters and small ships. It can also be used to destroy vulnerable spots (such as screen generators or blaster turrets) on large ships.

The kamikaze is a small spaceboat carrying a large warhead. It can be used to destroy any size of enemy ship, but several kamikazes may be needed to eliminate the largest vessels. The kamikaze actually rams the enemy ship and explodes. Hence kamikazes are not reusable, unlike fighters.

When you launch a fighter or kamikaze chassis (by striking the "F" or "K" keys, respectively), a subspace link is set up between your main ship and the smaller craft, so you can pilot these ships directly. However, if the chassis is destroyed, you yourself are not harmed. Instead, you are returned to the Main Cockpit. Fighters and kamikazes are only used in combat, against enemy vessels.

4.4.1

SCREEN INFORMATION

Blaster bar: The leftmost bar hologram indicates the readiness of your fighter's blasters. When the bar is at its height, you can fire a lengthy burst (by pressing Enter, joystick button one, or the left mouse button). As you fire, your blasters rapidly heat up, the bar drops. Once the bar reaches bottom, your blasters are too hot, and can only get off shots intermittently. If you refrain from firing to let your guns cool off, the bar gradually rises.

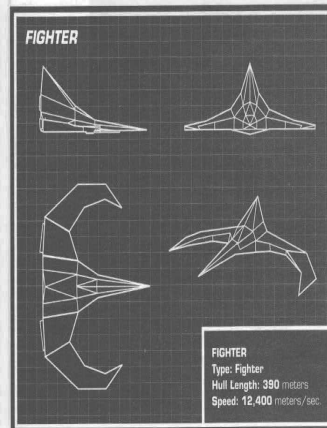
In general, you get more impact from your shots if you fire single bursts rather than emit a continuous slow barrage.

Kamikazes have no blasters. In a Kamikaze cockpit, this gauge is inactive; the blaster hologram is permanently at the bottom of its ramp.

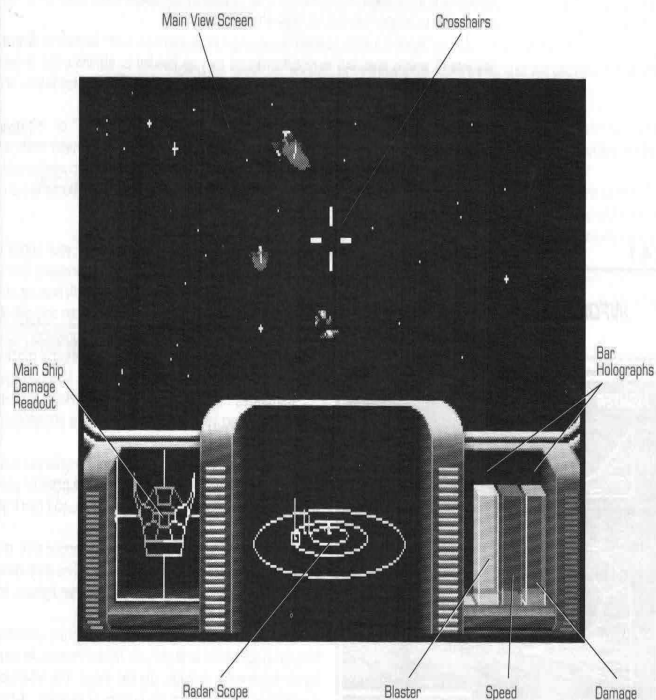
Speed bar: The center bar hologram tells you how fast you are going. The higher the bar, the greater your velocity. When it is at the top of its scale, you can't go any faster.

If you are flying a Kamikaze, you will notice that the center hologram will not rise above halfway. This is because Kamikazes have a lower maximum speed than fighters (in fact, they are only half as fast).

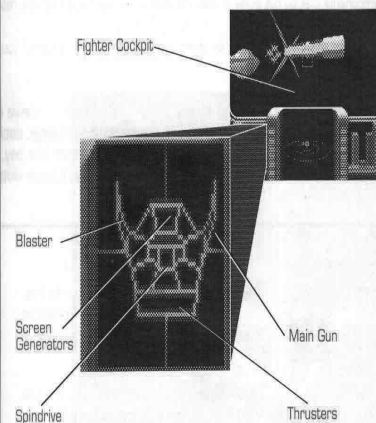
Damage bar: The rightmost bar hologram indicates how much structural strength your fighter retains. As your fighter takes more damage, the bar drops. You will never actually see the bar reach the bottom of its scale. When that happens, the fighter is destroyed, and your viewpoint leaves the chassis.



FIGHTER COCKPIT



MAIN SHIP DAMAGE READOUT



A kamikaze possesses the damage indicator, but any hit on a kamikaze will explode its deadly cargo; it never loses any structural strength without being totally destroyed. Thus, it is always appears at full strength.

Radar Scope: This works identically to the Main Cockpit's radar scope. See 4.1.1 for details.

Main Ship Damage Readout: This diagram provides a graphic indication of how much damage the *Trailblazer* is suffering while you are in the fighter or kamikaze. Portions of the diagram change color as they are damaged. At the bottom of the readout, text appears on which system was just damaged.

If you get concerned about the damage the *Trailblazer* is taking, you may jump back into the Main Cockpit and take control, abandoning the fighter or kamikaze to its fate, or returning it with **Return Chassis** (tap the "R" key) to the mother ship's hold for future use. Unless returned, the chassis flies straight on its last course until destroyed or you return to command it.

Crosshairs: These work identically to the crosshairs in the Blaster Turret. See 4.3.1 for details.

4.4.2

CONTROLS

Speed controls for fighters and kamikazes are almost identical to those of the main ship; **Maximum Speed** (hold down Shift and tap "+"), **Stop** (hold down Shift and tap "-"), etc. all work. The one major difference in controls is **Match Speeds** (the "M" key), which enables your chassis to match the speed of an enemy ship which is currently in your target crosshairs. This ability is very useful for a fighter which wishes to cruise along behind a slower ship and pump fire into the enemy until he explodes. It is less useful for a kamikaze, but is still available.

To fire a fighter's blasters, just tap Enter, joystick button one, or the left mouse button.

The space bar returns you from the most recently-launched chassis back to the Main Cockpit. From there, you can tap the space bar again to get to the blaster turret, and from there you can tap it again to go to the oldest chassis in action. Tap the space bar again to go to the next-oldest chassis, etc. Once you have cycled through all your current chassis, you tapping the space bar once more gets you back to the Main Cockpit again.

4.5

ENGINE ROOM DISPLAY

Tips: Engine Room

- Except for linkages, components that do not pulse or spin are useless — separated from the rest of their system. They may as well be in the hold.
- The converters siphon power from the Spindrive to other systems. The more powerful your Spindrive, the better those systems are.

4.5.1

INTRODUCTION

From the Main Cockpit or Blaster Turret, tap **Engine Room** (the "E" key) to receive a top-down view of your ship's vitals. The engine room is divided into five different bays, each holding a variety of components. Some components can be used in more than one bay.

At the top left-hand corner of the Engine Room is the **Screen Generator**. It holds slots for up to 12 components, but only has 10 at game start.

COMPONENT ICONS



Accelerators: Used in the Main Gun, screen generators, and Spindrive. Enhances system operation.



Blasters: Standard model. Used only in the blaster turret. Essential for the turret to fire.



Burners: Standard model. Used only in the thruster bay. Essential for the ship to move.



Converters: Used in the Main Gun, screen generators, thruster bay. Draw energy from the Spindrive to enhance other systems.



Linkages: Used in the blaster turret bay, Main Gun, screen generators. Used to connect disparate components.



Radiators: Used in the blaster turret bay, Main Gun, screen generators. Enhances system operation.



Secondaries: Standard model. Used in the Main Gun, screen generators, thruster bay. Essential for screen generators, enhances other systems.



Targeter: Cody model. The targeter is used only in the blaster turret. Essential for the turret to fire.

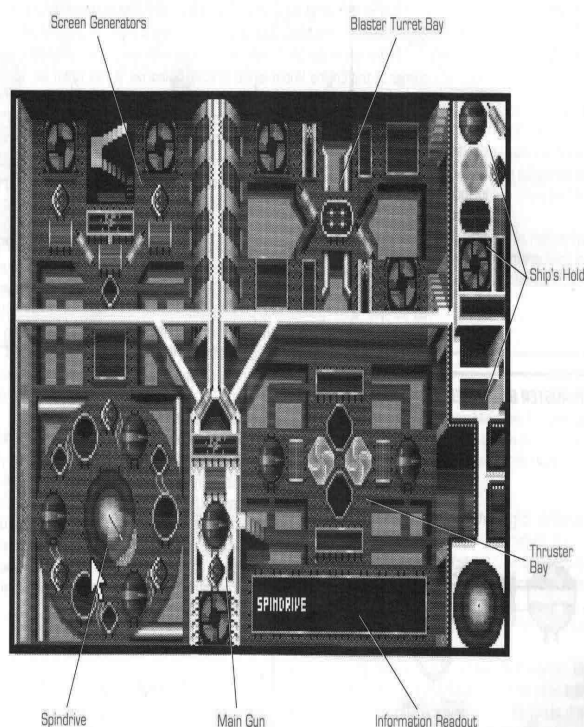


Turbines: Used in the Main Gun, Spindrive, and thruster bay. Enhances system functioning.



Navigator: Vespucci model. The navigator is used only in the Spindrive. Essential for faster-than-light travel.

ENGINE ROOM SCREEN



The top right-hand corner has the **Blaster Turret Bay**. It can contain up to 13 components, but only has 7 at the start.

Below the Blaster Turret Bay, in the lower right-hand corner, is the **Thruster Bay**, capable of holding 10 components and starting with 6.

Just to the left of the Blaster Turret Bay, and running vertically up the middle of the Engine Room, is the **Main Gun**, which has slots for 7 components, all of which are filled.

To the left of the Main Gun, under the Screen Generator, and in the lower left-hand corner of the Engine Room is the circular **Spindrive**. It has room for 13 components, starting with 7. The large round component in the center of the Spindrive is the Navigator, the most important component you possess.

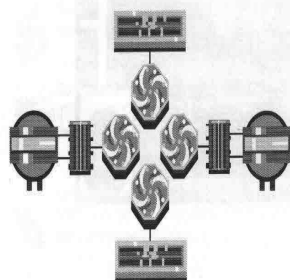
Your ship's hold is to the right of the screen. The hold contains components that are not in use, either because you are saving them for trade, or because all the slots for that type of component are filled. The hold can carry an enormous number of components. No matter how many components you trade for or scavenge, you do not have to worry about running out of storage space.

Combat damage destroys components. You can repair damage by visiting the Engine Room and replacing burnt-out or missing components by new ones from your ship's hold.

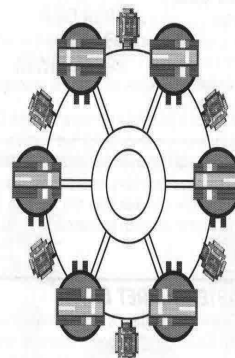
To interact with the Engine Room, use the mouse, joystick, or arrow keys to place the cursor over a component slot. Click on that slot with the Enter key, joystick button one, or the left mouse button. If the slot currently holds a component, clicking moves that component to your hold, and empties the slot. If the slot is empty, clicking on it fills it with a matching component from your hold (if you have any). If you have no matching components, clicking on that slot is futile.

Placing the cursor over a component slot in the ship's hold tells you how many such components you possess. Some components come in more than one "flavor" (for instance, there are three types of Targeters: Cody, Hickock, and Oakley). If you have more than one "flavor" of component in your hold, clicking on the appropriate slot brings a different "flavor" to the top. Then, when you click on an appropriate slot elsewhere in the Engine Room, the correct "flavor" pops into the slot.

THRUSTER BAY SCHEMATIC



SPINDRIVE UNIT SCHEMATIC



4.5.2

THRUSTER BAY

Tips: Thrusters

- If you beef up your thrusters in the Engine Room, once you return to the Main Cockpit, be sure to hit **Maximum Speed** (hold down Alt and tap the "+" key), or you will continue moving at your previous speed.

The Thruster Bay controls your sublight engines. The components that make up this bay determine your ship's maximum combat speed. Your initial configuration is composed of two burners, each connected to a converter and a turbine. At the start, there is room for two more burners, each potentially controlled by a secondary.

Your ship is an immense battleship. No matter how powerful your thrusters are, it moves and maneuvers in a stately fashion. If you crave speed and responsiveness, jump into one of your ship's fighters.

4.5.3

SPINDRIVE

Tips: Spindrive

- At game start, you have enough turbines and accelerators in your ship's Main Gun, Thruster Bay, and Screen Generators to build up your Spindrive to full strength, and thus get the lowest possible fuel consumption rate. If you do this, be sure to transfer those turbines and accelerators back if you are stopped for combat, or you will be seriously handicapped.

The Spindrive's primary function is to move your ship faster than light. Without a Spindrive, your vessel is totally incapable of accomplishing its mission. Therefore, it is the single most important system in your ship. The Spindrive is composed of a central Vespucci Navigator, surrounded by three turbine/accelerator pairs. It can be enhanced by adding up to three more turbine/accelerator pairs.

The turbines and accelerators *must* be matched in pairs to be effective. A lone turbine or accelerator is valueless in the Spindrive.

The Spindrive is controlled by the centrally-located Vespucci Navigator device. This device is actually capable of propelling your vessel through faster-than-light drive all by itself. However, the addition of matched pairs of turbines and accelerators permits you to drain off power to be used by the rest of your ship and also enhances the drive's efficiency, so that it takes less fuel to travel through the cluster.

MAIN GUN SCHEMATIC



4.5.4

MAIN GUN

Tips: Main Gun

- To speed up rate of fire, use accelerator, linkages, radiator, and turbine.
- To increase damage done, use converter and secondary.

