KLAGAR-CLASS BATTLECRUISER OPERATIONS MANUAL

Instructions for

STAR FLEET II
Krellan Commander™
Version 2.0

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This product is a joint offering of Dr. Trevor C. Sorensen
and Interstel Technologies, Inc. (www.interstel.tech)

Program Credits

Star Fleet II – Krellan Commander Version 1.0 was written by Dr. Trevor C. Sorensen and Mark Baldwin with additional code (planetary fractal generator) by Dennis Lawler. The revised and supplemental code for Version 2.0 was written by Dr. Trevor C. Sorensen. Version 2.0 Beta code was audited by James Lewis of Interstel Technologies.

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The original documentation (*Krellan Command and Battle Manual* and the *Star Fleet Training Manual Vol. 2*) for Version 1.0 was written and copyrighted by Robert L. Winkler and Dr. Trevor C. Sorensen, while the Version 1.5 *Star Fleet Training Manual Vol. 2* was written by Kreg Anderson.

For Version 2.0, some material was used from the original manuals, but most of the material is original or rewritten by Dr. Trevor C. Sorensen, Marianne Dyson, and Hector Roman.

Dedicated to the memory of

Robert Jones, Jr. (d. 1991)
Mark Terrell (d. 1992)
Brett N. Keeton (1964-2002)
and his father
Tommy Keeton (d. 2004)
Kreg Anderson (d. 2010)

Krellan Emperor Henri Zae IV

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PREFACE

This operations manual for the Klagar-Class battlecruiser provides the information you need to successfully command your ship and the forces at your disposal to accomplish the objectives of your missions. For training and background information, refer to the Training Manual, which contains the instructions for the eight tutorials that are required for your operations training as well as information on how to start up these simulations, general information about the Galactic War II, the universe, and other useful information. It is expected that before you assume your first command and start your career, you have studied and mastered the Training Manual. A lot of the basic information, including definition of displays and descriptions of the controls was covered in the Training Manual. However, this information is also included in this manual in the relevant sections or in the appendices of this manual for reference.

For ease of use the manual has been divided into four major parts plus appendices:

PART I	Battlecruiser Operation
PART II	Planetary Invasions
PART III	Commanding the Fleet
PART IV	Strategy and Tactics
APPENDICES	Miscellaneous Information

These are followed by the index for quick reference.

Key presses are indicated by the key in brackets, e.g. [M] means to press the "M" key. If two simultaneous key presses are required, they will be shown with two brackets, e.g. [Alt][Q] means to press the "Alt" and "Q" keys together. If the text has a number after it in parentheses, e.g., (1.2.3) then it is telling you to refer to that section of this manual for more information.

ZAGAR

PART I
BATTLECRUISER OPERATION

1.0   SHIP SECTIONS

The battlecruiser is divided into eight different sections or departments (Figure 1), each of which can be accessed by a command on the main menu (Figure 2). The commands can be activated by highlighting it using the [>] or [<] keys then pressing [Enter], or by pressing the capital letter highlighted in red. Pressing [Alt][M] or [~] keys will restore the Main
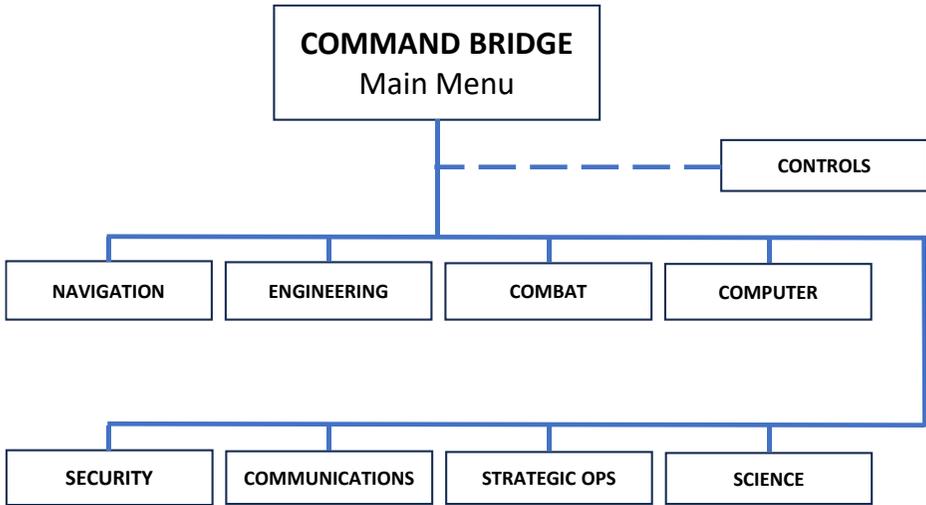
Figure 1. Battlecruiser Sections and Command Structure

Figure 2. Main Menu

Manu regardless of which display you are in (with a few exceptions noted later, where you might have to first press [Esc]). If you are not on the Bridge (Main Display), then you will first be returned to the Bridge with the Main Menu showing.

Each command is described in the following sections. After the heading for each command option are the key presses required to get to that command from the Main Menu. For example, [N]/[S]/D] is to go from the Main Menu to the Navigation Menu, then to the System Map, then to the Database option. If there is a shortcut to the particular command option, it will be shown after the key sequence by "or" followed by the shortcut keys. Note that the program sometimes uses [CR] (meaning carriage return) instead of [Enter]. They are the same, it's just that [CR] is a couple of letters shorter, and sometimes that makes a difference. It was also commonly used in the 1980s when the game was first written, being a common term used with typewriters.

1.1 NAVIGATION CONTROL

If a battlecruiser cannot move, then it is essentially a stationary space station and worthless to the Imperial Krellan Navy. Although Navigation Control is not a primary system of the ship that is susceptible to damage, it can be adversely affected by damage to the Main Computer, the Hyperdrive, and the Sublight Engines. There are two ways to move your ship in normal space, using Manual or Automatic Navigation.

1.1.1 Manual Navigation

You can manually change the heading and speed of your ship to travel to any location in your current star system. The definition of the navigation angles used are in Appendix A.5. You may want to use manual navigation when you have spotted something on your ship's LRS Display (A.3) and you want to move closer to examine it on the Tactical Display (A.3). Manual control is usually required when you engage in space combat.

You can only use manual navigation at sublight speed, when your ship is moving in normal space. You cannot change your heading or speed while your ship is moving through hyperspace between systems. When you spot an object on your LRS Display, but it is not close enough to also show up on your Tactical Display, you can set a new course to approach or intercept the object. If the object is to the right of your ship, then you have to increase your heading; if to the left, decrease your heading. Draw an imaginary line from the center of the LRS Display through the object; then estimate the angle between your present heading (along the upper vertical grid line) and the heading to which you want to change. You can increase or decrease your heading by 15 degrees, or by 1 degree at a time, using the heading control keys (Fig. B-1). To keep track of your heading, watch the number at the top of the Tactical Display change as your ship rotates. With manual navigation, you are also responsible for setting your ship's speed using the velocity controls (B.1). Having set the heading and speed, start the engines (B.1). You can then adjust the heading and speed as required.

It is possible to use manual navigation to intercept or bring your ship adjacent to an object, but doing this requires a great degree of precision in estimating and setting your new heading. Fortunately, your ship does have an automatic navigation system that performs all the necessary computations; to enable this system, use the Targeter option from the System Map Display.

1.1.2 Navigation Targeter - Automatic Navigation

You can only get automatic navigation using the Targeter (with some shortcut exceptions described later), and the Targeter can only be accessed from the System Map, Navigations Map, and War Map. Whenever the Targeter option appears in the Command Line of the screen display, you can order your ship to proceed toward a specific location, or select an

object or a location to be acted upon by some other command. When this option is available, the Target Designator Box (TDB) will appear on the map that is part of the current screen display. The first step in selecting a target is to move the TDB to the desired location. You accomplish this by using the direction keys. As you move the TDB across the map, information about the TDB's present location (*identification*, *position*, *distance*, and *bearing*) appears on the screen display. When you have positioned the TDB on the target you want to designate, execute the Targeter option to lock your ship's computers onto that

Figure 3. Targeter Display

location. You can target a location containing an object (ship, planet, etc.), or you can target to empty space. When you execute the Targeter option, the Targeter Display (Figure 3) appears in the message area of the System Map, or overlays a portion of the Navigational Star or War Map. This box contains the following information that will help you decide whether to commit your ship to moving toward the targeted area:

Table 1: Targeter Parameters

Parameter	Description
Velocity	Current set speed (which you can change using arrow keys)
Time	How many days it will take you to reach the selected target traveling at your set speed
Energy	The percentage of your energy capacity you would use to reach the destination
Energy Lf	How much energy your ship has remaining (in percent)
Time left	The number of days you have left to finish your current mission
Max. Vel	The highest speed at which you can safely travel

Note: the [CR] in the Targeter Display instructions is the same as [Enter]

When you select a Navigation Target using the Targeter, you are prompted first for Nav Target #1, which is entered into the Navigation Computer when you press [Enter]. When you increment Velocity, the other parameters are computed and displayed for your information. Time is how long, at your selected speed, it will take you to reach the destination. Energy is the percent you will use to get there. On the right side are displayed your current energy in percent, mission time remaining in days, and the maximum velocity your engines can achieve (with fully operational engines, 8.0c for hyperdrive and 0.9c for sublight engines).

The Targeter then will automatically switch to specify Nav Target #2. This second target will always cause the System Map of the system specified for Nav Target #1 to appear so you can select its destination in the system. If you subsequently bring up the Targeter, it

will automatically go to Target #2 because Nav Target #1 has already been specified and has top priority. Usually, this is only done unintentionally, so you will receive a warning that you already have a Nav Target #2 in the computer and recommend that you first reset the targets.

When you use the Targeter to move from one regional location to another, both the maximum speed and the speed you set must be 1.0 or greater. The maximum safe speed will be loaded into the Targeter as the default. You do not need to set a sublight speed to travel to the system's edge before making the jump to hyperspace. Your ship has to have a speed of at least 0.6c to jump into hyperspace. Your ship's computer automatically assumes maximum sublight speed. To examine another location before entering a destination into the Targeter, just move the TDB to the other location. To enter a location into the Targeter, press [Enter]. You can have two locations entered into the Targeter at the same time, with target #1 taking priority over target #2. These targets are navigation way points. Your ship will proceed toward target #1 until it reaches that objective, at which time target #2 will be shifted into the #1 slot, and the slot for target #2 will be empty (and available for another Targeter operation). When target #2 moves into the #1 slot, the speed setting will not be saved; you have to set a speed and start your engines to begin moving toward the new target. No decision you make when using the Targeter is irrevocable; you can change your mind about where you want to go at any time by pressing a key or two. However, you cannot enter a third location into the Targeter without deleting one of the other two, and you cannot re-enter a deleted target except by going through the entire selection process once more.

Use of the Targeter is optional when your ship is moving at sublight speed within a system; you can get from place to place using manual navigation. However, the Targeter is mandatory when you want to move through hyperspace from one system to another within a region. You can still change your mind about a targeted location, but you 'must first drop your ship back into normal space by reducing your hyperspace speed to zero. More information about how the Targeter is used in specific circumstances can be found in several sections throughout this manual as well as in the Training Manual.

1.1.3 Navigation Targets Display

You also have access to the Targets option, which allows you to view your current targets or to change a targeting decision made previously by either deleting a target or swapping the priority of the two target slots, or to reset your targets (delete them both). Executing this option calls up the Targets Display

Figure 4. Targets Display

(Figure 4), which contains the following target information for each of the two navigation targets (1 and 2):

Table 2. Targets Display Parameters and Commands

Parameter	Description
R/S	R means Regional target, S means System target
Object	Identification of navigation target (blank if none)
x y	Coordinates of navigation target (points for system, light years for region)
Bearing	The angle from your ship to the target coordinates (in either Regional or System coordinates)
Target #	Indicates which target is available to Delete. You can move from one target slot to the other by pressing [+] or [-]
Command	**Description**
[D]elete	Deletes the currently selected target but leaves the other intact
[S]wap	Swaps targets 1 and 2
[R]eset	Deletes both targets 1 and 2
[CR] accept	Pressing [Enter] accepts changes; [Esc] exits with no changes

1.1.4 Normal Space (Sublight) Navigation

When your ship is moving within a regional location, you can choose from nine different sublight speeds (ranging from 0.1 to 0.9). Unlike hyperspace movement, you can change course and speed at sublight speeds without having to bring your ship to a stop, and you can use either manual navigation (1.1.1) or the Targeter (1.1.2) to make these changes.

It is possible to move beyond the edge of a regional location while traveling at a sublight speed. In such a case, your ship will disappear from the System Map, but your position will still be updated as you move. Thus, it is possible to be at location 10, -20 (20 points beneath the lower edge of the system map) or location 90, 20 (10 points beyond the right edge). To return to the map area, you can either reverse your course manually or use the Targeter to select a destination within the map area.

1.1.4.1 Collision Avoidance System

You may be comforted to know that you cannot normally crash into an object in your ship's path. If your ship's computer is operational and a collision is imminent, your course will be automatically adjusted to take you around the object. If you were moving towards a target, your ship's computer will compensate for the change in direction and put you on a new course for the target. If you were using manual navigation, your course will be changed to the new heading that was implemented to avoid the collision.

If your ship's computer is not working, your ship will perform an emergency stop instead of steering around the object. You will not be allowed to start your ship's engines again until you have set a new course that will prevent you from colliding with the object in your

path. Collision avoidance will keep you from ramming into ships (enemy or friendly), starforts, and starbases. However, the automatic systems will not prevent you from being hit by enemy torpedoes and mines, or being sucked into black holes. When dealing with those obstacles, collision avoidance is up to you.

1.1.4.2 Sideslip

Sideslip is a special feature of your ship's navigation system that allows you to change your ship's direction of travel without altering the set heading. When sideslip is activated (by pressing [Tab] for right sideslip or [Shlft][Tab] for left sideslip) and you are not traveling toward a designated target, your ship will move along a heading that is 45 degrees to the left or right of the heading you have set. For example, if you set a course of zero degrees and then activate right sideslip, your ship will move along a heading of 45 degrees; if left sideslip is on, your ship's heading will be 315 degrees (45 degrees to the left of zero degrees). When sideslip is turned off, your ship will immediately resume its set course. In essence, the nose of your ship has remained pointed along your set course, but the ship itself has been moving along a heading of 45 degrees with sideslip activated.

If you are travelling towards a navigation target with sideslip on, your ship will travel toward the target in an arc, starting the curve in the direction of sideslip. If you turn off sideslip while traveling toward a target, your ship will move to the target in a straight line from the point where you resumed normal movement. Figure 5 shows the track your ship will follow if you start at 40, 10 and have targeted to the star with right sideslip on. Left sideslip would cause your ship to arc to the left.
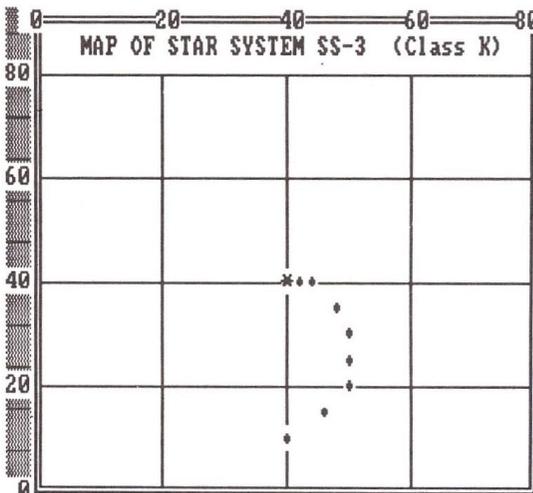
Figure 5. Sideslip Example

Sideslip is particularly useful as a dodging maneuver, to reduce your chances of being hit by an enemy torpedo. It allows you to arc around enemy vessels or starbases, staying out

of range of their sensors so that you will not be shot at. It also permits you to use a curved flight path to explore a star system without making frequent course changes.

1.1.5 Hyperspace Navigation

The only way to travel from one star system to another is by selecting a target system using the Targeter (1.1.2), and then using the velocity controls to set a hyperspace speed of 1.0c or greater. Your ship will begin moving toward the edge of the system you are in, accelerating as it does so (up to the maximum sublight speed of 0.9c). When your ship reaches the edge of the system, if its speed is at least 0.6c, it will automatically jump into hyperspace by engaging the hyperdrive engines and shutting off the sublight engines. The ship will begin accelerating up to the hyperspace speed you have set. If you are moving from a system that does not contain a star or black hole, your ship will enter hyperspace immediately instead of moving to the edge of the system first. While moving in hyperspace toward your target, you cannot change course or reset your hyperspace speed. To perform either of those operations, you must first come to a full stop - the only speed change you can make while in hyperspace. After your ship has decelerated and come to a stop, you can activate the Targeter to select a different destination (not necessary if all you want to do is change your speed). Then use the velocity controls (3.1.1) to set your hyperspace speed to a different figure, and restart your engines. While traveling in hyperspace between star systems in a region, the horizontal and vertical grid lines in the LRS Display and the Tactical Display will disappear, indicating that you cannot see anything outside your ship when it is moving faster than the speed of light. The grid lines will reappear when you reach the regional location you have targeted and your ship reappears in normal space. Deceleration to sublight speed is performed automatically when your ship reaches the targeted location; it is not necessary for you to manually slow or stop your engines.

Your hyperspace speed is the total of the speeds you have set on the "H" and "S" scales of the velocity indicator (2.0). For example, to set a hyperspace speed of 3.5, set the "H" scale to 3.0 and the "S" scale to 0.5. When you come out of hyperspace upon reaching your destination, the reading on the "H" scale (current hyperspace speed) will drop to zero, and your ship will continue moving at maximum sub light speed (normally 0.9) until you reach the target.

1.1.6 Navigational Hazards

The two most dangerous natural hazards of hyperspace travel are black holes and ion storms. If you see these symbols (shown in A.5) displayed on the Navigational Star Map, the safest course is to stay away from them. If you do encounter either kind of hazard, here is what to expect.

1.1.6.1 Ion Storms

Ion storms are scattered randomly across a region and can appear or dissipate suddenly. These storms can be very violent. If you pass in hyperspace through a regional location that contains an ion storm, your ship can suffer minor damage or even casualties among your crew and the complete failure of some of your ship's systems. Traveling in hyperspace with your shields up can provide some protection against an ion storm, but may not entirely prevent the storm from affecting your ship. If you encounter an ion storm while traveling in normal space, your sensors will be useless and you will only be able to receive visual scans. They should also be avoided, but unlike black holes, your helm will not warn you of any ion storms in your planned hyperspace path because they are not persistent in any location and will probably be gone by the time you reach them. Ion storms will only be visible on the Navigation Map.