The Main Gun is your ship's primary armament. Its sole function is to destroy enemy vessels and starbases. The Main Gun is composed of an accelerator, a converter, two linkages, a radiator, a secondary, and a turbine. Though the Main Gun is usable with less than this optimum setup, initially your layout is complete and cannot be increased.

4.5.5

BLASTER TURRET BAY

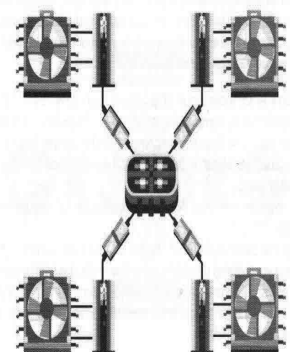
The Blaster Turret Bay is an important defensive system. The Blaster Turret is used to destroy or break up incoming missiles and energy bolts, as well as enemy fighters. The initial configuration is composed of a Cody Targeter, two linkages, two blasters, and two radiators, which gives you a "twin-barreled" effect. The bay can take two more linkages, blasters, and radiators, giving you up to four "barrels" when engaged in battle. Each linkage/blaster connection to the central targeter gives you one working blaster.

Your targeter controls the firing sequence of the blasters. It is the key component to your Blaster Turret Bay, and without it, no blasters can fire.

The damage rating for a single hit from a blaster is 0.15. *Note:* "damage rating" is a relative measure of how powerful a weapon is. A "damage rating" of 1 means that if the weapon hit your own ship, and was not stopped by screens, it would destroy 1 component. A damage rating of 2 would destroy 2 components, and so forth.

If a blaster lacks a radiator, it can only get off three shots in a row before overheating. An overheated blaster fires much more slowly than one with a radiator.

BLASTER TURRET SCHEMATIC



4.5.6

FORWARD AND REAR SCREEN GENERATORS

Tips: Screen Generators

- When facing fighters, try to balance protection between the forward and rear screens. When facing large ships or starbases, put all your strength in the forward screen.
- Having four or more turbine/accelerator pairs in the Spindrive boosts your screens.

The screens protect your ship from combat damage. Your screens are always "on" and consume no fuel. The components of your Screen Generators are arranged in a Y-shape. The right and left "arms" of the Y are the Forward Screen Generator. The rearward-pointing

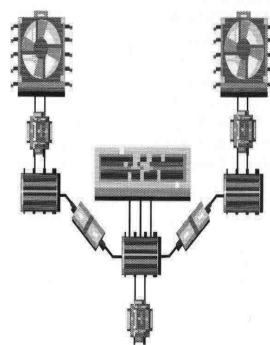
"base" of the Y is the Rear Screen Generator. The Forward Screen Generator protects only the front hemisphere of your *Trailblazer*. The Rear Screen Generator protects only the rear hemisphere of your *Trailblazer*. The Forward Screen Generator can be (and usually is) more powerful than the Rear Screen Generator.

A pair of linkages connect the Forward Screen Generators to the Rear Screen Generator. They are not actually part of either generator, and do not directly enhance the activity of either generator. However, the absence of a linkage prevents operation of the connected arm of the Forward Screen Generator.

At the start, your Forward Screen Generator is composed of two complete "arms," each containing one accelerator, one converter, and one radiator, for a total of two of each component. There is no room for expansion beyond this.

However, your Rear Screen Generator just has a converter and a secondary. There is room for an accelerator and a radiator, should you wish to upgrade your vessel's rear screens.

SCREEN GENERATOR SCHEMATIC



4.6

ESCAPE POD

You can use the **Escape Pod** (hold down Shift and tap the Escape key) to abandon your main ship and launch a sub-space capsule, which carries you unerringly back to your home base. Once there, a distress signal is sent to Earth and a new *Trailblazer* ship is dispatched to the home base for your use.

The disadvantage of the escape pod is that it costs you considerable time. The *Conestoga* colony ship must therefore wait even longer before getting its colony established, and this may mean the death of colonists.

48

4.7

HOME BASE

To assist you in your mission, a large robot home base has been constructed in the star cluster you will explore. Because the star clusters teem with hostile aliens, a security program has been instituted to conceal the home base's presence from those aliens, as much as possible. After you visit the home base, it will fire you away from itself, a parsec or two into space. Thus, when you travel to an alien world, the aliens will not be able to figure out the home base's location by extrapolating your flight route backwards.

The home base has a navigation beacon to make it easier for you to find. To zero in on this beacon, use **Home** (press the "H" key when in the Navigation starmap). This automatically targets your home base for Spindrive navigation.

When you visit your home base, your fuel tanks are automatically filled from the base's extremely large supply. In addition, you receive more missile chassis and mining complexes, if you have expended some since your last visit.

One of the most important functions of your home base is that it continually manufactures computer disks for use in trade. These computer disks are universally valued, and you can use them as trade goods with every alien species known. On each trip back to your home base, you will receive one or more of these computer disks, and you will be able to use them to your advantage in obtaining useful components from friendly aliens.

49

4.8

MISSION END AND EVALUATION

You must find a planet suitable for humanity and obtain the raw materials the fledgling colony requires to survive. Worlds habitable by humans are quite rare.

4.8.1

COLONY PLANET

The colony cannot survive without a habitable planet. All the clusters selected for your exploration are known to contain at least one habitable planet. It is often helpful to question aliens about such habitable worlds.

When you find such a world, claim it for humanity by launching a mining complex, which will begin the terraforming process.

4.8.2

RESOURCE REQUIREMENTS

The new colony will require resources to thrive. You must obtain these resources by mining them from unclaimed worlds (see 5.2.2) or through interplanetary commerce with friendly aliens (see 5.3.4).

The amount of resources needed for a particular colony depends largely upon its distance from Earth. The number of resources required for the clusters you are to explore is given below:

HYADES cluster	5 resources of each type
CERBERUS cluster	10 resources of each type
SASSANID cluster	4 resources of each type
RAGNAROK cluster	9 resources of each type

4.8.3

SAFETY FACTORS

You must make the cluster as safe as possible for human families by making friends and eliminating enemies.

The new colony will only prosper if humanity has allies in the star cluster. To obtain allies, you can befriend some of the aliens in that cluster. The only way to assure their friendship is to sign peace treaties. The more peace treaties you possess in a cluster, the safer humanity will be in future years.

Some aliens are not amenable to peace. Others may not be willing to sign a treaty if you have already signed with one of their enemies. If there is an alien which you believe will be actively harmful to the human colony, you must weaken or destroy this alien species. For instance, if you encounter an alien species of berserk warriors, you should rid the cluster: it would be extremely unsafe to leave them in the same cluster as a world full of humans.

4.8.4

TIME REQUIREMENTS

Despite its huge size, the colony transport ship is still overcrowded. You are under time pressure. The longer you take to finish preparing the colony world, the more colonists will die. Eventually, they will all die.

On the other hand, abandoning a bunch of hapless colonists on a world with insufficient resources in a star cluster teeming with enemies is a death sentence for them all.

All things being equal, it is better to spend the time to get an extra peace treaty or exterminate a species of implacably hostile aliens than to bring in the colonists prematurely.

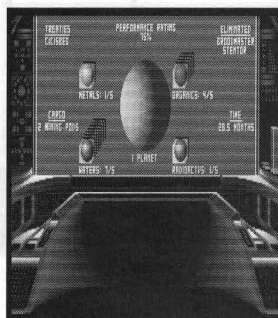
50

4.9

SAVE GAME TECHNIQUES

Like any roleplaying game, you'll want to save your game to disk periodically, and then restore it later. You can only do this from the Main Cockpit if you are not moving or engaged in combat. Just use **Save Game** (hold down Alt and press the "G" key) to bring up a screen which you can type your saved game's name into. To bring back a game, use **Load Game** (hold down Alt and press the "L" key). A screen appears on which all the saved games are listed. Highlight the one you want, and press Enter.

COLONY STATUS SCREEN



The **Colony Status Screen** (hit the "C" key) gives you an ongoing check on your progress through the star cluster. It lists the amount of each resource you carry (radioactives, organics, water, metal). This screen lists aliens with whom you have signed peace treaties, and all aliens you have exterminated or driven from the star cluster. It also tells you of any special non-component cargo you are carrying in your hold (which would not show up in the Engine Room screen). Such special cargo includes mining pods, but also may include special objects or creatures you pick up during your journey.

The Colony Status screen also informs you how much time your journey has taken until now, and whether or not you have found a habitable planet suitable for colonization. Finally, it gives you a performance rating, which should give you a rough idea as to how well you are doing in the cluster.

The Colony Status screen is a useful reference device, which you should use frequently in your travels throughout the cluster.

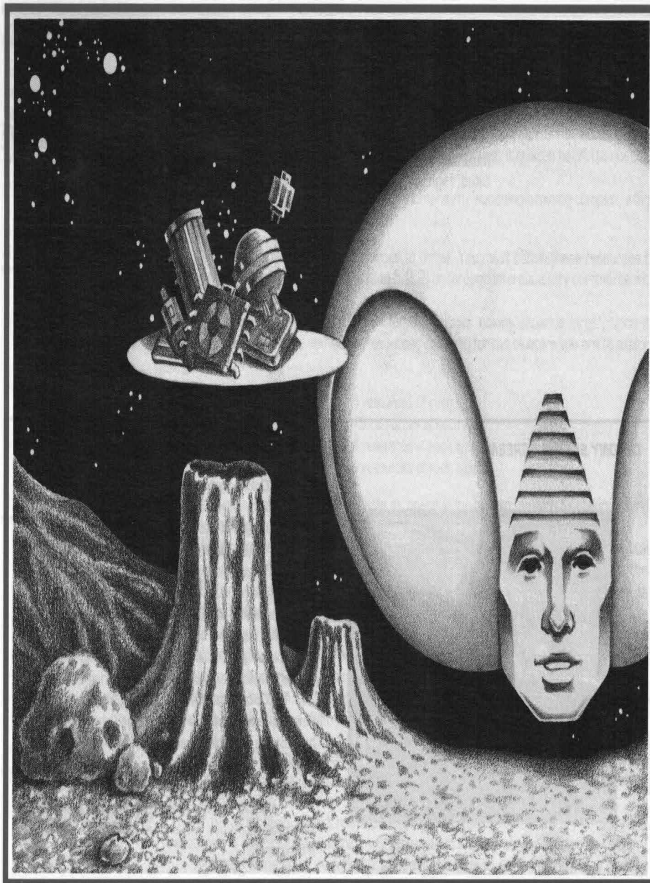
51

5. EXPLORATION & INTERACTION

5.1

PROBING A SYSTEM

When you arrive at any system, your ship is floating in space, not far from that system. Strike **Probe** (the "P" key) to launch a probe which explores the system and discovers any resources. When you probe an uninhabited system, you see the system's Information screen (see 1.2.2. above). If you probe an inhabited system, you are transferred to the Translator where you can talk to the inhabitants.



53

5.2

UNOCCUPIED SYSTEMS

5.2.1

SYSTEM INFORMATION

Four types of orbiting bodies are known to exist in star systems. Three are nearly useless to humankind, except as a matter of scientific interest. The fourth type of body — terrestrial planets — is the most important type.

A double-star system consists of one large star orbited by another, smaller star. Such systems are hotter than normal and have few, if any, Jovian worlds.

Asteroid belts are fragmentary belts of rock. Though space pirates may base their homes in these areas, their resource value is nearly nil.

Jovian planets are gas giants, like Jupiter or Saturn in the Solar System. Their enormous gravity and liquid nature preclude exploitation of any natural resources they may possess.

Terrestrial planets are distinguished by temperature, atmosphere, and natural resources.

Hot planets are good sources of radioactives. These worlds usually are found in youthful systems, and the world's high temperature is itself caused by the prevalence of radioactive elements.

Warm planets are ideal for carbon-based life forms. Because of this, they are the best source for organic compounds, essential for any fledgling colony's success.

Cool planets are often good sources of water. While Earth has been blessed with an adequate supply of water, it is likely that you will have to import this important liquid to a colony world.

Cold planets are freezing balls of rock, far from the warming sun. All of their lighter elements have long since disappeared, often leaving large supplies of metals and metallic elements.

5.2.2

MINING

When you have probed an unoccupied system, you are transferred to the Information screen. You can then select a likely world (use the "<" and ">" keys to choose a world) and hit **Mine Planet** (the "M" key) to send robot miners down to excavate that planet's raw materials.

Although you can call up the system Information screen to check out systems in which you are not present (to do this, hit the "I" key when on the Navigation starmap), you cannot mine such systems. You must physically be at a system to mine its worlds.

Your ship carries only three mining colonies, so you may wish to return to your home base and gather more colonies to completely exploit a particularly rich system. Once a planet is claimed, its resources are automatically added to your holdings. You can then use it to trade with aliens for other resources.

When you are through mining the system, use the Escape key to return to the Navigation starmap.

5.3

NEGOTIATING WITH ALIENS

5.3.1

CONTACT PROTOCOL

Tips: Meeting Aliens

- Whenever you arrive at any system, use a *probe* (the "P" key). Even the most hostile aliens are usually willing to communicate via probe.
- **WARNING!** Attacking any starbase is extremely dangerous and difficult. Initially, your ship is probably overmatched by a starbase. You are advised to wait until (a) your ship has been improved, (b) you have plenty of spare parts to repair battle damage, and (c) you have learned effective attack techniques.

When you emerge from Spindrive into an inhabited system, you see the alien starbase dead ahead, usually accompanied by one or more spaceships. Some or all of these spaceships could be to your side, above, or behind you. You can open communications by tapping **Probe** (the "P" key). If you have arrived at an uninhabited system, see section 1.3.4 for your options.

Don't fire any weapon (including launching fighters), for the aliens will recognize this as a hostile act and attack.

Don't accelerate your ship, or the aliens might assume that you are preparing to attack. The aliens deliver a warning the instant you begin to move. If you do not cease movement within a few seconds, the aliens begin to fight.

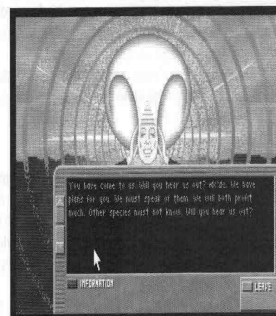
If you do attack a starbase, and succeed in destroying it, the system becomes unoccupied. Until and unless another alien subsequently occupies it, it is abandoned, and you can mine the planets in that system for their resources, if any.

5.3.2

THE TRANSLATOR

When you launch a probe (by tapping the "P" key), it travels down to the aliens' planet or spaceship. The probe contains a mobile translator device which makes contact with the appropriate alien representative. You can now see and communicate with the aliens. An image of the alien, his planet, and part of the translator device is beamed up to your main ship.

TRANSLATOR SCREEN



In the lower right foreground of the displayed image you see the translator, which displays the alien's speech patterns. This device determines potential responses to the alien's remarks, and these responses, each with a button, are listed underneath the alien dialogue.

To select a response, highlight a button by moving the joystick or arrow keys, or by moving the mouse cursor over said button. To activate that button, tap Return, joystick button one, or the left mouse button.

The up- and down-arrow buttons to the left of the alien's remarks enable you to scroll the translation text up and down. This is necessary when the dialogue of an especially verbose alien is too long to fit in the message area.

To communicate, click on the button matching the desired response. This engenders a new remark from the alien, which in turn generates new buttons.

The buttons grouped on the far right side of the translator devise are special. If one says "Leave," selecting it turns off the probe and returns you to the Main Cockpit. If a button is labeled "Fight," pressing it actually opens hostilities with the alien. Select this with extreme caution, since you will be commencing battle with an enemy *starbase*! Right-side buttons labeled "Next," "Prev.," "Exit," etc. move you from one dialogue to another.

Watch the alien carefully. Quite often movements and expressions give clues to its opinion towards you or about the statement it makes. For instance, if it is discussing another alien species, and appears frightened, it is probably afraid of that particular species. On the other hand, if it asks you to do something, and looks angry, it may be trying to threaten you. A few aliens, of course, are expressionless; but most are highly animated.

Do not click through the responses too swiftly. Although an alien's answers to your responses are instant, it usually takes several seconds for the impact of your remarks to sink in. Alien movements and expressions may not change immediately. If you rocket through a conversation, you may miss emotional subtleties which could prove vital in future dealings.

Some aliens, for services rendered or because they are philanthropic, will give you free fuel. This is made available under the name of "Refuel."

Certain aliens (notably the Jot and the Stentor) can load information directly into your ship. If this occurs, you gain access to information about certain previously unexplored star systems through your Navigation starmap.

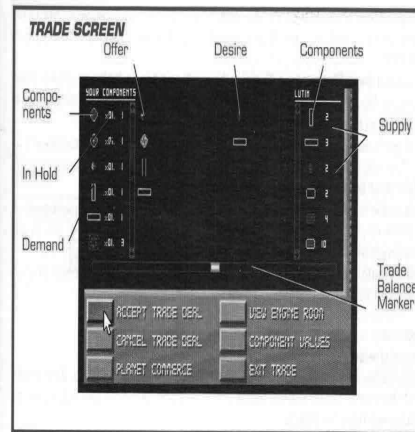
When an alien agrees to trade with you, the Trade screen appears.

On the left side of the screen is a column of icons, representing all the components currently in your ship's hold. Next to each component are two numbers. The first is the number **In Hold**. The second is the **Demand** value. On the right side of the screen is another column of icons, this one representing the components which the alien has made available for trade. Next to these components is the **Supply** value. To trade successfully and profitably, you must understand and use these values.

In Hold: This is displayed in the form "x[number]," and simply gives the total such components currently in your hold. For instance, if you have three radiators in your hold, next to the image of the radiator would appear "x03." If you had six radiators, it would read "x06," and so forth.

5.3.3

TRADING



If no image of a particular component appears, that component is not in your hold. However, it may be present in your engine room. If you wish to trade that component, you must go to your engine room, move the designated component out of its system and into the hold, then return to trade.

Demand: This number ranges from 1 to 4, and gives the value which the alien places upon that item. The higher the number, the more the item is desired by this alien, and the more components the alien will offer in exchange.

Supply: On the right side of the screen is a complete list of all the components which that alien manufactures for trade. (In theory, the alien manufactures other components as well, but these other items cannot be converted for use in your ship, so they are not displayed here.) Next to each component is the Supply value, which ranges from 1 to 4. The magnitude of the Supply

value shows how much the aliens value that component. The higher the value, the more components the alien will demand in exchange for it.

All aliens sell Fuel, and the price for Fuel is always the same: 1 component. This "tops off" your fuel supply (i.e., completely fills your tank). You can only purchase it once per visit. After that once, you cannot buy more fuel until you burn some up by traveling elsewhere.

How to Trade

To trade with an alien, use the joystick, arrow keys, or mouse cursor to place a highlight box around one of the components on your side of the screen (or the alien's, it is not important). Press Return, joystick button one, or the left mouse button to select that component.

When you do so, note that the Trade Balance marker in the middle of the screen slides towards one side or the other. If the Trade Balance marker is tilted in your favor (that is, it is slid over towards the alien's side of the screen), then the alien won't agree to the trade. To get the trade accomplished, you need to add enough items from your hold to even things up. If the marker is slanted in the alien's favor (is slid over towards your side of the screen), the alien will agree to the trade, but it may not be in your best interest!

Once the Trade Balance is centered, you may move your controls to the lower part of the screen to select the Accept Trade Deal button on the screen's lower half to make the

57

deal. If you are using joystick or keyboard, tap the space bar to move your highlight between the upper and lower parts of the screen. If you are using a mouse, just move the cursor over the desired button.

Components with a high Demand or Supply value tilt the trade balance more than others. The best way to figure out how to buy things is to add up the total Demand on one side, and make it equal to the total Supply of what you wish to purchase.

Warning: it is perfectly possible for you to accept a trade deal that is unbalanced in the alien's favor. Try not to do this. Occasionally it is unavoidable, because of your component mix. But do it as little as possible.

Different aliens value components differently. One alien may Supply radiators at a value of 2, and another alien may Demands them at 4. If you encountered these aliens, you could purchase radiators from the first alien, and sell to the second alien for a tidy profit.

This is used for trading components between you and an alien. This is a function of your translator, which in turn is part of a probe.

Trade Screen Buttons

At the bottom of the screen is a group of buttons. They are:

ACCEPT TRADE DEAL: Enacts the trade deal currently on the screen above. If no trade deal is present or if the current deal is unbalanced in your favor, the alien will not agree to trade and this button will have no effect.

CANCEL TRADE DEAL: If you decide against a trade deal you just set up, or you have made an error, use this to cancel the deal.

PLANET COMMERCE: Takes you to the Commerce screen (see section 5.3.4).

VIEW ENGINE ROOM: Allows you to check your ship's needs, utilize components newly added through recent trade, or cannibalize your ship's systems, to get components to the hold for trade.

COMPONENT VALUES: Brings up a window in the middle of the Trade screen. See below for further details.

EXIT TRADE: Returns you to the Translator.

Component Values

To make effective deals and set up profitable trade routes, you need to compare one alien's trade deals with another's. You can do this while in Trade, using the View Values button.

Selecting this button pops up a window in the middle of the screen. On the left side of the window are given the selected alien's **Supply** value for all the components (or resources) he sells. On the right side of the window are the alien's **Demand** values for those components (or resources) he wishes to obtain.

Only those aliens with whom you have engaged in trade are available through the View Values button. Aliens whom you have met, but not engaged in trade, are also available to view.

5.3.4

COMMERCE AND PLANETARY RESOURCES

Next Alien: this flips the window to the next alien you know of. This is done in alphabetical order.

Previous Alien: flips the window to the previous alien. The Values window "wraps around", so that if you keep flipping through windows, you'll eventually come back to the alien you started with.

Return to Trade or Return to Commerce: Returns you to the Trade or Commerce screen, whichever you had come from.

You are unable to get enough planetary resources to complete your mission by mining alone. At some point, you must engage in commerce with friendly aliens to accumulate the raw materials the future colony needs. Four types of planetary resources are available: Metal, Organics, Radioactives, and Water. Your colony world requires a certain amount of each of these for survival, varying with the star cluster you have entered.

To get to Planetary Commerce, you must first get to Trade when talking to an alien. Once there, select "Planetary Commerce" from the buttons at screen bottom. Some aliens never deal in planetary commerce. If so, this button is absent when you are trading with them.

If an alien supplies a particular resource, it won't accept that resource in a trade deal. An alien that sells Radioactives won't buy them.

Planetary Commerce is operated in exactly the same fashion as Trade (see 5.3.3).

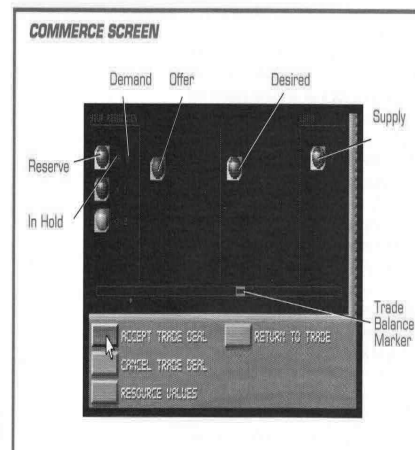
However, only four buttons are at the bottom of Planetary Commerce.

ACCEPT TRADE DEAL: Enacts the deal currently on the screen just above. If there is no trade deal present, or if the current deal is unbalanced in your favor, the alien will not agree to exchange resources, and this button will have no effect.

CANCEL TRADE DEAL: If you decide against a deal you have just set up, or you have made an error, use this button to cancel the deal.

RESOURCE VALUES: Brings up a window in the middle of the Planetary Resources screen, which can be used to compare the deals offered by different aliens. It works just like the Component Values screen available during Trade (q.v., at 5.3.3), but is for Planetary Resources instead.

RETURN TO TRADE: Returns you to the Trade screen.

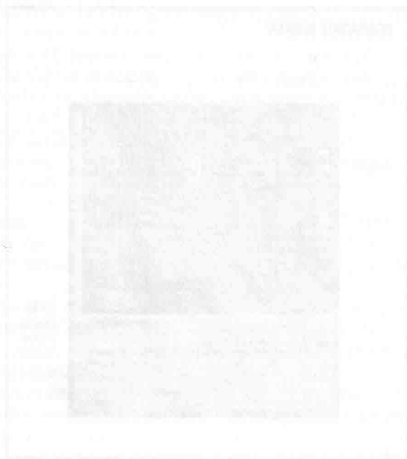


TREATIES & ALLIANCES

You have a free hand to do whatever you please in the name of Humankind. You can sign peace treaties, engage in acts of war, make trade arrangements, etc.

However, if you sign a peace treaty with an alien species, you may not thereafter attack that alien's ships or bases. You need not obey any other provisions of the peace treaty. If the alien species attacks you, thus violating its own treaty, you are free to fight them thenceforth. You cannot be the first to break a treaty.

You may make any other types of treaties or deals you wish, but need only uphold these deals as you see fit. The only type of agreement which is binding is the peace treaty.



5.4

5.4.1

INITIATION

BATTLES WITH ALIENS

Battles can be initiated in two ways: you may be ambushed (or may ambush) an alien ship while traveling via Spindrive; or you may attack (or be attacked by) a starbase when visiting a star system.

Most combats take place while you are traveling between systems. An enemy may simply jump you, forcing you into combat against your will. Or you may pass near a ship that you decide to attack. See 4.2.4 for exact details of such midflight encounters.

After you have left Spindrive to fight, you can either hit **Spindrive** (the "S" key) to keep traveling, or you can go to the Navigation starmap (using the "N" key) to change destinations.

A combat at an enemy star system can be initiated in one of three ways. First, you could start the fight by choosing the FIGHT option while talking to the alien over the Translator. Second, the alien could start the fight by getting angry during a Translator conversation, and drop you out of the discussion, to immediately begin combat. Third and last, you could start the fight from your Main Cockpit, either by firing a weapon or by moving your ship. When you start moving, the alien base will warn you to cease at once. If you do not cease, it will begin combat.

5.4.2

ESCAPE

You have three last-ditch defense mechanisms, usable to get out of an unwanted combat.

If attacked by space pirates that you do not wish to fight, you can **Jettison Cargo** (tap the "J" key), to placate the pirates and permit your escape without further conflict. The amount of cargo jettisoned depends on the pirate, and all pirates will signal your ship with their demands as the combat starts. The longer the combat continues, the more greedy the pirates become, so if you plan to Jettison, do so as soon as you decide you will not win the fight. The main disadvantage to Jettison Cargo is that it is only effective against space pirates. Non-pirates that are your enemy will not be put off by this sacrifice.

The most all-around useful escape device is your **Emergency Spindrive** (hold down Alt and tap the "S" key). This can be used at any time to exit a battle instantly, leaving all pursuers behind. The great disadvantage of Emergency Spindrive is that its use seriously damages your Engine Room, burning out an average of 10 components. It is best reserved for true emergencies. If you have not selected a destination, and try to use Emergency Spindrive, your ship will signal an error. To correct it, go to the Navigational starmap and select a nearby system. Then use Emergency Spindrive.