1.1.6.2 Black Holes

Black holes are extremely dangerous. If you pass in hyperspace through a regional location that contains a black hole, its strong gravitational pull will cause a hyperspatial dislocation and your ship will emerge into normal space at random in the region. Your ship will also probably suffer some damage. If you stop in a regional location that contains a black hole, your ship will be sucked into the hole and destroyed unless you leave that system immediately. Your sublight engines cannot overpower the gravitational attraction of a black hole. To escape, you must execute an Emergency Hyperspace Maneuver (1.1.7.4.5). No system containing a black hole will have a star or planets within it. Black holes will be visible on both the Navigation and War maps.

When you select a regional target in Navigation (Navigation or War Map), your Helm will check the planned route (remember in hyperspace you can only travel in straight lines) to check if there is a black hole in your path. If there is, the helm will warn you of the black hole on the route and give you the opportunity to cancel your navigation targets so you can choose an alternate path.

1.1.6.3 Supernovae

In the higher mission levels, Class O (white dwarf) stars can go supernova. It is very rare for this to happen and cannot happen more than once per region (mission). When a star goes supernova everything in the star system is destroyed, including all planets, ships, starbases, etc., and the star is replaced in the center of the system and on the star maps by a new black hole. In the Star Systems table, the entry for the star that went supernova is replaced by "***********". Any destruction caused by the supernova will not be counted on the Mission Tally (except for your ship). If it destroys something that is needed to complete your mission (e.g. starbase), then that will be deducted from your mission requirements. Once a star starts to go supernova, it will occur within one day. You will only know if a star is about to go supernova if there are any Krellan assets (ships, probes, planets, etc.) in that star system and your communications are working (unless, of course, it is in your system, in which case your Science sensors will detect it). When a supernova

occurs, your science instruments will detect it, and Krellan HQ will inform you of what, if anything, was destroyed by the supernova (except for enemy assets). If the sun in your local system is going to go supernova, then you must immediately leave the system before it does so, or you will be destroyed.

1.1.7 Navigation Commands [N]

So the first command to examine is the command structure for monitoring and control of the movement of your ship in the myriad of tactical situations you will encounter. The hierarchy of the Navigation Commands is shown in Figure 6.
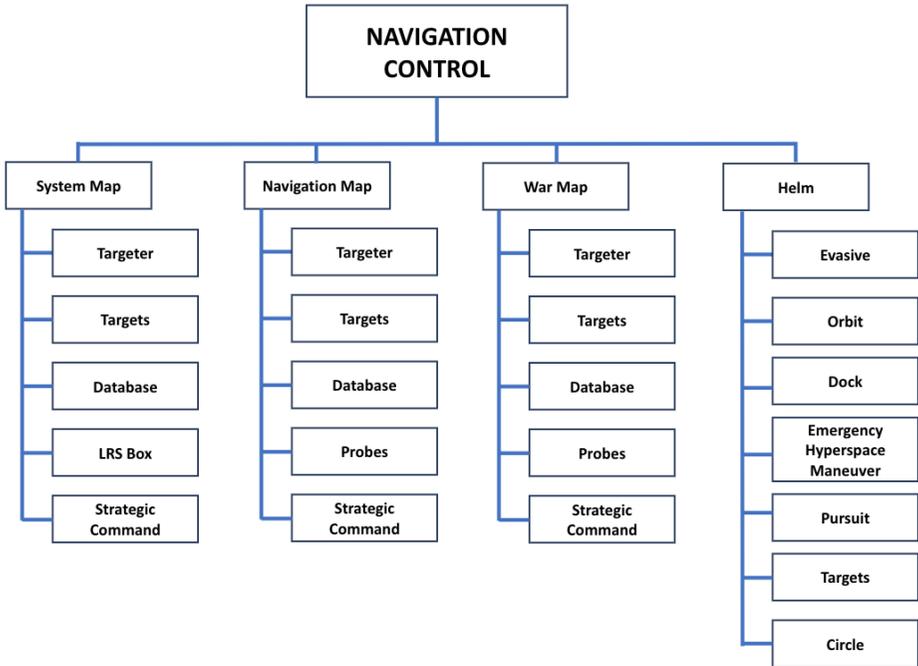
Figure 6. Navigation Control Command Structure

1.1.7.1 System Map [N]/[S] or [Alt][S]

Executing this command calls up the System Map Display, a detailed depiction of your current regional location. Figure 7 shows an example System Map Display that contains one of your starforts, a planet, and a task force of UGA ships, which are preparing to attack the starfort. Your escorts are in the System Search formation, and are the Krellan ships at the four corner intersections (20,20 20,40 40,60 60,60) although in this example the escort at (40,60) is not showing on the map, possibly because it is too close to the planet to be distinguished.
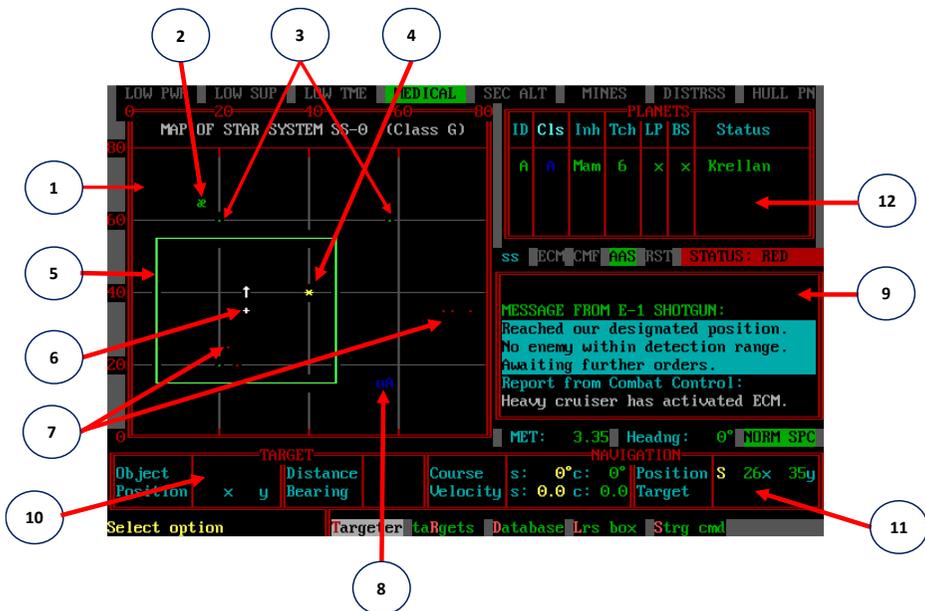
Figure 7. System Map Display

1) **System Map** – This shows the map of the 80 x 80 points of Normal Space contained within this regional location. If this regional location contains a star, then it is called a *Star System*, the identification of which, along with its stellar class, are shown in the space above the map. If there is no star, then it is called a *Regional Location*, but can also be called a System for compatibility with displays and messages. The resolution of the map is x=2, y=5 points. This means that anything withing an area of x=2 and y=5 points occupies a single position on the map. That means that each time you move the TDB horizontally, the position changes by two point, and when you move it vertically, it changes by five points. It there is more than one object in that space, only the object with the largest size or highest priority is shown. For example, in Figure 7 the planet is located at (56,17), which you will see as the Target Position if you moved the TDB over the planet symbol. If the TDB was in that same location without the planet,

Figure 8. System Map Symbols

TDB over the planet symbol. If the TDB was in that same location without the planet,

it would show the position as (58,15), which is the center of that position area. If there is a ship in the same position area, i.e., between x=55 and 57, and y=13 and y=17, then only the symbol for the large object, the planet, will show, not the ship. If there are two or more ships in the same position area (with no large object), then only one ship symbol will appear, and enemy ships have priority over Krellan ships, so you'll just see a red ship dot. The edges of the map (along the x=0, x=80, y=0, y=80 lines) is the edge of the system. Once you reach the edge of a Star System, you can jump into hyperspace if your speed is at least 0.6c. If you are in a Regional Location without the gravitational effects of a star, you can jump into hyperspace from anywhere in the system, as long as you have the required speed. Noye that you can toggle the System Map grid on and off by pressing [Alt][G]. This setting will be remembered for the next time you bring up the System Map. The symbols you will see in the System Map are defined in Figure 8.

2) **Krellan Starfort** – Any large object, such as a planet, starfort, or starbase, will show its position on the map with its standard symbol (see Appendix A.5). In Figure 7, this example is the starfort. Krellan objects are green, UGA objects are red. Normally a starbase symbol (#) will in red, but if it's been captured, it will be green.

3) **Krellan Ships** – These green dots are Krellan ships. Each dot represents one or more Krellan ships in that position area as described in part 1).

4) **Sun (Star)** – If this regional location is a star system, then the star will appear at the center of the system (40,40). The local star in your current system is usually referred to as the sun.

5) **LRS Box** – The box shows the range of your Long Range Sensors. Note that this green LRS box does not necessarily match the area covered by the LRS display on the Bridge Display. Due to the limitations of the ASCII graphics, it can only show vertical and horizontal lines. If your heading is one of the four orthogonal angles (0º,90º,180º,270º) or very close to it, then the LRS box will match the LRS display.

6) **Your Ship and Heading** – Your ship is the blinking white cross ("+") in the center of the LRS box. The white symbol next to your ship shows the current heading of your ship (i.e., the direction it is pointing). The angle symbols shown are for: 0º (↑), 45º(¬), 90º(→), 135º(⌐), 180º(↓), 215º(⌐), 270º(←), 315º(¬) so it will be the symbol that is closest to your heading.

7) **Enemy (UGA) Ships** – These red dots are UGA ships. Each dot represents one or more UGA ships in that position area as described in part 1).

8) **Planet** – The letter next to the planet is its planet identification (A, B, …) within the system. It's full identification is the star system number followed by the planet identification. For example, in Figure 7 it is SS-0A. If the Planets Indicator Switch ([Alt][I]) is set to Class, then the color of the planet will match the class of the planet (in Figure 7 the planet is blue because it is a Class A – Aquatic planet). If the Planets Indicator Switch is set to Status, then the color will show the color for its ownership status: green for Krellan, red or bright yellow for UGA, blue for neutral, and white for unknown. See 12) Planets Box for how to determine and change the Planets Indicator Switch.

9) **Messages Display** – Nearly all internal reports, external messages, command acknowledgments, and some displays will appear here while you are in the System Map Display. Some special reports and displays will appear in pop-up message windows. New lines will appear at the bottom of the messages display and the previous lines will be scrolled up. Once the line is scrolled off the display you cannot retrieve it. However, most of the lines are stored in one or more of the logs (1.4.5). Note that the width of the messages in this display is only 34 characters, as compared to the 39 characters in the other displays.

10) **Target Data Box** – Pressing any key will bring up the TDB. Moving the TDB via arrow keys to surround an object, will provide the object's identity, position, distance from your ship, and bearing in the Target Data Box. Typical objects are planets, star (sun), starfort, and other ships. If you place the TB over empty space, it will say "Nothing". Position is given in system coordinates, x across (0-80), and y up (0-80). Distance is given in system units (points) computed along a straight line between the object and your ship. Bearing is the course you'd have to set in order to fly there manually.

11) **Navigation Data Box** – The Navigation area provides you with a summary of your ship's navigation settings. The course you have set (s) and your current (c) course are displayed in degrees, as well as your set (note s is for set, not sublight) and current (c) Velocity (speed). Sublight speed is added to hyperspace speed for these numbers. Sublight is the fractional part. Your position (not that of the target) is given in system coordinates (shown by a yellow "S"), x across (0-80), and y up (0-80). When you are in hyperspace, the regional coordinates (shown by a yellow "R") with x=0-35, y=0-15. The name of target 1 from the Navigation Computer as set in the Targeter is loaded into Target under the Navigation Data Box. If there is no target, then this is blank. Above the Navigation Data Box is the current heading of your ship shown with the label "Headng".

12) **Planets Data Box** – If the system contains any planets, information about each is provided in the Planets Data Box. If there is a "?" shown, then the planet has not been scanned from orbit yet. However, the class of the planet is determined when you arrive in normal space in a star system and does not require that the planet be scanned from orbit. The following parameters appear in the planets box:

ID: This is the capital letter that appears next to the planet circle on the map. A star can have up to four planets, A-D.

Cls: Planets are one of seven classes (Appendix A.4), some more valuable to the Krellan Empire than others. The letter of the class will be in the class color. Note that if the Planets Indicator Switch is set to "Class", then the "Cls" column header will be in bold. In this case, the planets in the map will be shown in their class color.

Inh: Only Class A, D, K, or P planets can be inhabited. The inhabitants (natives) can be Humanoid, Mammalian, or Reptilian. When the nature of the inhabitants is known, this column will contain one of four specific designations:

-	No inhabitants
Hum	Humanoid
Mam	Mammalian
Rep	Reptilian

Tch: Inhabited planets are at various levels in their technical development. This indicates their current technical development level (see Table 3 for the definition of these levels).

Table 3. Planetary Technology Levels

TL	Description	Comments
0	No intelligence	So stupid they don't get out of the way of falling rocks
1	Primitive nomads	Hunters looking for FOOD
2	Primitive agricultural society	Primitives who fight with sticks, and bows & arrows. Have simple villages.
3	Medieval	Swordsmen and knights. Towns & castles
4	Early industrial	Some industries for us to take over
5	Early nuclear, advanced industrial	Nuclear industries for us plunder
6	Advanced – interplanetary	Advanced populace with planetary travel
7	Advanced – Krella level or higher	Technology worth fighting for – and for our glorious legions to earn honors

LP: An "x" means there is a Krellan landing party on the planet, a "-" means there's not.

BS: An "x" means a Krellan base is established. A "-" means there's not.

Status: This indicates ownership of the planet: Krellan, Alliance (UGA), Neutral, or Unknown. Planets in Krellan star systems (see WAR MAP), are claimed as Krellan. A planet that is Unknown remains so until a landing party completes a survey or the natives reveal their status to you.. Note that if the Planets Indicator Switch is set to "Status", then the "Status" column header will be in bold. In this case, the planets in the map will be shown in their Status color.

1.1.7.1.1 System Map Command Options - Listed on the command line of the System Map Display are the five options you can select at this level of the command hierarchy.

Targeter [N]/[S]/[T] - General information about the Targeter is given in section 1.1.2. When you execute the Targeter option from the System Map Display, the maximum

velocity in the Targeter Display will be 0.9 (assuming your sublight engines are fully operational).

Targets [N]/[S]/[R] - General information about the Targeter is given in section 1.1.3. When you select this option from the System Map Display, the targets described will be system locations and the x, y values will be system coordinates.

Database [N]/[S]/[D] – To use this option, you must move the TDB so it is centered on a planet. To get information about the planet, you or other Krellan units must have scanned the planet from orbit, otherwise you will get a message that a detailed scan has not yet been done. If a scan has been done and information about the planet is known, a planet data summary box (Figure 9) will be display. This box shows you the planet identification, system position (x,y), name (if any), and planetary class. It then provides a summary analysis of the planet that includes (as relevant) the type of natives, their technology level, its rating for minerals (rich, medium, or poor), whether supplies are available, whether a survey of the planet has been completed, whether a Krellan planetary base has been established, and if a Krellan landing party is present (it doesn't have to be yours). It will


```
OBJECT: Planet          POSN: 56,17
ID: SS-0 A              NAME: UEAEUE
ANALYSIS: Class A/aquatic
Mammalian/Tech Lvl=6:advanced-i/p flt
Rich minerals; supplies available.
Survey complete. Base established.
Krellan landing party present.
 8 Krellan legions present.
```

Figure 9. Planet Summary Box

also inform you if there are any enemy (Alliance) present, and whether or not the natives have a unified government if it's not a Krellan planet. If there are any ships in orbit, they will also be reported.

After the Planets Summary Box has been displayed, you will be asked if you want to view the planet map. Upon answering either affirmative or negative, the summary box will be removed. If you reply [Y], then your System Map Display will be replaced by the Planet Map. The Planet Map display can also be accessed from the Nav and War maps through the Database option; from the Scanners option under the Science command on the Main Menu; or from the Orbital Command option under Strategic Command on the Main Menu. A sample planet map is shown in Figure 10. Many of the items in the Planetary Map Display are identical to elements of the Bridge Display (Appendix A.3), with the following additions:
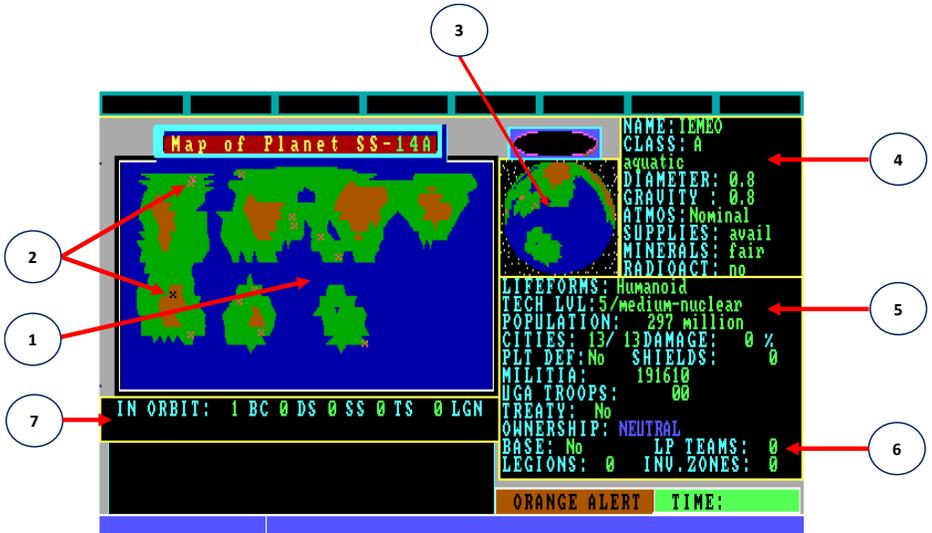
Figure 10. Planet Display

1) **Planet Map** – This is the flat projection map of the planet. The terrain colors are defined in Table 4.

Table 4: Planet Terrain Colors

Terrain Type	Planet Class	Color
Water	K, A	Blue
	D, I	Cyan
Lowlands	K, A	Green
	D	Sand
	P, B, I	Yellow or Red
Hill Country	K, A, D	Brown
	P, B, I	Gray
Mountains or high plateau	K, A, D	White
	P, B, I	Brown

2) **Cities** – These symbols show the locations of significant cities that are suitable for invasion. For Tech Level 1 planets, they are villages, and for Tech Level 2, they are towns. From Tech Level 3 and higher they are cities. If the city symbol is an "X" then it has not been selected, but If the city has been selected (a maximum of eight cities can be selected at the same time), the symbol is a square ("□"), and if it has been destroyed, it is a cross ("+"). If you move the Target Designator Box (TBD) over it, then you can view the city using the "View" command in the options line.