The most powerful emergency technique you possess is the **Escape Pod** (hold down Shift and tap the Escape key). This completely abandons your main ship, and launches a sub-space capsule which heads back to your home base. Once there, a distress signal is sent to Earth and a new **Trailblazer** ship is dispatched for your use. The disadvantage of the escape pod is that it costs you considerable time. The **Conestoga** colony ship must therefore wait even longer before getting their colony established, and this may mean the death of colonists. However, it gives you a whole new ship, and is thus your best choice if you are in a completely untenable position.

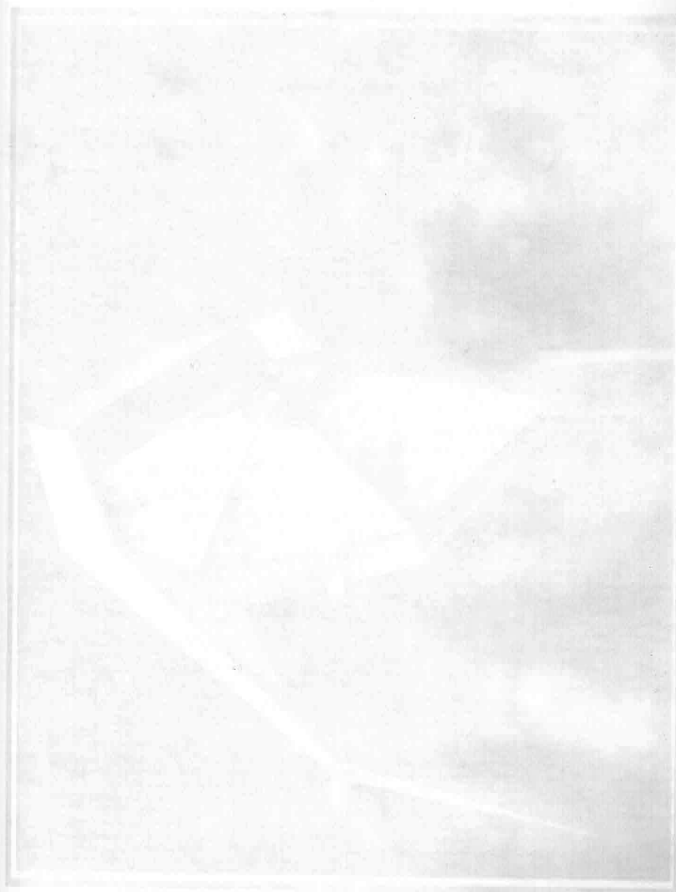
5.4.3

VICTORY

After a space combat where you did not flee, your ship automatically scavenges debris using invisible tractor beams. Any and all intact components found amidst the wreckage of destroyed ships are recovered and added to your hold. If you are skillful and choose your combats wisely, you can gather a nice supply of components by doing this.

Be warned, however, that most aliens object to this sort of piracy. Species you victimize, and their friends, may become significantly more hostile in future encounters. Also, unless you choose your targets wisely, you may lose more components in battle than you gain in the aftermath.

In general, the larger the alien ship you destroy, the more components you recover after the fight. Destroying an alien starbase generally garners the most salvage. In addition, because starbases always have large fuel reserves, destroying a starbase always recovers enough fuel to fill your tanks.



6. TECHNICAL SPECIFICATIONS

6.1

INTRODUCTORY MATERIAL

6.1.1

DESIGN HISTORY

Although the vast inventory of Terran (human-built) spacecraft built in the first two centuries after the dawn of the Atomic Age was almost entirely based on designs from Japan, this was not the case with the new generation of craft developed in the decades preceding Earth's utter ecological devastation. The new ships were the finest ever made, and were one of the few bright spots in those rather grim times. The most immediate result of the experiences in the Pluto War was recognition of the need for more powerful screen generators to resist contemporary plasma weapons. The *Kongo*-class star cruisers had proved vulnerable, often exploding after taking only a single hit, thus exposing the fallacy that powerful guns and maneuverability were adequate for a warship's protection. In both the Pluto War and the skirmishes off Arcturus, Terran personnel had complained that warp-based engines were too capricious, bursting into flames or shutting down at the slightest provocation. This led to increased interest in the then-theoretical Spindrive technique, which could operate under the most severe conditions. Soon designers were working on new ships to solve these problems.

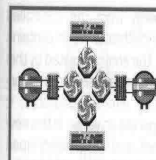
The first of the new generation of spacecraft was the *Uproar*, which began development to replace the outmoded *Kaisers* vessels. The six prototypes had the new Spindrive and the most powerful screen generators yet made (composed of 5 components instead of the usual 2). Their sub-light speed was inadequate, however, and it was soon realized that though their screens were exceptionally powerful, their own weapons were incapable of seriously damaging enemy ships of comparable build. The project was terminated.

About this time, Project Erebus was completed, which constructed an immense antiproton accelerator in Antarctica, for scientific research into antimatter systems. Before long, it was realized that versions of this accelerator could be fitted into a starship hull, to make the most powerful mobile weapon ever constructed. With the outbreak of the Arcturus War, a ship, named the *Habakkuk*, was hastily constructed from two *Uproar*-class hulls, with an Erebus-style antiproton gun fitted between. This prototype was sent for experimental combat trials with the 20th Battle Fleet. Even before the conclusion of the

65

6.2

THRUSTER SUBSYSTEM



Your Thrusters produce forward motion in a three- or four-step process.

Step One: The burners produce high-energy ions. This produces raw thrust which can be channeled backwards to provide a simple, if crude, forward locomotion.

Step Two: A converter absorbs and thus cancels the electric charge on the backwards-moving ions, preventing them from repelling one another. The former ions can be expelled on exactly parallel lines, creating an electrically-neutral particle "laser"; thus, all the thrust produced is directly used in moving the ship. The converters by themselves are not able to absorb a very large electric charge, so most of the charge absorbed must be transferred to the Spindrive. Thus, the capacity of the Spindrive indirectly affects the speed produced by the Thruster Bay, through the converters.

Step Three: The magnetic swirl of a turbine is transformed into linear acceleration, speeding up the high-energy ions to relativistic speeds, at which both mass and velocity are enormous.

Step Four: A secondary mechanism controls and organizes the ion flux, pulsing it in the most efficient manner to prevent wavelength interference as the neutral ions are expelled from the ship's rear.

Under your ship's initial configuration, the potential fourth step of the above process is unused. If you are able to obtain additional secondaries, you can utilize this potential extra speed.

The speed gained through the components of the Thruster Bay is explained below.

Thruster Speed

Each active burner provides	870 kph
Each active secondary provides	1090 kph
Each active turbine provides	440 kph
Each active converter provides	220 kph, plus 220 kph per active turbine/accelerator pair in the Spindrive, up to a maximum of 650 kph per converter.

Arcturus trials, the Defense Council accepted the *Habakkuk* as the basis for Earth's new dreadnought-type vessels, and began planning its production.

When Earth's leaders realized that our planet was going to be ruined beyond swift recovery, they quickly decided upon the *Conestoga* plan, whereby colonists would be sent out in the huge *Conestoga* transports while specially-built scout ships checked out clusters for habitable worlds. It was decided that the scout vessels should be the most powerful and advanced ships ever constructed by human technology. The lessons of the *Uproar* and *Habakkuk* were taken to heart, and the new ships were built from scratch to have the most powerful armament possible, as well as a healthy range, reliable engine, and excellent defensive capabilities.

The result was the *Trailblazer*.

6.1.2

TECHNICAL SPECIFICATIONS

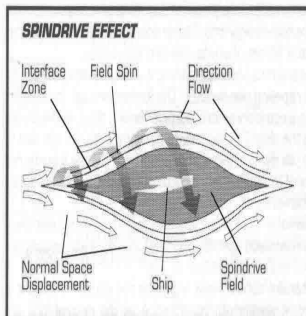
Your ship is a *Trailblazer* class interstellar dreadnought. The main hull is 3400 meters long (11,200 feet), and 2960 meters wide (9700 feet). Built at the Tycho Spaceworks of the Lunar Democratic State, it belongs to the second-largest class of starfaring vessels built by humankind, eclipsed in size only by the immense *Conestoga* colony transports.

Your vessel is an essentially a gigantic scout ship, built to operate with minimum of support. It carries the following:

- Up to 500 units of fuel
- Up to 10 missile chassis (for guided missiles, kamikazes, or fighters)
- Up to 3 mining complexes, for extracting planetary resources
- Several hundred probes, for communication and exploration
- 6 accelerators, with room for 4 more
- 2 normal blasters, with room for 2 more
- 2 burners, with room for 2 more
- 6 converters
- 6 linkages, with room for 2 more
- 1 Vespucci Navigator
- 5 radiators, with room for 3 more
- 2 secondaries, with room for 2 more
- 1 Cody Targeter
- 6 turbines, with room for 3 more

In addition to the components listed above, The *Trailblazer* has a hold with an extremely large capacity for storing spare components.

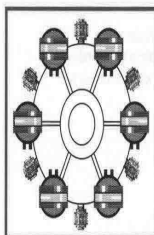
6.3 SPINDRIVE SUBSYSTEM



The Spindrive derives its energy from the controlled destruction of a complex antimatter clathrate, which contains numerous molecules of anti-Xenon. The energy created by this destruction is used to twist the fabric of space-time into a four-dimensional spindle. As the twisting effect accelerates, it eventually splits the ship off into a separate universe. In this new universe, all that exists is the ship itself, and the spindle-shaped hunk of vacuum contained by the Spindrive's effect. Within the new sub-universe, you are still limited by the speed of light, but you can move your entire universe (the new, small, one) faster than lightspeed, now that it is disconnected from the rest of the cosmos. Without much difficulty, you can greatly exceed the speed of light.

When two spindrive fields are operating in close proximity, it is possible for either of the ships involved to reverse their drive's polarity. This forces both ships out of spindrive and back into normal space. Once back in normal space, combat is possible. Hostile ships will often use this technique to drop your *Trailblazer* into normal space so that they can attack. You may also use this technique if you happen to pass near an alien ship while traveling through space.

The only drawback to this form of travel is that our ship expends enormous amounts of fuel to achieve any distance.



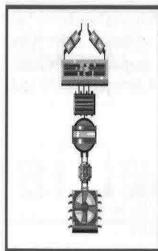
SPINDRIVE COMPONENTS

Working Turbine/ Accelerator Pairs	Effect on Fuel Cost	Effect on Thrusters	Effect on Main Gun	Effect on Screens
1	no effect	+220 kph	+0.8 damage rating	none
2	no effect	+440 kph	+1.6 damage rating	none
3	no effect	+650 kph	+2.4 damage rating	none
4	.875 normal	+870 kph	+3.2 damage rating	+12%
5	.75 normal	+1100 kph	+4.0 damage rating	+12%
6	.625 normal	+1300 kph	+4.8 damage rating	+12%

NOTE: the Spindrive's effect on other ship systems must be applied through those systems' converters. Thus, the listed effect should be considered a maximum.

6.4

MAIN GUN SUBSYSTEM



Your Main Gun works by joining the normal functioning of two separate ship functions. Your ship's Spindrive travel naturally creates waste antiprotons. These antiprotons are not expelled from your ship, but are collected into a small sub-universe. This sub-universe is similar to that formed by your Spindrive, but is shaped into the form of a hypersphere, and is thus both stable and immobile, relative to your ship. Antiprotons by themselves are not useful. However, your ship is also subject to a never-ending barrage of gravitational energy, emanating from stars, planets, and galaxies from everywhere in the universe. Your ship uses this constant supply of gravity waves to create a spherical gravity shear. Antiprotons are bled off from their storage sub-universe and injected into the center of the gravity shear. When a sufficient mass of antiprotons is present to give the gravity shear the ability to persist temporarily outside of the ship, your Main Gun is ready to fire.

In firing, you project this sphere of antiproton plasma towards your intended target. When the sphere hits that target, the gravity shear is dispelled, and the energy of the antiprotons is absorbed, burning out many of the target ship's systems or even breaking it up entirely.

In its natural state, the Main Gun's antiproton sphere builds up rather slowly, and can only be launched once every 13 seconds, for a damage rating of 2.3. However, this can be improved by a number of enhancements.

At game start, all possible enhancements to the main gun are used.

Accelerator: an accelerator relativistically compresses the antiproton sphere, forcing it to condense faster than normal, and thus speeding up the time needed for the Main Gun to cycle.

Converter: a converter can be used to channel electrical power into the Main Gun from the Spindrive. This literally "heats up" the antiprotons, increasing their ambient temperature by as much as a billion times! This, of course, greatly increases the damage done by the Main Gun, but its effectiveness is entirely depending on the current strength of the Spindrive. If the Spindrive is completely inoperative, the converter does nothing.

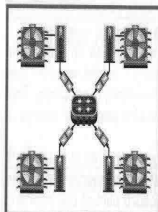
Linkage: linkages join the antiproton storage sub-universe directly to the gravity shear, enabling the antiprotons to flow into their shear at a much faster rate than the normal quantum leakage permits. This speeds up the time needed for the Main Gun to cycle.

Radiator: the time needed for the Main Gun to cycle is normally lengthened by the fact that the gravity shear produces an enormous amount of heat as it forms. To keep it from heating up too quickly [which would dissipate it before it was ready for use], the Main Gun normally cycles at a slightly less-than-optimum rate. A radiator expels excess heat directly into the vacuum of space and so permits the Main Gun to cycle quicker.

Secondary: a secondary is able to control the antiproton flux, arranging the particles within their gravity shear in carefully layered rings of energy. When the antiprotons hit the target, their energy is released serially over the course of several nanoseconds instead of all at once. This produces a pulsed effect that significantly enhances the damage done by the Main Gun.