3) **Scan View** – This display shows the part of the planet you can see from orbit. If you are in Orbital Control the terrain changes as your orbit takes you over the planet surface.

4) **Planet Physical Data** – This lists the major physical characteristics of the planet:

   NAME: Designated name (usually natives' name of the planet), if known

   CLASS: Class of the planet, including the type description

   DIAMETER: Diameter of the planet expressed as a fraction of the diameter of Krella, the home planet of the Krellan Empire (e.g., an entry of 0.5 indicates a planet half the diameter of Krella)

   GRAVITY: Average gravitational acceleration of the planet also expressed as a fraction of the gravity of Krella

   ATMOS: The rating of the atmosphere of the planet, given as "Nominal" (Krella-like), "Poisonous" or "None"

   SUPPLIES: Sustenance suitable to sustain Krellans – either available ("Avail") or "None"

   MINERALS: Rating of quantity of the planet's valuable mineral resources "None", "Poor", "Fair" or "Rich"

   RADIOACT: If the planet is dangerously radioactive "Yes" or not "No"

5) **Planet Inhabitants Data** – This lists the major information about the planet's natives and Alliance forces (if any):

   LIFEFORMS: Indicates the predominant type of native intelligent beings. The possibilities are "None", "Humanoid", "Mammalian", or "Reptilian"

   TECH LVL: Technology level (TL) of the inhabitants (1-7). See Appendix A.4.

   POPULATION: The estimated number of native inhabitants on the planet

   CITIES: The number of major cities or military targets that are suitable for invasion or elimination

   DAMAGE: The damage level to the planet's civilization/infrastructure as a percentage. If the damage level reaches 100%, then the planet civilization is destroyed, although physically still exists

   PLT DEF: Indicates if the planet has active planetary defenses – either "No" or "Yes"

   SHIELDS: The current strength of planetary shields (if any) in energy units. Invasion or bombardment of the planet's surface is not possible until the planetary shields are destroyed

   MILITIA: The number of organized native troops on the planet

   UGA TROOPS: The number of UGA regular forces on the planet

   TREATY: "Yes", if a treaty has been signed by the natives and the Krellan Empire, or "No"

   OWNERSHIP: Shows who currently controls the planet (equivalent to STATUS in the Planets Box in the System Map). The possibilities are: "KRELLAN" in green, "UGA" in red, "NEUTRAL" in blue, or "CONTESTED" in magenta

6) **Krellan Forces Data** – This lists the major information about the Krellan military presence on the planet (if any):

> **BASE**: Indicates the presence of a Krellan base (it does not have to be yours) on the planet's surface – "Yes" or "No"
> **LP TEAMS**: The number of Krellan landing party teams on the planet's surface. A full-strength team consists of 10 personnel. The teams do not have to be yours
> **LEGIONS**: The number of Krellan legions on the planet
> **INV.ZONES**: The number (0-8) of landing zones you have selected on the planet

7) **Orbital Forces Data** – This lists the major information about the Krellan military forces orbiting the planet (if any):
> **BC, DS, SS, TS**: Indicates the number of each ship type (Battlecruiser, Destroyer, Supply Ship, Troopship) in orbit
> **LGN**: The number of Krellan legions contained in the orbiting troopships

LRS Box [N]/[S]/[L] – This is the toggle switch to turn the depiction of the LRS box (item 5 in Figure 7). This switch defaults to ON. This switch does not affect the operation of the LRS, only whether or not the box appears on the System Map Display.

Strategic Cmd [N]/[S]/[S] - This option takes you directly to the options in the System Strategic Command Menu. This shortcut eliminates the need to go back through the command hierarchy and access these options from the Bridge Display.

1.1.7.2 Navigation Map [N]/[N] or [Alt][N]

Executing this command calls up the Navigation Map Display, which shows information about your current region that is useful for navigation. Figure 11 shows an example Navigation Map. The definition of the region is given in Appendix xxxxx. Messages will

Figure 11. Navigation Map Display

appear overlaid on the star map in small windows. In some cases, you will be required to press a key to acknowledge receiving a message before you can execute another command. The window will then disappear. You can keep the message window up permanently by toggling the retain message CRT switch [Alt][K] on and remove it by toggling it off. This retained window will automatically change its position so that it does not cover your ship's location or the TDB. Significant items on the map have been highlighted and are described below.

1) **Our Ship** – The location of your ship on the map blinks. If it's in empty space between systems, it is your ship's symbol (as in Figure 11), while if you are in a star system, then the star system symbol will blink.

2) **Target Designator Box** – The TDB is moved in the map using the cursor keys.

3) **Star Systems (Mapped)** – If a star system has been mapped (i.e., scanned by a Krellan ship or a probe), then the "*" symbol will be replaced by the symbols showing the number of planets in the system (if any). The symbols are defined in Figure 12, but will appear in the color of the star type in the Navigation Map.

Figure 12. Star Map System Symbols

4) **Star Systems (Not Mapped)** – Any unexplored star systems (i.e., they have not been scanned by Krellan ships or probes and are not part of Krellan space at the bottom of the region), then the generic star symbol "*" is shown in the color of the spectral class of the star (which has been determined by astronomical observation before the invasion).

5) **Black Hole** – Described in 1.1.6.2. Black holes will not move nor disappear. They should be avoided at all costs.

6) **Ion Storm** – Described in 1.1.6.1. Ion storms are dynamic and temporary. They can appear and disappear anywhere in the region, and can move at random between regional locations during their existence. Ion storms are a navigation hazard and do not appear on the War Map.

1.1.7.2.1 Navigation Map Command Options - Listed on the command line of the Navigation Map Display are the five options you can select at this level of the command hierarchy.

Targeter [N]/[N]/[T] - General information about the Targeter is given in section 1.1.2. When you execute the Targeter option from the Navigation Map Display, the maximum velocity you can set in the Targeter Display will be 10.0c, but the Targeter will be set to the default maximum safe of 8.0c (assuming your hyperdrive engines are fully operational).

Targets [N]/[N]/[R] - General information about the Targeter is given in section 1.1.3. When you select this option from a star map Display, the targets described will be regional locations, and the x, y values will be regional coordinates (measured in light years).

Database [N]/[N]/[D] – The Database Command has several options available to provide information about the region. The options are *System*, *Bases*, *Landing Parties*, *Stars*, and *Mapped Region*.

> **System** [S] – To obtain information about any regional location while viewing the Navigational Star Map, move the Target Designator Box to the desired location and select the Database option. The left side of the star map will be overlaid by a system map of the location, which can be a star system or an area of "empty" space (note that a location without a star can still contain a starfort or a starbase). If the location is a star system with planets, a Planet Information Box (1.1.7.1) will overlay the upper right portion of the star map. To obtain information about a planet in the star system and optionally a planetary map (1.1.7.1.1), move the TDB on the system map to that planet and press [Enter]. The information shown and the procedure is the same as described in the System Map Database option (1.1.7.1.1**).** The planetary map will take the place of the system map and will remain in place until you move the TDB to a new location.

> **Bases** [B] – The Bases option shows you the location of any planetary bases that have been established by the Krellan side (i.e., built by you or other Krellan forces). The locations of the bases are designated by a gold "B" on the star map. If your ship is in the same star system, the base symbol will blink. Press any key to remove the base indicators.

> **Landing Parties** [L] – The Landing Party option shows you the regional location of the Krellan landing parties in the region. The locations of the bases are designated by an "L" on the star map. If they are your landing parties, they are in bright white. If they are landing parties belonging to other ships, they are shown in bright green. If your ship is in the same star system, the landing party symbol will blink. Press any key to remove the base indicators.

> **Stars** [T] – The Stars option produces a *Star Systems Database* window that shows information about all 50 stars in the region (Figure 13). The following parameters are shown for each star system:
>> **SS:** Star System identification number (unique to this region)
>> **Rx Ry:** Regional x and y coordinates (in light years from lower left corner)
>> **Cls:** Stellar class of the star (defined in Appendix A.4). Class F (green) and G (cyan) stars are the most likely to have Krellan-inhabitable planets
>> **Status Indicator** (no column heading): A small box shows the status of the star system by its color as defined in Table 5. If the small status indicator box is inside

```
STAR SYSTEMS                    DATABASE                          HULL PN
SS Rx Ry Cls Plt SS Rx Ry Cls Plt SS Rx Ry Cls Plt SS Rx Ry Cls Plt      35

 0 31, 1  B ▪ 1  13 14,11  B ▪ 0  26 24, 5  G ▪ 2  39 25, 9  B ▪ 1       15
 1  0, 1  0 ▪ 0  14  0, 7  0 ▪ 0  27 27, 4  M ▪ 0  40 14, 5  0 ▪ 0       14
 2  2, 1  M ▪ 0  15 26, 3  G ▪ 1  28  0, 9  M ▪ 0  41 15,10  G ▪ 3       13  S
 3 33, 0  F ▪ 0  16 **********     29 12, 7  G ▪ 0  42 18, 6  0 ▪ 0    ó  12  T
 4 26, 0  K ▪ 0  17 22, 8  F ▪ 2  30 25,12  G ▪ 1  43 32, 3  A ▪ ?       11  A
 5 19,12  0 ▪ 0  18  4,12  0 ▪ 1  31 23,12  G ▪ 1  44 35, 8  F ▪ ?    *  10  T
 6 12, 6  F ▪ 2  19 22, 3  B ▪ 0  32 17, 6  0 ▪ 0  45 34,12  G ▪ 1        9  U
 7 17,15  B ▪ 0  20 34, 2  A ▪ 0  33  2, 4  M ▪ 1  46 27, 6  B ▪ 0    *   8  S
 8 27, 2  G ▪ 0  21 28, 6  0 ▪ 0  34 22,10  B ▪ 0  47 13, 3  F ▪ ?        7
 9 23, 7  F ▪ 1  22 26, 6  B ▪ 0  35 18,15  F ▪ 2  48 35,10  F ▪ ?        6  0
10  7, 4  G ▪ 1  23 28,11  F ▪ 1  36 35, 3  F ▪ 0  49 34,11  F ▪ ?        5  R
11 15, 2  G ▪ 1  24 32, 2  0 ▪ 1  37 30, 5  K ▪ 0                         4  A
12  7,11  G ▪ 2  25 30, 3  K ▪ 0  38 21,10  F ▪ 1                      o  3  N
                                                                         2  G
 Status: ▪unknown ▪neutral ▪Krellan ▪UGA ▪contested  ▪UGA activity    o  1  E
         [CR]: select for transfer to Nav  [Esc]: exit                   0
```

```
                ┌─TARGET─┐                   ┌─NAVIGATION─┐
 Object   star sys  Distance   0.0  MET        4.21 days Position  S  12x  20y
 ID/Class SS-10/G   Bearing     0°  Velocity s: 0.0 c: 0.0 Target
Select star system
```