6.5

BLASTER TURRET SUBSYSTEM



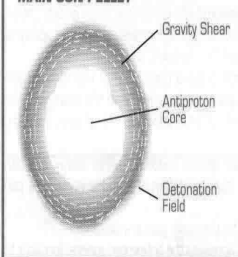
Your blasters work by emitting controlled bursts of plasma through aimed tubes. This process heats up the tubes, which must be cooled down by radiators. These blasters do 0.15 in Damage Rating, which is quite small compared to your missiles and Main Gun, but adequate for their task.

The blasters themselves are rather simple. Of more interest is the control system which operates it. You, as commander of the *Trailblazer*, normally sit near the exact center of your ship. When you activate the Blaster Turret, a spherical shell closes around you. On the inside surface of this shell is projected all the space around you, and you can slew your chair around inside the shell to see in every direction. Dotting the surface of the *Trailblazer* are dozens of tiny tubes. When you face in a particular direction, the tubes in that location are activated and aimed at the spot you designate.

The blasters themselves are immobile objects located in your Engine Room. The plasma bursts they produce are channeled through the ship to the appropriate tubes. Hence, the more blasters you can obtain, the more shots you can take with them.

In this manner, you are able to get a turret with a full 360° spherical field of view — for the first time in human history!

MAIN GUN PELLET



MAIN GUN COMPONENTS

Component	Effect
accelerator	-2 seconds from rate of fire
linkage	-2 seconds from rate of fire per linkage
radiator	-2 seconds from rate of fire
secondary	+1.6 to damage rating
turbine	-2 seconds from rate of fire
converter	+0.8 to damage rating per active turbine/ accelerator pair in the Spindrive

Basic Damage Rating: 2.3

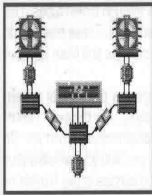
Basic Rate of Fire: 1 per 13 seconds

Maximum Damage Rating: 8.6

Maximum Rate of Fire: 1 per 3 seconds

6.6

SCREEN GENERATORS



The Screen Generators protect your ship from enemy attacks by blocking off incoming missiles and energy charges. They act as follows:

Step One: the secondary in the heart of the Screen Generator sets up a powerful atomic field encircling your entire vessel. Any form of energy striking this field, whether that energy is electrical, radiation, or even kinetic, tends to convert harmlessly to neutrinos. This conversion is done on an all or nothing basis — either the entire packet of energy is transformed, or none of it is.

Step Two: converters alter the charge and spin of the incoming quanta of energy and prepare it for the desired transformation into neutrinos. If the Spindrive is at greater than normal capacity, the converters can, in addition, attempt to absorb part of the incoming charge. Under usual conditions, however, this latter effect is negligible.

Step Three: the incoming energy is caught by the accelerators, which heat up rapidly. The accelerators' ability to transform energy is degraded unless this heat is expelled in turn by radiators. The accelerators enhance the effect of the atomic field as the energy is played out across its surface and then (hopefully) the harmful energy's potential is altered and dispelled.

If the transformation process is successful, the screen can cancel out the effect of even extremely powerful attacks. A disadvantage is that the transformation process is somewhat random, due to quantum effects.

Some alien races attempt to circumvent the screen's protection by firing volleys of shots or by firing very rapidly, in the hope that multiplicity of incoming attacks will ensure that some will hit home. Unfortunately, they are correct in this hope.

Each component in a screen generator gives a percent chance that it will neutralize an incoming attack. Converters are only effective if the Spindrive is powerful enough ($q.v.$). The Screen Generator Efficacy table below gives the precise numbers.

SCREEN GENERATOR EFFICACY

Component	Effect on Protection
Accelerator	+12% to chances of success
Converter	+12% to chances of success if Spindrive contains at least 4 active turbine/accelerator pairs
Linkage	no effect (but if absent, that arm of the Forward Screen Generator goes inactive)
Radiator	+12% to chances of success
Secondary	provides basic 12% chance of success

For example, if a shot hits the front of your ship and you are using the at-start layout, your front screens have two converters, two accelerators, and two radiators. The converters do nothing, because the Spindrive only has 3 active turbine/accelerator pairs. The accelerators and radiators each give a 12% chance of cancelling out any given attack. Hence, your forward screens have a 48% chance of success.

6.7

REMOTE CHASSIS

6.7.1

GUIDED MISSILE

Guided missiles home on the enemy ship you designate with **Target** (the "T" key). Guided missiles require no concentration to use, but are only really effective against small craft.

Length: 180 meters (600 feet)
Normal Combat Speed: 600 meters/second (21,600 kph, or 13,000 mph)
Armament: impact warhead
damage rating: 1.6

6.7.2

KAMIKAZE

Kamikazes are under your direct control. Because they do not need an automated guidance system, they can carry a much larger warhead than a guided missile. If all enemy ships are destroyed, all extant kamikazes automatically return to your ship.

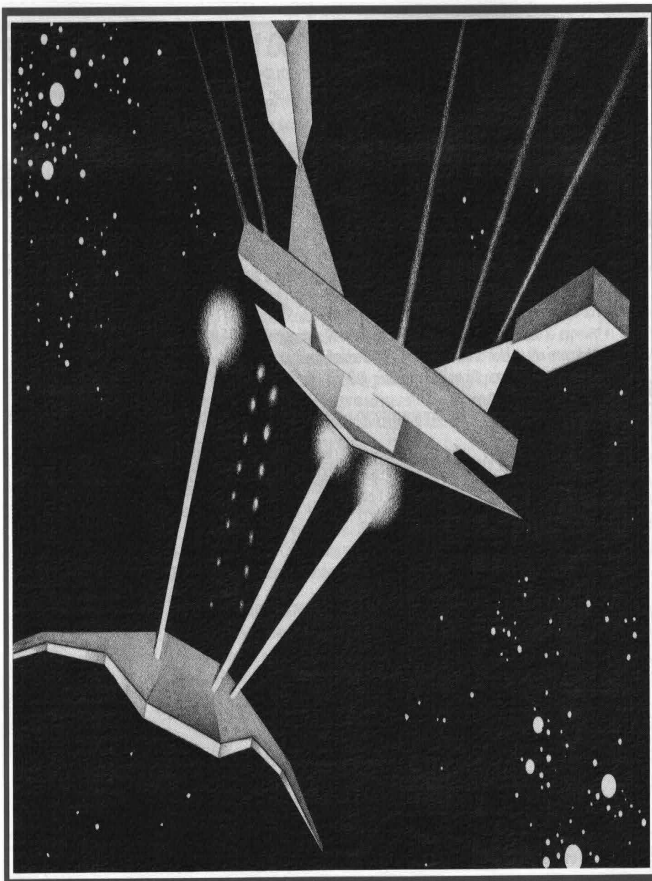
Length: 180 meters (600 feet)
Normal Combat Speed: 600 meters/second (21,600 kph, or 13,000 mph)
Armament: impact warhead
damage rating: 6.3

6.7.3

FIGHTER

Fighters are under your direct control. They mount two fixed blasters, firing straight ahead.

Length: 180 meters (600 feet)
Normal Combat Speed: 1200 meters/second (43,200 kph, or 26,000 mph)
Armament: twin blasters
damage rating: 0.15 each



7. TACTICAL MANUAL

7.1

COMBAT TACTICS

7.1.1

THE MAIN GUN

Tips: the Main Gun

- An audible signal is heard when the Main Gun is ready to fire. Rather than watch the Main Gun Gauge, work on maneuvering your ship into firing position and fire the instant you hear the signal.
- Even when all the rest of your ship is destroyed, your Main Gun will still fire at a reduced level. Sometimes you can use this fact to eliminate particularly bothersome enemies, using your Escape Pod when you are finished.
- If the enemy ship is briefly masked by a blocky shield after you fire your Main Gun, it has a shield generator, and your Main Gun cannot harm it. Use other weapons.

Your Main Gun fires an 80-meter diameter cluster of antiprotons held together by a spherical gravity shear. It fires straight ahead, and you must aim your entire ship to aim the Main Gun.

When the Main Gun hits a ship, but does not destroy it, the target ship momentarily glows brightly. This occurs when the antiproton energy is absorbed, and normally indicates that the target is seriously damaged.

The disadvantage of the Main Gun is that a defensive gravity shear cancels the effect used to keep the antiprotons together, dissipating them immediately. Such a defensive system briefly turns visible just after a hit by your Main Gun. If you see a blocky-looking shield appear when you hit a ship, you'll know it has a screen generator and is immune to your Main Gun fire. You must use missiles or kamikazes against such targets, or use fighters to destroy the screen generator (see section 7.3.2).

Because of the Main Gun's comparatively slow rate of fire, and the fact that you must aim your entire ship, it is not a good destroyer of enemy fighters or missiles. However, it does a great deal of damage, has a long range, and does not use up one of your limited supply of chassis. For these reasons, it is very effective against large ships and starbases.

7.1.2

GUIDED MISSILES

Tips: Guided Missile

- A guided missile can't hit a fighter faster than it, unless fired while the enemy is flying toward your ship and you are aiming for a head-on collision.
- Launch guided missiles early in the combat, so they will hit enemy fighters before they start shooting — a stray shot may hit and explode your missile uselessly.
- Guided missiles are the most specialized of your weapons. When meeting an unfamiliar enemy, you might want to fire a single guided missile at his fighters to see if it does any good, but you may be better off trying out kamikazes and fighters.

Guided missiles home in on the currently-targeted enemy ship (visible in the left-hand viewer from the main cockpit). That ship is also indicated by brackets around its image in the main 3-D screen, and a box around its dot in the radar screen. Guided missiles do comparatively little damage (damage rating 1.6). However, one can destroy any fighter, and several together can destroy a small warship. They are very vulnerable to enemy laser turrets, which can destroy the missile before it hits.

Your guided missiles, fighters, and kamikazes are all based on the same missile chassis. You can carry only 10 chassis at a time, so use them sparingly.

7.1.3

KAMIKAZES

Tips: Kamikaze

- If the enemy ship has laser turrets, launch a fighter before any kamikazes — it can destroy the laser turret, clearing the way for the kamikazes.
- Against big, slow targets (like starbases), try launching a kamikaze, aiming it, hitting the space bar to return to your Main Cockpit, from which you can launch another kamikaze, then hit **Return Chassis**. Keep this up until you have four kamikazes going straight at the enemy. If they all hit, they deliver a tremendous punch, and while they are flying you can still operate your main ship.
- Some enemies shoot shells or pellets at kamikazes. To avoid these, don't fly toward the enemy's middle. Instead, fly towards his edge, so his shots are not aimed right down your throat.
- Few laser turrets provide all-round protection. If you can find the "cracks" in an enemy's defensive perimeter, your kamikazes can hit him with impunity.

Kamikazes must be piloted yourself. They do much more damage than guided missiles (damage rating of 6.3 as opposed to the guided missile's 1.6). You can exit a kamikaze cockpit at any time, leaving the kamikaze to continue in a straight line along its current course. If all the enemy ships are destroyed, all extant kamikazes automatically return to your ship.

Laser turrets are very effective against your kamikazes. You should try to eliminate them before sending your kamikazes to deliver a *coup de grace*.

7.1.4

FIGHTERS

Tips: Fighter

- The design of shield generators and laser turrets varies a little between alien species, but you can learn to recognize them and target them with your fighters.
- The best way to knock out an enemy laser turret is to fly straight at it at top speed. As soon as you come within range, start firing.
- The easiest way to destroy an enemy fighter or small warship is to get on its tail and *Match Speeds* (the "M" key). Then just follow it as it flies and pump in your shots.

Fighters must be piloted yourself. They fire blasters (damage rating of 0.15) which cannot harm large warships, but can destroy pinpoint targets, such as laser turrets and screen generators. They are also very effective against enemy fighters.

Lasers can shoot down your fighters, if you linger too long in their vicinity. If you keep moving at top speed, their chances of destroying you are significantly lessened. Your fighter can take 2 laser turret hits before it is destroyed. Keep an eye on the damage bar hologram (on the far right).

7.1.5

BLASTER TURRET

For maximum efficacy, begin firing just before an attacking fighter comes within range (experience will teach you when this occurs). If you are quick and skilled in operating the turret, and can follow an enemy fighter as it swoops past, you can get some extra shots in as it leaves. Hitting a fighter both coming and going almost always destroys it on a single pass — the most effective possible use of your turret.

Incoming missiles are a different kettle of fish. Shooting down a single incoming missile is trivial — if you can get your blasters pointed at the darn thing, you can shoot it down. However, many aliens fire salvos of missiles, all coming in at the same time. To shoot these down, aim at one of the missiles and fire at it just as it comes into range, then, without waiting to see if you hit the first missile, keep firing, and swinging your turret back and forth across the oncoming enemy missiles. Eventually, you should be able to shoot down as many as six missiles, if they are clumped closely enough.

7.1.6

SCREENS

Your defensive screens work by randomly cancelling attacks against your ship. The more powerful your screens, the likelier they are to halt a given attack. You should try to make sure that your screens have the maximum number of components possible.

If you are facing a warship or starbase, it is usually a good idea to put as many components as possible in your Forward Screen Generator, since your rear screens are unlikely to be hit. However, if you are facing small, agile fighters, or multiple enemies, you should even out your protection, with some components in your Rear Screen Generator as well, even if you must partially denude one of your Forward Screen Generators.

7.1.7

EMERGENCY MANEUVERS

You have three fail-safe maneuvers, useful for getting out of a bad situation.

If you are being attacked by pirates, you can **Jettison Cargo** (tap the "J" key) to dump a portion of your hold in return for immunity from attack. While this may often stick in your craw, if you're not sure you can defeat the pirates, it may be smart, especially if your ship is damaged from recent battles.