Figure 13. Star System Database Display

a larger red box, it indicates the presence of Alliance activity in that star system. However, unlike with the War Map, where this red box indicates current Alliance activity, in the Star Systems Database it indicates if there was ever Alliance activity detected, even if no longer current. This retains the history of enemy activity in the regions even if there is no active Krellan probe, ship, or base in the system.

Plt: This shows the number of planets in the star system

If a star has gone supernova, either naturally or with your help, its row of data will be replaced by "********".

Mapped [B] – This command option shows the regional locations where no stars have been scanned by probes or Krellan ships on the star map. When you select this option, the standard gray grid appears on the star map, which signifies the regional locations (without a star) that have not been scanned and mapped. If the regional location has been mapped, a larger dot will appear: • (green) means no sign of the enemy, • (orange) means enemy detected, while • (red) means enemy base has been located. Pressing any key will clear the mapped display (if the grid toggle switch was on, the grid will stay). Your location is shown as a blinking symbol. The four Mapped Database options are shown on the options line. The four options are: *Filter msgs*, *Targets*, *Reset map*, and *Legend*. Figure 14 shows the Mapped Database active with the Legends box up and four probes targets indicated. Note: only the Message Filter command is available in standard battlecruisers. The other three command options are only available on upgraded flagships.
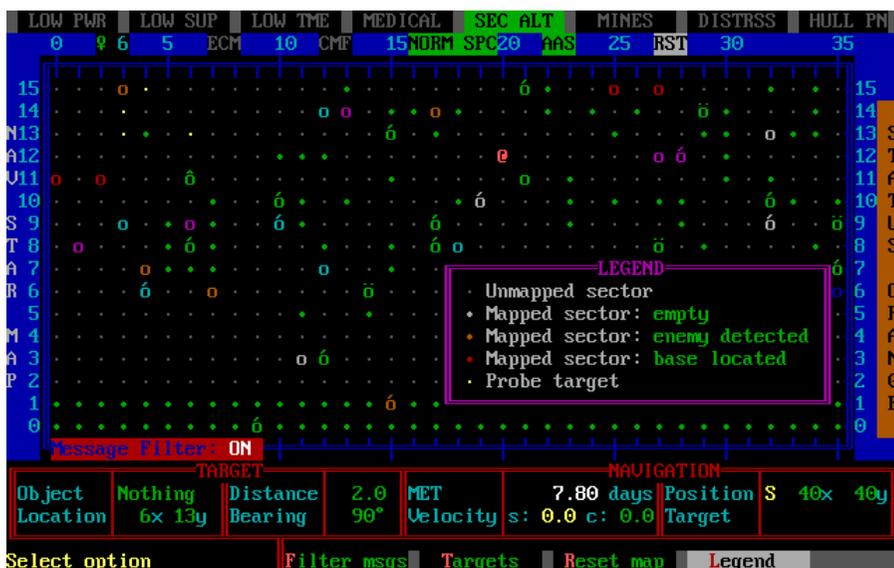
Figure 14. Mapped Database in Nav Map with Legend Box and Four Probe Targets

1) **Filter msgs [F]** – *all battlecruisers*

This is a switch that will toggle the filtering of mapping reports from other Krellan ships (but does not affect reports from probes). The indicator for this toggle switch is located on the lower left map frame. When ON, the filter will not show messages from Krellan ships that map star systems or region sectors unless enemy presence is detected. When OFF, all messages from Krellan ships after they have mapped a regional location are shown. If this filter is off, a large number of spam messages can be produced that interrupt the flow of the game and your controls.

2) **Targets [T]** – *flagships only*

This option shows all the empty regional locations that have been targeted by probes. These locations are designated by a small yellow dot that is the same size as the gray grid dots. Press any key to remove the indicators and return to the options menu.

3) **Reset map [R]** – *flagships only*

This option will reset the map (remove all dots to their unmapped state). If a certain phase of the mission has been accomplished, (e.g., locate 5th Fleet Headquarters) and you are entering a new phase that requires you to search the region again (e.g., to find remaining UGA ships which can be either in star systems or deep space), it is helpful to delete all the previous mapped indicators to start the new search. Note that the mapped indicators only show the state of when the location was initially scanned. They do not automatically update subsequently (unless there is an active probe or Krellan ship in the location).

4) **Legend [L]** – *flagships only*
This option displays a box that identifies the symbols and colors in the Mapped Database display. Press any key to remove it.

Probes [N]/[N]/[P] – You do not have to visit all of the star systems in the region in order to find out what each system contains. You can send a reconnaissance sensor probe to a regional location within five light-years of your present location by moving the Target Designator Box to the desired location and selecting this option.

Probes will be launched in the order given (#1 through #5) unless you select a certain one by highlighting your selection or pressing the launch tube number. You cannot launch a probe into your ship's current regional location, and you will not be allowed to send a probe to a location that is more than 5.0 light-years distant. (If you pick an out-of-range target, exit the option and move the TDB to a new location.) When a probe is in transit, its symbol (↔) will appear on the star map. The symbol will not be visible on the star map after it arrives at its targeted location, and cannot be seen on the LRS, but is visible on your Tactical Display (and the Combat Information Display). When a probe arrives at its targeted location, it will map the system and you will receive a message to that effect. Thereafter, you will have access to a map of the system just as if your ship had travelled there and done the mapping in person. As long as the probe is active, you will be informed when any enemy ship arrives in the system.

When you reach the rank of *Prefect*, you can upgrade your battlecruiser to become a *flagship*. One of the ship's systems that is included in the upgrade is *Probes Control*. The upgraded probes have sublight propulsion for travel in normal space (as well as their usual hyperdrive). For standard battlecruisers, you will have the standard Probes Control. On a standard battlecruiser there are initially five probes in the launch tubes and five probes in storage for a maximum capacity onboard of 10 probes, while the flagship has eight probes in storage in addition to the five in the launch tubes for a maximum capacity of 13 probes onboard. The standard and upgraded probes and Probe Control are described in the following subsections.

Standard Probes
The *Probes Control Display (PCD)* will appear in the lower right corner of the Navigational Star Map (Figure 15). On the upper row of the PCD box is a number from 0 to 5. This shows the number of probes that are currently left in storage. When you launch a probe, if there are any probes left in storage, then one will be loaded into the launch tube left empty by the launched probe. To launch a probe, press [Enter]. The display contains the following information for each probe:
L: launch tube number (also control station for launched probe)
STATUS: either *Supply* (available for use), *Transit* (en route to target), *Passive* (stationary and sensing at target location), or *Destroy* (has been destroyed).

TG: number of the star system targeted for that probe.

RAD: not used.

SS, number of the star system where probe is currently located (same as your ship if the probe is in Supply or has just been launched).

REG.L: probe's current location in regional coordinates.

SYS.L: probe's current location in system coordinates (after arriving at target).

DETECT: either Enemy, if Alliance activity has been detected in the target system, or blank.
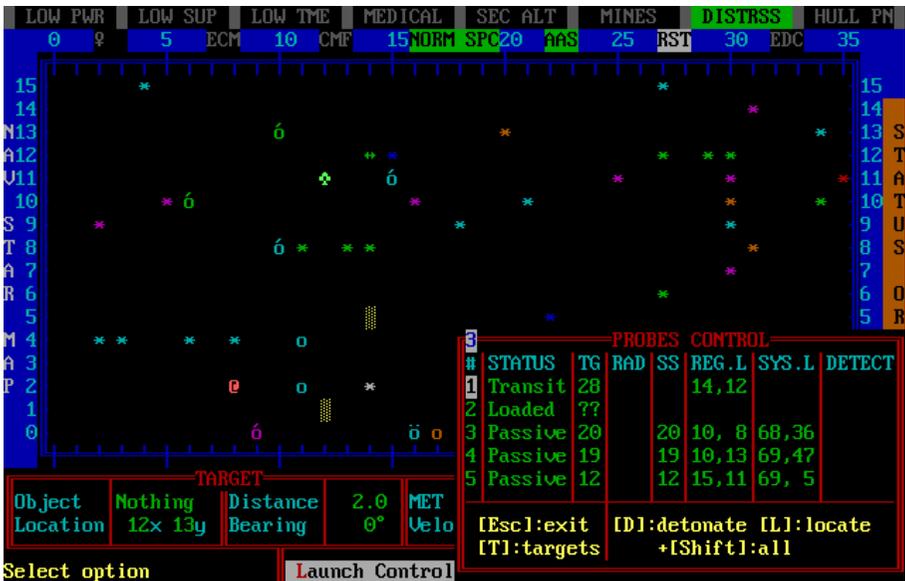
Figure 15. Standard Probes Launch Control

Because you can only control five probes at any time, you may find it necessary to destroy a probe that has outlived its usefulness. Select the probe you want to destroy by highlighting the appropriate number, then follow the screen instructions. You cannot destroy a probe that is in transit or in supply. It is possible to have five probes in supply

Table 5. Standard Probes Launch Control Commands

PROBE STATUS	[Esc]	[D]	[L]	[CR]
	Exit unchanged	Detonate	Locate*	Launch*
Standby	Y	N	N	Y
Transit	Y	Y	N	N
Active Search	Y	Y	Y	N
Passive	Y	Y	Y	N
Destroyed	Y	N	N	N

* Can be done only from star maps and not from Engineering on Main Display.

and five probes in service. When an active probe is destroyed, a supply probe will replace it in the Probes Control Display. You can replace destroyed probes while docked at a starfort or during a rendezvous with a supply ship. To replace probes without docking, you can use the Material Transfer option of the Teleporters command (1.2.2). The commands available for Standard Probes are shown in Table 5.

Upgraded Probes

The upgraded probes have new capabilities, and Probes Control has been divided into two parts – Probe Launch Control (PLC) and Probes Operations Control (POC). You use the PLC to set, target, and launch the probes. Once they have been launched, control of them is transferred to the POC.

Probe Launch Control (PLC)

The PLC can be accessed through the Probes Command in either the Navigation Map or the War Map or through Engineering. However, its functionality is limited if accessed through Engineering. Its operation is similar to the standard Probes Control, but there are some differences. The PLC (Fig. 16) only controls the probes while they are in the five launching tubes onboard your ship. Here you can target the probes, change their mission mode, and launch them. Once they have been launched, they are handed over to the POC for monitoring

Figure 16. Probe Launch Control

and control. You have five launch tubes numbered one through five (in the "L" column on the left). Tube number one is always the tube that contains the next probe that will be launched next. However, you can launch the probe in any of the tubes – just highlight that tube. Whichever probe is launched, its target will be the current regional location of the Target Designator Box (TDB). Once that probe is launched, the probes move up in the table so that the second probe is now in Tube #1. Move the cursor up and down to specify the launch tube that contains the probe you want to make a change in its mission mode. You can also select a tube by pressing the number of it the tube (1 to 5). In the column to the right of the Launch Tube number is the probe number. This is the unique number of this probe until it is destroyed, at which time a replacement probe will be given its number when needed. The next column shows the current status of the launch tube – Loaded or Empty. In the right column is the current Mission Mode to which the probe is set. The default is Passive. The various modes will be discussed in the Mission Mode Option. On the upper row of the PLC box is a number from 0 to 8. This shows the number of probes that are currently left in storage. When you launch a probe, if there are any probes left in storage, then one will be

loaded into the launch tube left empty by the launched probe. When you first access the PLC, there are five options shown: *Launch, Mode, Showloc, Targets*, and *Auto_tg*.

Launch [L] - If there is a probe loaded into the selected launch tube, then you can launch it from the main PLC menu by pressing [L] or pressing [Enter] when the Launch option is highlighted. This will launch the selected probe to the current regional location of the TDB. Once the probe has been launched, control of it is handed over to the POC, which can handle up to 12 probes simultaneously. If there are no more available slots in the POC, then you will receive a warning and not be allowed to launch the probe. If there are any probes left in storage, then as soon as the probe has been launched, a replacement probe from storage will be loaded into the empty launch tube.

Set Mission Mode [M] - In the standard probes there is only one mission option – Passive. Once the probe has arrived at its target system, it will go into stealth mode and not move from that location. The upgraded probes have three mission modes: *Passive*, *Search*, and *Explore*. The latter two modes are the *Active* or *Dynamic Modes*. The Active modes (Search and Explore) use energy reserves for the operation of the sublight engine, and the probe will have enough to complete one search pattern plus travel to one or more planets. Once the probe runs out of power, it automatically switches to Passive Mode. Note that if a probe is operating with one of the *Active* Modes and there are UGA ships in the system, there is a chance they will be detected, intercepted, and destroyed. To select the mode, select the mode on the options line and press [Enter], or press the highlighted letter for the mode option.

Passive Mode - This is the default and safest Mission Mode. When the probe arrives in a system, it is in a random location and goes into stealth mode. It uses minimum power and employs only passive sensors (like telescopes, radio receivers, spectrometers, etc.) to map the system and search for any enemy activity. The probe will send its initial report to your ship by hyperspace burst, and any updates by the same method. Because the probe gives off almost no emissions and is stationary, it is virtually impossible for the UGA to detect, and there is no known case of the UGA destroying or capturing a probe in Passive Mode.

Search Mode – This mode is good for locating enemy ships and starbases in systems. It does the standard clockwise (CW) search pattern between the system sectors (20x, 20y) (20x, 60y) (60x, 60y) and (60x, 20y). Completing this search pattern will ensure that any starbase or ships inside that system will be located. The probe will immediately report if it has located the enemy. If the Search Mode has been preset in the probe, then it will arrive at (20,20) and start its search pattern. If the Search Mode is set after the arrival of the probe in the system (e.g., with Passive Mode), then it will move to the closest corner of the search pattern and then start the search. At the end of the search pattern, the probe will move to a random location and switch to Passive Mode.

Explore Mode – This mode is used specifically to scan planets. It will only explore viable planets, which means that the planet cannot be Class G (Gaseous Giant) and

must be unscanned. If the probe is preset to Explore Mode, it will arrive in the star system at sector (40x, 0y). It will first map the system, and if there are no viable planets in the system, it will move to a random location and switch to Passive Mode. It will note the location of the viable planets and set the first (SS-##A, B, C, or D in that order) planet as its target. It will inform you of its target, when it reaches and goes into orbit of the planet. It scans the planet just like your ship or another Krellan ship would do, and once scanned, the data for the planet will be in your Planets Database. It will also identify any enemy presence on the planet and any enemy assets in orbit. If the planet is enemy and especially if there are orbital assets, then the chances of the probe surviving are very low. If it is not destroyed, the probe will then target the next viable planet. If there are no more planets, it will go to a nearby random sector and switch to Passive Mode.

Show Probe Location [S] - This option only works for the PLC accessed through the Navigation or War Maps. It does not work in the Engineering PLC. When you select this option, the PLC box disappears and the location of each probe in shown on the star map with the probe symbol. Press any key and the map will be restored as will the PLC box.

Show Probe Targets [T] - This option only works for the PLC accessed through the Navigation or War Maps. It does not work in the Engineering PLC. When you select this option, the PLC box disappears and the a golden "T" appears on every regional location targeted by a probe. This is to help you identify which systems still need to be targeted. If you happen to attempt to launch a probe to a system already with a probe or is targeted by a probe, you will be so informed and the launch will be aborted. Press any key and the map will be restored as will the PLC box.
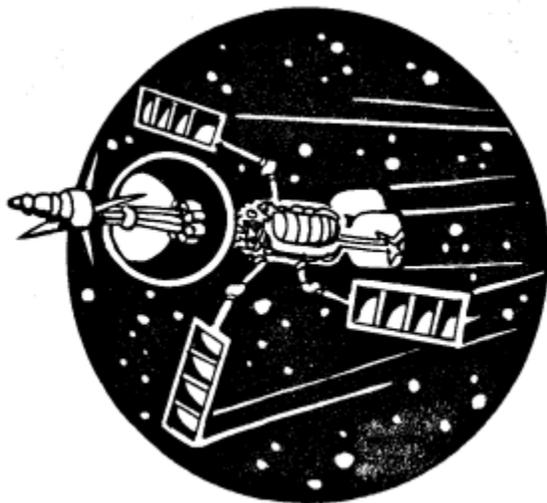
Automatic Targeting Mode [A] - This option only works for advanced probes (i.e., in an upgraded battlecruiser) and only for the PLC accessed through the Navigation or War Maps. It does not work in the Engineering PLC. When you select this option, the PLC box disappears and star system targets selected by the computer are shown as a magenta "A" (Fig. 17). The computer prioritizes the selection by star class, with F and
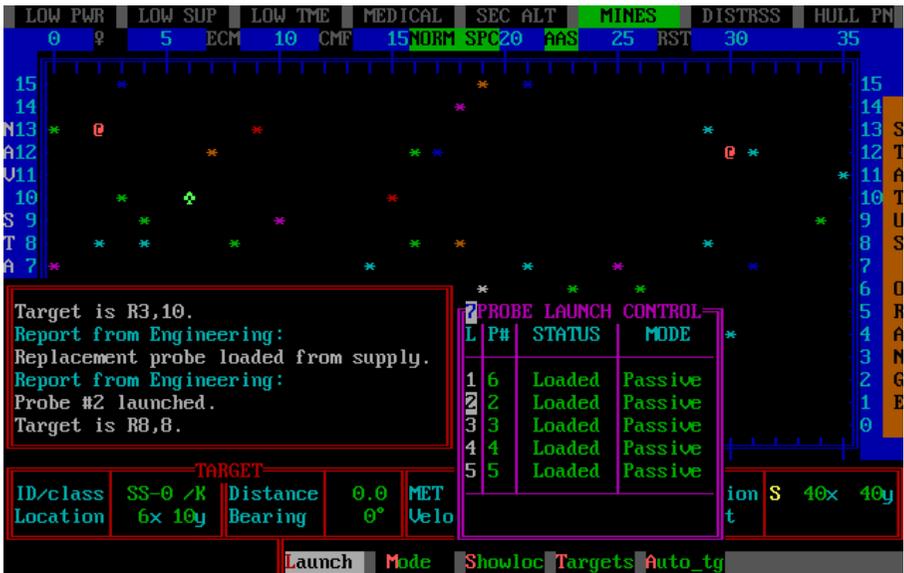
Figure 17. Automatic Launching of Probes with Auto-Targeting

G stars having top priority, because they are more likely to have inhabited and especially Alliance planets. Once all the F and G stars within range have been selected, but there are still probes in the launch tubes with no target, then other class stars will be selected. Note that the computer does not factor distance into its selection – only that the target is within the five-light-year range of the probe. This is because the Commander's preference for the probes can vary. Sometimes the Commander wants the probes to hit the closest stars, while other times the command may want the probes to go to the more distant stars so the Commander can examine the closer stars himself/herself. Thus, the order of the targets is based on the order of the stars in the Star System Database.