Against other aliens, **Emergency Spindrive** (hold down "Alt" and tap the "S" key) is effective at removing you from a battle quickly. However, the damage it causes to your internal systems is enough to make it undesirable under most circumstances. Emergency Spindrive destroys about 10 components, chosen randomly. Therefore, you should choose to utilize it if you are facing an enemy that you believe will destroy more than 10 of your components. That is, unless you think you will gain more than that in salvage.

If your ship has been ruined so much that you no longer wish to bother with it, the **Escape Pod** (hold down Shift and press Escape) is your best bet.

7.2

7.2.1

DEFEATING ENEMY FIGHTERS

DEFEATING ENEMY CRAFT

Enemy fighters are much faster and more maneuverable than your *Trailblazer*, and are difficult to hit, though they do not deliver much damage on a single attack run.

Your Blaster Turret is generally the weapon of choice for dealing with enemy fighters. All fighters are vulnerable to it, and even the heaviest attacking fighters can only withstand around 10 hits (you start out with 2 blasters, and can upgrade to 4, so only a couple of bursts can knock them out). Of all your ship's systems, the Blaster Turret is the most easily upgradable. We strongly recommend that you attempt to improve it before attacking enemies who are employing multiple fighters.

Sometimes it is better to hop into a fighter of your own and hunt down the enemy. Few enemy fighters have defensive laser turrets, so your own fighter can usually draw quite close to the enemy. Get on an enemy fighter's tail, press *Match Speeds* (the "M" key) when you are within range, then fire a burst each time you get it in your sights. Be careful that your *Trailblazer* isn't wrecked beyond repair while you are out gallivanting around.

Sometimes you can knock down a fighter with your Main Gun as it comes in for its initial attack run. Once they start circling your ship, though, the Main Gun is rarely effective.

Guided missiles, too, are sometimes useful. If you wish to use guided missiles, fire them before the enemy fighters have gotten in close.

Kamikazes are rarely cost-effective against fighters. While a kamikaze can destroy any fighter made, so can a guided missile, and with less investment of your time. On the other hand, a well-piloted fighter of your own can usually destroy two or three enemy fighters in the time needed for a kamikaze to knock out just one.

7.2.2

DEFEATING ENEMY WARSHIPS

An enemy warship is defined as any vessel larger than a fighter. The smallest warships are no more than overgrown fighters, while the largest ones rival or even exceed your *Trailblazer* in size. While most fighters have fairly simple attack procedures, warships have a more complex array of weapons. Some warships launch missiles or fighters of their own.

The Main Gun is generally the most effective attack against enemy warships. If you can avoid their attacks (whether by distracting them with a fighter or missile, or by shooting down their incoming shots with your blaster turret), and get a few hits in with your Main Gun, you can usually destroy almost any enemy. Many warships attempt to dodge your main gun's fire. You may need to predict which direction they'll dodge and fire there, to catch them as they move.

Guided missiles and kamikazes are worthwhile against many warships. Guided missiles are less effective, since it takes four times as many of them to knock out a target.

Small warships are often vulnerable to your fighters, and you can sometimes zoom in on them and destroy them long before they come within range of your Main Gun. Beware of defensive laser turrets, however.

Your blaster turret is rarely useful against a warship. They usually begin attacking from too far away for your turret to reach them, and many are armored against its effects.

DEFEATING ENEMY STARBASES

Starbases are enormous, immobile redoubts. They defend entire solar systems from alien interference. Even when you have built your ship up to great power, think carefully before taking on a starbase.

Most starbases are accompanied by defending warships. These vessels may be specially-designed for starbase defense. In addition, the base itself may be armed and capable of self-defense by firing missiles or energy blasts. The best way to knock out a starbase is at long range. First, destroy any defending warships. Then send in fighters or kamikazes to knock out the starbase's defensive systems, especially any screen generators. Once the base is defenseless, you can return to your *Trailblazer*, move in close and destroy it with your Main Gun.

If you are desperate, you may wish to press home an attack against the starbase alone. If you can destroy the starbase, all accompanying ships will depart as their continued presence is useless.

DEFEATING SPECIFIC ENEMY SYSTEMS

DEFEATING LASER TURRETS

Your vessel has a blaster turret which provides protection against incoming missiles and fighters. Many alien ships, especially those which are not particularly maneuverable, possess similar turrets. For simplicity, all such systems are termed "laser turrets," though in fact they fire a wide variety of energies, depending on the alien manufacturer.

For obvious reasons, a laser turret must be mounted on the ship's exterior. Hence, a fighter or carefully-aimed missile could hit the laser turret and destroy it, opening the way for follow-up attacks.

DEFEATING SCREEN GENERATORS

Your vessel's Main Gun fires a sphere of antiprotons held together by a gravity shear. Certain types of energy fields are capable of cancelling the sphere's containment shear. When the shear is cancelled, the antiprotons dissipate at once, completely destroying the main gun's efficacy.

The activation of such a defensive screen is highly visible — the screen is opaque and shaped like rectangular blocks. The screens appear only for a moment, but remember, their appearance indicates that your Main Gun shot had no effect. You cannot harm that ship until you destroy the screen generator.

Screen generators have no effect on fighters and missiles. Cancelling out such a small object's internal gravity has a negligible effect on the object's integrity.

Screen generators must be located on the ship exterior, for a gravity wave cannot be generated safely from the interior of a ship (the tidal effects would shatter the ship's hull). Because of this, a fighter or kamikaze can move in and destroy the externally-mounted screen generator. Once the generator is destroyed, the enemy is once more vulnerable to your Main Gun.

DEFEATING ARMOR

All large enemy ships possess armor. You can tell that a particular vessel is armored if, when you fire at it with a blaster, no signs of damage appear (normally visible as small flaming chunks flying off the enemy ship).

An armored ship is immune to your fighter's weapons. However, if the ship has a screen generator, laser turret, or other vulnerable exterior device, your fighter may still come in handy. You can use it to destroy these devices. In any case, you'll need to destroy the enemy ship itself with kamikazes or your Main Gun.

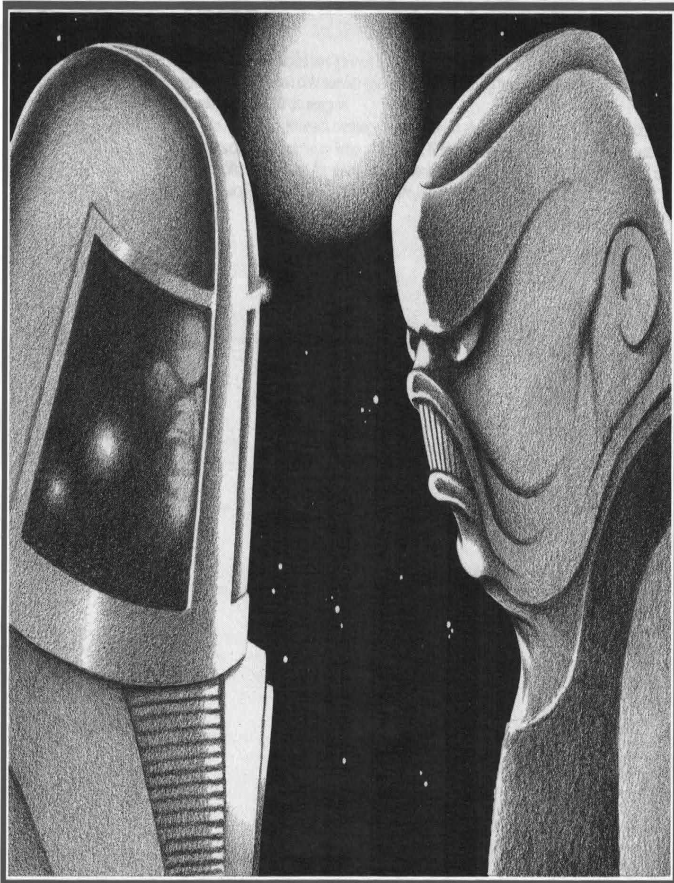
SPECIAL SYSTEMS

Some ships may have vulnerable exterior portions other than laser turrets or screen generators. You'll have to learn these on a trial-and-error basis.

7.4 NOTES

Each alien species has its own special weaponry, ships, and strategies which it applies against you. You can only survive and prosper by learning how a particular enemy fights and developing counter-strategies.

You will need different strategies for different aliens. The general-purpose techniques in this section may serve to keep you alive at first. However, sooner or later you must learn the specific techniques for each independent alien species. One risk-free method of doing this is using the Practice Combat option.



8. ALIEN SPECIES & WARSHIPS

Dozens of different alien species are known to exist. Those known to humanity are listed below. You should be prepared for anything. The data below is the best available at this time. However, it is possible that some of the information is misleading or entirely false. Only your exploration can clear such matters up.

8.1

ATHDALDE

8.1.1

ATHDALDE



ATHDALDE GENERAL INFORMATION

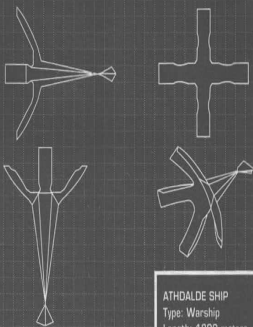
Biology: Standing well over three meters (ten feet) tall, these aliens have a thickened hide, encapsulated bodies and four long legs. Arm-like tentacles spring from their torsos. They always wear a complex helmet/visual sensor on their heads — this helmet is surgically connected to the alien's nervous and sensory system and cannot be removed.

All known Athdalde live in spaceships. They use blindingly bright green-white light sources even in what (by human standards) appears to be full daylight. Water in quantity crystallizes and decomposes their tissue, and when outside their ships they wear spherical self-sealing transparent envelopes to protect themselves. The Athdalde communicate between one another via controlled pulses of gamma radiation, emitted and received by their helmets. Their weapons, tools, and shipboard command devices are operated similarly, in combination with manual controls. Hence, none of their devices can be easily used by other sapient.

Psychology: The Athdalde are viewed as enemies by other species, as their custom is to move in on a planet in force, quickly excavate useful minerals with destructive plasma bombs, and then abandon the gutted world.

85

ATHDALDE WARSHIP



ATHDALDE SHIP
Type: Warship
Length: 1800 meters
Speed: 3000 meters/second

8.1.2

ATHDALDE WARSHIPS

The Athdalde have only one type of ship. It fires plasma stalker pods, composed of superheated plasma. The pods do equal ionizing and radiation (heat) damage. The pods are self-guiding, and home in on both enemy ships and threats to the Athdalde vessel itself (such as your own missiles).

Athdalde Ship (warship)

Length: 1800 meters (6000 feet)
Normal Combat Speed: 3000 meters/second
(11,000 kph, or 6600 mph)

Armament: three plasma stalker pod launchers
damage rating: 4
firing arc: homing

Defenses: armor

8.2

AUTOMATA

8.2.1

AUTOMATA GENERAL INFORMATION

Biology: these are an inorganic race of robots. Their history is multiform. On many different worlds, for a variety of reasons, the dominant species has been replaced by robotic entities. On some worlds, the ruling organic species arrived, built the robots to run mining complexes or otherwise tend the planet, and then the organic beings left. On other worlds the ruling species simply became extinct, leaving the robots behind — occasionally the robots exterminated their former masters themselves. In several known cases, the robots started out as organic beings, and transformed themselves into their current forms.

Thousands of years ago these various planets of robots contacted one another and became a single unit. The various alien technologies used to construct them were combined into one vast super-technology. The original robots were all dismantled, and new ones were built. These new robots are the beings known as the Automata today.

Psychology: Whatever their origin, all share the same traits used by robots everywhere. In all cases, their form fits their function. They have no comprehension of self-preservation. All lack free will.

8.2.2

AUTOMATA WARSHIPS

The Automata possess a wide variety of ships. All of their ships except their extremely small and agile fighters have an orbiting box of armor. This circles them and protects them from damage. To harm an Automata ship, you must time your shot so that it hits an open, unarmored area.

Automata Fighter (fighter)

Length: 60 meters (200 feet)
Normal Combat Speed: 9200 meters/second
(32,900 kph, or 19,800 mph)
Armament: repeating cannon
damage rating: 0.2
firing arc: straight ahead

Automata Corvette (fighter)

Length: 450 meters (1500 feet)
Normal Combat Speed: 5500 meters/second
(19,800 kph, or 11,900 mph)
Armament: polar pulsar
damage rating: 0.4
firing arc: all around
Defenses: twin orbital plates

AUTOMATA CRUISER



AUTOMATA CRUISER
Type: Warship
Length: 1400 meters
Speed: 2700 meters/second

Automata Cruiser (warship)

Length: 1400 meters (4500 feet)
Normal Combat Speed: 2700 meters/second
(9900 kph, or 5900 mph)
Armament: polar pulser
damage rating: 0.8
firing arc: all around
Defenses: four orbital plates, plus armor

Automata Battleship (warship)

Length: 5500 meters (18,000 feet)
Normal Combat Speed: 1500 meters/second
(5500 kph, or 3300 mph)
Armament: polar pulser
damage rating: 1.5
firing arc: all around
Defenses: five orbital plates, plus armor

8.3

BALATHIDE

BALATHIDE



The Balathide are a parasitic species which attach themselves to starships and feed off of the ship's ambient energy. They are wormlike, without visible sense organs. Since they themselves can fly through space, they have no need of ships. They act as their own vessels.

8.4

BROODMASTERS

8.4.1

BROODMASTER GENERAL INFORMATION

Biology: An individual broodmaster is always accompanied by several insectoid broodlings. The broodmaster itself holds the main brain, and resembles a large dark sac of tissue, capable of extruding appendages. Normally the master remains within a protective shelter.

The broodlings serve as eyes, ears, and hands for the master unit, and they also groom and feed the master. They themselves feed parasitically on a proteinaceous secretion which seeps from the master's pores. If the master dies or is incapacitated, the broodlings go into a dormant state and eventually die.

Psychology: Broodmasters value territory above all and continually colonize new worlds, conquering and enslaving the native populations as desirable. Broodmasters are also cowardly, and generally refrain from aggressive action without first ensuring success.

8.4.2

BROODMASTER WARSHIPS

Broodmasters field four known types of ships. These are the patrol ship (562 meters long), light cruiser (1104 meters long), cruiser (2400 meters), and battleship (4800 meters). The patrol ship is only encountered when near a broodmaster colony. Broodmaster vessels always operate alone or, at most, accompanied by one patrol ship.

The main armament of a broodmaster ship consists of one to six neutron spark launchers, the exact number depending upon the ship's type. These neutron sparks deliver heavy damage. This, added to the fact that the sparks are fired in volleys makes a broadside from a large broodmaster ship extremely dangerous.

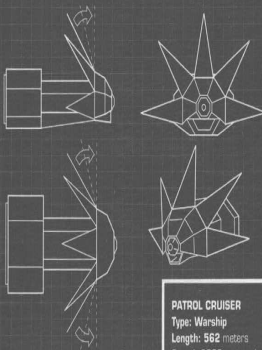
All broodmaster vessels are equipped with frontal laser turrets for close-in defense against missiles. In addition, cruisers and battleships are armored, rendering their main hulls immune to your fighters. Battleships (only) are equipped with screen generators, which must be destroyed before your main gun can take effect on them.

Broodmaster ships are generally slow and unmaneuverable. Their normal tactic is to head straight for your *Trailblazer*. When the broodmaster ship is within range, it ceases movement and begins firing. If you move, the broodmaster ship will swivel to keep you in its sights.

Broodmaster Patrol Ship (warship)

Length: 562 meters (2000 feet)
Normal Combat Speed: 3000 meters/second
(10,800 kph, or 6500 mph)
Armament: light neutron spark launcher
damage rating: 1
firing arc: straight ahead
Defenses: frontal laser turret

BROODMASTER PATROL SHIP



PATROL CRUISER
Type: Warship
Length: 562 meters
Speed: 3000 meters/second

Broodmaster Light Cruiser (warship)

Length: 1104 meters (4000 feet)
Normal Combat Speed: 2400 meters/second
(8600 kph, or 5200 mph)
Armament: twin neutron spark launchers
damage rating: 4
firing arc: straight ahead
Defenses: frontal laser turret

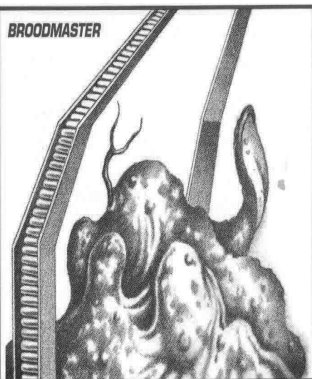
Broodmaster Cruiser (warship)

Length: 2400 meters (8000 feet)
Normal Combat Speed: 1800 meters/second
(6500 kph, or 3900 mph)
Armament: quadruple neutron spark launchers
damage rating: 8
firing arc: straight ahead
Defenses: frontal laser turret, armor

Broodmaster Battleship (warship)

Length: 4800 meters (16,000 feet)
Normal Combat Speed: 1200 meters/second
(4300 kph, or 2600 mph)
Armament: sextuple neutron spark launchers
damage rating: 12
firing arc: straight ahead
Defenses: frontal laser turret, armor

BROODMASTER



CICISBEO



8.5.1

CICISBEO GENERAL INFORMATION

Biology: These are genetic mutants engineered by their mythic founders, the Bright Masters. Most births are test-tube babies, formed by artificial chemical stimuli. For the first three years of life, a young Cicisbeo lives as a worm-like embryo inside a glass aquarium. After it has grown to the point where it can survive outside its life-support systems, it is carefully evaluated by trained judges. If it is deemed inferior, it is immediately destroyed. A Cicisbeo that survives this initial judgment is transferred to a windowless metal chamber where it lives and grows for nine more years, seeing no other living creature and being taught by robot tutors, learning the complex Cicisbeo societal intricacies. At the age of 12, the young Cicisbeo has reached its full growth and adult form, and leaves its room to be judged yet again. Once more, if it is considered less than fully acceptable, it is destroyed in a tasteful, yet painless, manner. The survivors enter Cicisbeo society.

Psychology: Cicisbeo that have reached the age of 8,000 years or more are considered Elders. Cicisbeo do not die naturally, nor do they grow physically after the age of 12. The Cicisbeo has the ability to focus its being on a single goal. Once a Cicisbeo has set its mind upon some such goal (which could be destruction of an enemy, desire for an object, etc.), all its skills and abilities are degraded except when being used in an attempt to accomplish its chosen goal. In this latter case, the pertinent skills are each greatly enhanced. A Cicisbeo often chooses its goal for what seem petty reasons to humans. In general, Cicisbeo respect beauty and elegance, and the elder of two Cicisbeo is usually socially senior to the younger.

8.5.2

CICISBEO WARSHIPS

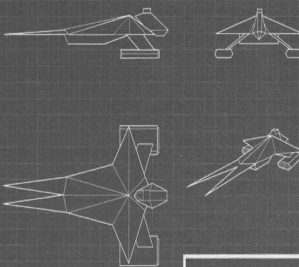
The Cicisbeo appear to possess only one type of warship: the monitor. This is a small ship, only 1020 meters long from its nose to the tip of its "tail." In open space, monitors are always accompanied by three fighters, termed "birds" by the Cicisbeo.

A monitor is equipped with a large store of nuclear homing missiles, which it fires singly. Birds are armed with conventional blasters.

The monitor is equipped with two laser turrets for all-around defense against missiles. However, it is unarmored and thus vulnerable to any fighter that can get past the turrets. The birds are good-sized for fighters, and relatively slow. However, they pack a correspondingly heavier punch.

The typical Cicisbeo tactic is to send in the birds to make attack runs on your *Trailblazer* while the monitor circles, firing homing missiles. The Cicisbeo are not a warlike race, and if the monitor takes too much damage it retreats, taking the birds with it.

CICISBEO MONITOR (WARSHIP)



CICISBEO MONITOR

Type: Warship
Length: 1020 meters
Speed: 2400 meters/second

Cicisbeo Bird (fighter)

Length: 350 meters (1000 feet)
Normal Combat Speed: 5400 meters/second
(19,400 kph, or 11,600 mph)
Armament: blaster
damage rating: 0.25
firing arc: straight ahead

Cicisbeo Monitor (warship)

Length: 1020 meters (3400 feet)
Normal Combat Speed: 2400 meters/second
(8600 kph, or 5200 mph)
Armament: homing missiles
damage rating: 1.5
firing arc: all-round
Defenses: two laser turrets (top & bottom)

Ever-seeking, ever-hungry, these arcane beings control the legendary Museum of Time, in which they are attempting to collect at least one example of everything in the universe. Ancient legends say that at least once they traded a museum exhibit to obtain an even rarer item.

Collectors Attack Boat (warship)

Length: 1800 meters (6000 feet)
Normal Combat Speed: 4300 meters/second
(15,400 kph, or 9200 mph)
Armament: neutrino gun
damage rating: 0.4
firing arc: straight ahead
Defenses: Prism shield generator

8.7.1

DACIANS
GENERAL
INFORMATION

This warlike race belongs to a single nation ruled by a militaristic oligarchy based on merit. They practice eugenics and believe themselves racially superior to other beings. Conquered peoples are rarely mistreated, simply restricted to special enclaves and left to wither away of their own accord. Their planets and lands are gradually taken over by Dacian citizenry.

Individually, Dacians tend to be brave and flamboyant, if ruthless. Though they are generally arrogant, they rarely underestimate an opponent. We know of two recent wars which they have lost. They lost the first war (waged on the Thoth) because the Stentor attacked the Dacian rear in the middle of the war. The second war (against the Dignee) was lost because Dignee diplomacy unified most of space against the Dacians. In both wars, though the Dacians were defeated, their opponents took heavier casualties.

8.7.2

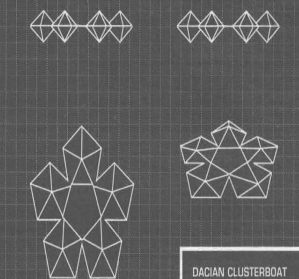
DACIAN WARSHIPS

The Dacians have one main type of ship—the clusterboat. A smaller ship, a sort of fighter, has also been seen, but we are unsure under what conditions it makes its appearance.

Dacian Clusterboat (warship)

Length: 1800 meters (6000 feet)
Normal Combat Speed: 3700 meters/second
(13,200 kph, or 7900 mph)
Armament: heavy blaster
damage rating: 0.8
firing arc: straight ahead
Defenses: unknown

DACIAN CLUSTERBOAT



DACIAN CLUSTERBOAT

Type: Warship
Length: 1800 meters
Speed: 3700 meters/sec

DIDINIUM



8.8 DIDINIUM

8.8.1

DIDINIUM GENERAL INFORMATION

Biology: Well over ten feet long, these aliens have small encapsulated bodies and several long ribbon-like tendrils. Whip-like structures spring from the base of their translucent bodies. All known Didinium live in spaceships. They are able to survive full vacuum. Water crystallizes and decomposes their tissue, so when visiting a planet surface they wear spherical self-sealing transparent envelopes to protect themselves.

Psychology: The Didinium communicate among one another via controlled pulses of gamma radiation. Their weapons, tools, and shipboard command devices are operated similarly, in combination with manual controls. The Didinium are viewed as enemies by other sapient, as they are aggressive space pirates.

8.8.2

DIDINIUM WARSHIPS

Only one type of Didinium ship has been sighted. It is not particularly large (1530 meters long), and it is not known whether it operates alone or in groups.

The armament of the Didinium is unknown. However, the large scoop on the front of their vessels would appear to indicate that their weapon, if any, is quite unusual.

Current information available indicates that the Didinium craft lack either laser turrets or screen generators. However, they are large enough to carry armor.

Their tactics are unknown, but presumably are based around their mysterious weapon. Despite their moderate size and innocuous appearance, Didinium ships are known to have defeated foes many times their size. These may have been the result of teams of Didinium working together, however.

Didinium Ship (fighter)

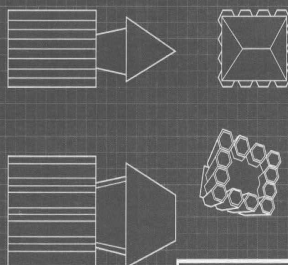
Length: 1530 meters (5000 feet)

Normal Combat Speed: 3600 meters/second
(13,000 kph, or 7800 mph)

Armament: unknown

Defenses: unknown

DIDINIUM SHIP



DIDINIUM SHIP
Type: Warship
Length: 1530 meters
Speed: 3600 meters/second

8.9

8.9.1

FEL GENERAL INFORMATION

FEL

Nothing is known of the Fel biology other than it appears somewhat compatible with human. Devices and chemicals found within the single Fel artifact discovered indicate that they exist in an atmosphere similar to our own, and are apparently carbon-based.

The most recent information indicates that the Fel are an extremely friendly and non-prejudiced species, with little fear of alien contact and no xenophobia whatsoever.

8.9.2

FEL WARSHIPS

The only type of Fel vessel available for study was a wrecked cargo pod (1008 meters long). The pod found was incapable of movement on its own, and presumably had been attached to some sort of transport vehicle.

Armament and defenses of the Fel are currently unknown. All indications are that they are an unaggressive species, and perhaps their ships are not particularly lethal.

LUTIN



8.10 LUTIN

8.10.1

LUTIN GENERAL INFORMATION

Biology: Lutins are tallish insect-like hexapods. A Lutin's head is flattened, with a pair of large eyes and a battery of complex mouthparts. All members of a Lutin colony appear to be identical, and may even think identical thoughts.

Personality: They evolved as plains predators and their ancestors have been using missile weapons for over seventy million years — since before their species was sentient! Lutin skill with weapons is infamous; they are hatched knowing how to fire and repair a laser. Their language is instinctive, so all Lutin can speak and understand from birth, and are full members of their community no matter what their age.

8.10.2

LUTIN WARSHIPS

The Lutin operate only one type of ship in deep space, the fairly small Rover (315 meters long). They are known to have a wider assortment of specialized ships for planetary defense. The Rovers in deep space are always encountered alone.

Each Rover is equipped with a spinal gun, running the length of the ship. It fires a pellet similar in nature to the antiproton ball launched by our own ship's main gun. Do not be deceived by the Rover's small size — its cannon is surprisingly powerful; and packs a punch heavier than that boasted by many larger ships. The Rover can fire its pellet only periodically, however, and has no other armament.

The Rover possesses no armor or other defenses. Rovers and probably other Lutin ships are extremely quick and maneuverable. The Lutin, like insects, fight to the death and never flee.

Lutin Rover (fighter)

Length: 315 meters (1500 feet)

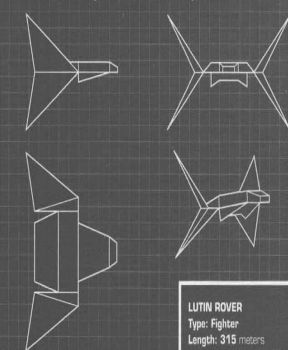
Normal Combat Speed: 9100 meters/second
(32,800 kph, or 19,700 mph)

Armament: spinal gun

damage rating: 4.5

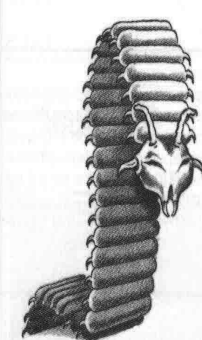
firing arc: straight ahead

LUTIN ROVER (LARGE FIGHTER)



LUTIN ROVER
Type: Fighter
Length: 315 meters
Speed: 9100 meters/second

MOON CHI



8.11 MOON CHI

Descended from a species of arthropod-like organisms, the Moon Chi are highly socially developed. They are less warlike and more cooperative than almost any other species.

In battle, the Moon Chi form a long chain of ships, and move as if connected. Thus, they have a very distinctive appearance, as their battle-line moves in a rather serpentine fashion.

Moon Chi Queue Ship (warship)

Length: 600 meters (2000 feet)

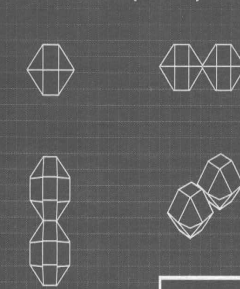
Normal Combat Speed: 5500 meters/second
(19,800 kph, or 11,900 mph)

Armament: triple blasters

damage rating: 1.5

firing arc: straight ahead

MOON CHI QUEUE SHIP (WARSHIP)



MOON CHI QUEUE SHIP
Type: Warship
Length: 600 meters
Speed: 5500 meters/sec.



8.12 RILL

8.12.1

RILL GENERAL INFORMATION

The Rill evolved from an extremely aggressive precursor, which showed its dominance in violent physical clashes. This species is still aggressive and hostile. When one Rill meets another for the first time, it immediately strikes out, trying to enforce its superiority by using its bulk and muscle to cause the other to submit. On subsequent meetings between the two, the dominant Rill will never start a fight, but the inferior Rill (the one who lost the first fight) may choose to begin battle and attempt to reverse their roles.

Rill science is crude, and they themselves are not highly intelligent. Still, their force and sheer audacity may lead them to go far.

8.12.2

RILL WARSHIPS

Rill ships attack by colliding with their enemy. This does not hurt them, but can cause quite a bit of damage in their target. Their tactics are quite simple — they aim straight for their target, though they may dodge their foe's shots while making an attack run.

8.13

STENTOR

8.13.1

STENTOR GENERAL INFORMATION

Biology: This species is known to have entered our galaxy 20,000 years ago. Reportedly, they have significant hyperspatial abilities and can perform feats with their peculiar biology which are unknown to other species. Most reports agree that the Stentor are small creatures. They manipulate tools by magnetism, rather than through dexterous appendages.

Psychology: The Stentor are efficient. Even the most barbaric actions are done with carefully-calculated ends in sight. Their savage suppression of ships which refuse to surrender serves to discourage other would-be foes.

8.13.2

STENTOR WARSHIPS

Only one type of Stentor ship is known: the 180-meter-long fighter. It is small and simply-built. Available information conflicts as to whether the Stentor operate singly or in large packs.

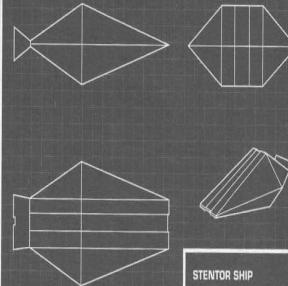
The Stentor are armed only with conventional blasters, and possess no defenses besides speed and small size. In light of this, it is disquieting to learn that their vessels are widely feared, and most starship captains go out of their way to avoid Stentor territory.

Stentor tactics are reportedly conventional, if aggressive. Because of their reputation, we advise extreme caution when encountering the Stentor.

Stentor Ship (fighter)

Length: 180 meters (600 feet)
 Normal Combat Speed: 7900 meters/second
 (28,400 kph, or 17,100 mph)
 Armament: twin blasters
 damage rating: 0.5
 firing arc: straight ahead

STENTOR SHIP (FIGHTER)



STENTOR SHIP
 Type: Fighter
 Length: 180 meters
 Speed: 7900 meters/second

8.14

THOTH

8.14.1

THOTH GENERAL INFORMATION

All Thoth are trained in the use of hyperspatial power, and different Thoth actually train their hyperspatial organs to different forms and functions. Hence, one Thoth's powers may differ completely from another's.

Every Thoth has a rank either above or beneath every other Thoth, and this rank alters from time to time for reasons unclear to humans. If a Thoth happens to meet another Thoth for the first time, they must immediately determine respective rank in order to place the two in proper perspective to one another. A higher Thoth may command the services of a lower Thoth at any time, for any reason. However, the act of providing such service lowers the rank of the higher Thoth.

8.14.2

THOTH WARSHIPS

Little is known about Thoth war vessels except that their ships are large, carry fighters of their own, and are extremely powerful.

Thoth Ankh (fighter)

Length: 300 meters (1000 feet)
 Normal Combat Speed: 5500 meters/second
 (19,800 kph, or 11,900 mph)
 Armament: blaster
 damage rating: 0.1
 firing arc: straight ahead

Thoth Sphinx (warship)

Length: 4800 meters (16,000 feet)
 Normal Combat Speed: 900 meters/second
 (3300 kph, or 2000 mph)
 Armament: mass accelerator
 damage rating: 0.8
 firing arc: straight ahead
 Defenses: laser turret, screen generator

8.15

TRAJAN

The Trajan are a very small species with an extremely fast breeding cycle. On Earth, the fastest-known breeding organism is *Escherichia coli*, which reaches full size and is ready to replicate in only 20 minutes (under ideal conditions). The Trajan species is just as fast, so within a few days after the Trajan has colonized a world, its entire surface is covered with their tiny bodies.



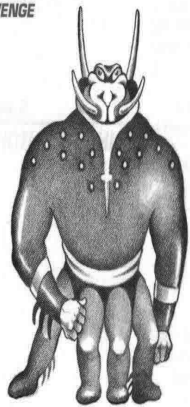
8.16

VENGE

8.16.1

VENGE GENERAL INFORMATION

VENGE



Biology: Venges are odd creatures with multiple stubby legs, long manipulatory appendages, and an erect posture. Their facial features are somewhat like those of a human, with paired platter-sized eyes located above a huge tusked mouth-slit. A pair of spiracles at the back of the head are used for breathing and sometimes ooze yellowish slime. Their rough hide is blue-green, becoming more blue with age. The separate parts of a Venge's body have separate blood supplies and enervation.

Venges possess only one sex, but two individuals are required to mate. In mating, each partner produces a single zygote. After fertilization, each partner removes its own zygote, and places it inside the other's body. For the first three years of life, a young venge lives as a parasitic grub inside its parent's body cavity. After birth, it lives for 9 more years with its parent, learning the complex Venge societal intricacies. At the age of 10, the parent seeks out another mate, and at 13, the child leaves as the parent "gives birth" to another child. However, until it has reached the age of 80 or so, the child continues its friendly connections with its parent.

Psychology: Venges that have reached the age of 213 or more are considered Elders. Venges do not die naturally, nor do they grow physically after their early teens. They continue to breed throughout life, raising one child every 10 years (or more often, if a child dies before reaching maturity).

A Venge has the ability to obsess itself, focussing its being on a particular foe. When a Venge chooses an enemy, all its skills and abilities are reduced except when being used in an attempt to harm that enemy. In this latter case, the pertinent skills are significantly raised.

In general, Venges respect age and maturity, and the older of two Venges is always socially senior to the younger.

8.16.2

VENGE WARSHIPS

The Venge hateship is one of the largest warships known. Only a few, such as the *Trailblazer* herself, rival the hateship in size and power. Its tactics are simple and effective — the ship zeroes in on the largest opposing vessel, and fires its huge energy pulses until one or the other vessel has been destroyed.

Venge Hateship (warship)

Length: 3000 meters (10,000 feet)
Normal Combat Speed: 2400 meters/second
(8800 kph, or 5300 mph)
Armament: quadruple pulsars
damage rating: 3 each, for total of 12
firing arc: straight ahead
Defenses: fore and aft laser turrets plus screen generator

VORC



8.17 VORC

8.17.1

VORC GENERAL INFORMATION

The Vorc are genetic mutants engineered by the Dacians to serve as shock troops and garrison soldiers on hostile planets. A few are now found outside of Dacian rule. They have a breeding season invoked by artificial chemical stimuli, and lack all libido at other times. Thus, they breed only at the need of their masters. Most births are test-tube babies.

8.17.2

VORC WARSHIPS

Vorc have rather large fighters, plus triangular vessels that possess tractor beams.

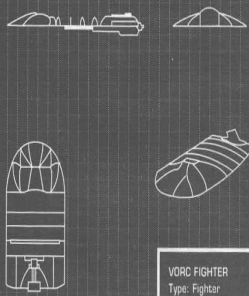
Vorc Fighter (fighter)

Length: 450 meters (1500 feet)
Normal Combat Speed: 7300 meters/second
(26,400 kph, or 15,800 mph)
Armament: blaster
damage rating: 0.5
firing arc: straight ahead

Vorc Basic (warship)

Length: 1800 meters (6000 feet)
Normal Combat Speed: 3700 meters/second
(13,200 kph, or 7900 mph)
Armament: tractor beam
damage rating: unknown
Defenses: laser turret

VORC FIGHTER



VORC FIGHTER
Type: Fighter
Length: 450 meters
Speed: 7300 meters/sec.

8.18

VORTICELLA

The Vorticella are a species of space pirates. They are widespread and aggressive. Their motivation for their actions is unknown. The Vorticella ship most often encountered are their small twin-bodied fighters. At their starbases, larger vessels can be encountered.

Vorticella Twin Fighter (fighter)

Length: 150 meters (500 feet)
Normal Combat Speed: 7300 meters/second
(26,400 kph, or 15,800 mph)
Armament: blaster
damage rating: 0.3
firing arc: straight ahead

Vorticella Bigship (warship)

Length: 2400 meters (8000 feet)
Normal Combat Speed: 1800 meters/second
(6600 kph, or 4000 mph)
Armament: nitinol brick launcher
damage rating: 1
firing arc: straight ahead
Defenses: armor

8.19

ZOR

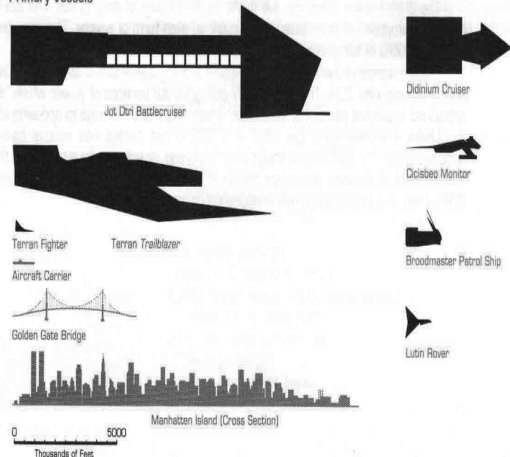
The ZOR, like the Balathide, live in the harsh vacuum of deep space. The ZOR are evidently composed of anti-matter, or possibly an alien form of energy. They may be the personifications of some cosmic principle, as yet unknown to humanity.

These extremely potent entities are capable of giving spawn to monstrous larvae which may grow into new ZOR. They apparently can generate vortices of power which, when unleashed in combat situations, can deliver great amounts of damage to opposing ships.

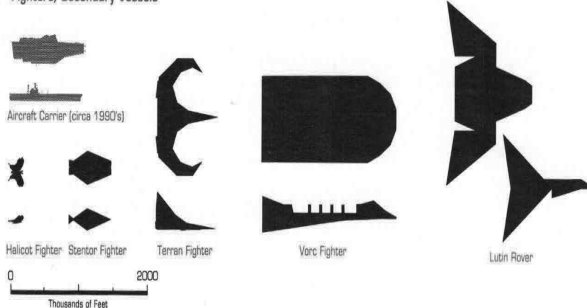
Unlike a human mind, the mind of a ZOR is not divided into several layers of consciousness. The ZOR have no imagination, superego, or subconscious to mislead them. Their outlook of absolute pessimism results in an atmosphere of gloom that makes the ZOR's mind and actions extremely unappealing to most humans.

SHIP SIZE COMPARISON CHART

Primary Vessels



Fighters/Secondary Vessels



9. DESIGNER'S NOTES

Most previous science-fiction computer role-playing games utilized one of only two approaches to the genre.

Some earlier games have been mercantile in nature. Outer space was treated as an immense free market, and the player represented a trader or merchant prince. Other games have emphasized the military aspect of space. The player acts as a space mercenary or fighter pilot, going from battle to battle until he has beaten the enemy.

In *Hyperspeed* we wanted space exploration not space exploitation. We wanted a game in which much of the fun is in discovery. For this reason, the game is full of widgets, aliens, and secret plots. To maximize the pleasure of discovering a new alien, each not only looks completely different, but has a markedly different style of speech, a different musical texture, and even a different type font to speak with.

Hyperspeed is very different from the typical MicroProse game, most of which are realistic and serious combat simulators. In essence, *Hyperspeed* doesn't take itself too seriously. Its thrust is not cheap jokes, but many of the aliens are light-hearted in nature. Even some of the alien combat tactics are intended to be amusing — such as the "victory" barrel roll made by the first alien you meet, the surprise the Dacian mother ship holds for you upon its destruction, or the rather pathetic combat performance of the gungho Vorticella.

Hyperspeed is a fast-paced action game. You can't get too far without engaging in 3-D combat. But victory in combat is not based on arcade techniques — you must learn the strategies best-suited to fight each type of alien. Because of this, every time you meet a new type of alien, learning to defeat their ships in combat becomes a new mini-game. You must either master this, or befriend those aliens.

One of *Hyperspeed's* philosophical foundations is the idea that everything is a trade-off. In many computer role-playing games, you must solve the entire game as a puzzle in which there is really only one correct action for a given situation. In *Hyperspeed* there is no "one correct action." The Broodmasters may appear evil and contemptible, and perhaps few people will ally with them, but those who do will find that they receive benefits in return.

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