Once the targets have been shown, you will be prompted on whether you want to accept the targeting or not. If not, then you just revert back to the normal Launch Control. If you accept the targets, then the computer will automatically enter the targets into the probes in the launchers, and then launch them one by one, replacing them if possible from ship storage or from starfort if you're docked (Fig. 17).

Probe Operations Control (POC)

The POC can be accessed through the Probes Command in either Engineering or Navigation (in either the Navigation Map or the War Map). The POC (Fig. 18) controls the probes once they have been launched and left your ship until their end of life. The POC can monitor and control up to 12 probes simultaneously. If additional probes need to be added, then room for them needs to be made by removing existing probes. The definition of the POC table columns is given in the following section.
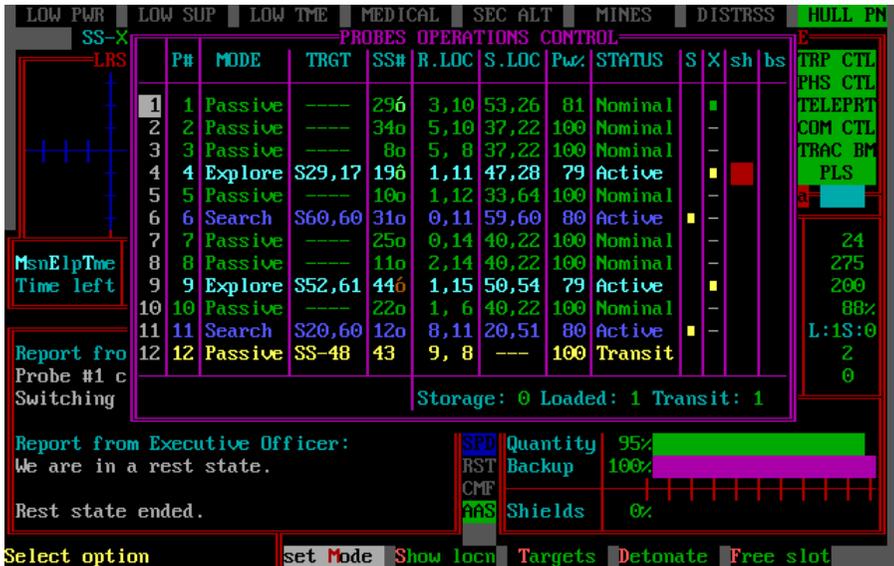
Figure 18. Probe Operations Control

POC Table Description

Column Headings

The definition of the column headings is as follows:

Col. 1 – This just numbers the probes in the table.

P# - The is the probe identity number that stays with the probe from when it is assigned to a probe launcher until its end of life.

MODE – The possible modes for the launched probes are given below. The information for the probes is color-coded based on the mode for ease of identification. Note that regardless of the mode setting, if the probe is in transit, then the information is in yellow. The three Mission Modes (Passive, Search, and Explore) were explained in Section 1.1.7.2.

- **Passive (green):** The probe is stationary in the system with only passive sensors.
- **Search (blue):** The probe is performing a search pattern with active sensors.
- **Explore (cyan):** The probe is visiting and scanning all viable planets in the system.

- **Detonated (brown):** The probe has self-destructed under our orders. This is usually done if you want to make room for another probe in the POC table. A probe in a system with no planets and no sign of the enemy is a good candidate for this.
- **Destroyed (red):** The probe has been destroyed by an external agent not under our command. This could be natural phenomena (e.g., ion storms or black holes), or by enemy action. Occasionally the cause of the destruction will be unknown.

TRGT – If the probe is in transit in hyperspace, then this shows the regional coordinates of the probe's target (x, y). If the probe is in normal space then this shows the system location of its current target. If the probe is in Passive Mode, then it has no target and "----" is shown. If the probe is in a system search, then the target is the coordinates of the next waypoint location. If the probe is in Explore Mode, then the target is the system coordinates of the targeted planet. However, if you put the selection cursor on that probe, it will show the planet identification number. Once you move the cursor off of the highlighted probe, it will revert to show the coordinates.

SS# – This shows the star system number of the probe's current location. For example, if it is in star system 24, then the SS# will show "24". Next to the SS number is the symbol representing this star system indicating how many planets are in the system (same symbols used in star maps). The star system symbol is color-coded to indicate the presence of habitable (planet classes K, A, D, P, and I) or not (planet classes B and G). If there is at least one habitable planet in the system, the star system symbol will be in bright green. If there are none, it the color will be brown. If there are no planets, the color remains the color of the probe mode (although it cannot be in Explore Mode with no planets in the system).

R.LOC – The current regional location (x, y) of the probe, whether it is in transit or not.

S.LOC – The current system location (x. y) of the probe if it is in normal space. If it is in transit, then "----" is displayed. Note that if the probe is moving, then the system location flashes.

Pw% - Power indicator for the probe's sublight propulsion system. The probe is launched with 100% power and as long as it is in Passive Mode, will not use any of it. It will use about 30% of its power to complete a full system search, and the amount used during Explore Mode depends on the number of viable planets and the distance between them. If the power is insufficient to do a full system search (e.g., after exploring the planets), you will be warned. If the probe runs out of power while moving, it switches to Passive Mode at its current location.

STATUS – This indicates the current status of the probe, which is dependent on its mode. The possible status conditions for probes after launch are:
- **Transit**: Traveling to its target regional location. Most of the time in transit it is in hyperspace.
- **Nominal**: Probe is in Passive Mode with everything normal. This is not related to the detection of enemy forces.
- **Active**: If the probe is currently doing a system search or planet exploration expedition, then the status indicates the mode is active.

- **By us**: This indicates that the Detonated mode was by our command.
- **By UGA**: This indicates that the probe destruction was a result of UGA action.
- **ByHazrd**: This indicates that the probe was destroyed by a natural hazard like an ion storm or black hole.
- **ByUnkwn**: This indicates that the cause of the probe's destruction is unknown. It could be a probe malfunction or by unidentified enemy action or by Space Gremlins.

S – If the indicator is bright yellow, then the probe is actively doing a system search. If the indicator is green, then the system search has been completed.

X – If the indicator is bright yellow, then the probe is actively doing an explore mission. If the indicator is green, then the explore mission has been completed. If there is not a viable planet in the system, and thus the probe cannot be put into Explore Mode, then this indicator is "-".

sh – If the indicator is brown, then enemy ships have been detected as being in the system, but not within sensor range. If the indicator is red, then UGA ships are in sensor range.

bs – If the indicator is brown, then a UGA starbase is suspected to be in the system. If the indicator is red, then the starbase has been located.

Other Information

At the bottom of the table is a blank space for messages and the following three data labels:

Storage – Shows the number of probes that are currently left in storage.

Loaded – Shows the number of probes currently loaded in the probe launchers.

Transit – Shows the number of probes currently in transit to their target system.

Multi-Probe Group Selection

For some commands that you want to give to several probes at once, doing them one at a time is tedious, so in the POC you can select multiple probes so that when you issue the command, it occurs for all the selected probes simultaneously. You mark a probe for a multi-probe group by moving the cursor to the probe and pressing [Spacebar]. The sequence number of the probe will be highlighted in brown on white until you move the cursor off (Fig. 19), and then it will change to black on brown. You can deselect the probe by highlighting it and pressing [Spacebar] again. Not all the command options can be done in multi-probe groups, so in the following descriptions will indicate whether they can be used or not with groups.

Figure 19. Multi-Probe Group (2, 3, 5, 7, 8, 10)

POC Command Options

The following commands are available through the Options line of the display. Some of them are not available to the POC accessed through Engineering, but only through Navigation:

• **Set Mission Mode [M]** – You can select any of the three Active modes described in Section 1.1.7.2. THIS OPTION DOES NOT WORK WITH MULTI-PROBE GROUPS. This option does work if POC is accessed through Engineering.

• **Show Probe Location [S]** – When you select this, the POC table will disappear and the location of the specified probe will be shown on the current star map. THIS OPTION DOES NOT WORK IF THE POC IS ACCESSED THROUGH ENGINEERING. This option does work with Multi-Probe Groups.

• **Show Probe Targets [T]** – When you select this, the POC table will disappear and the location of the specified probe will be shown on the current star map. THIS OPTION DOES NOT WORK IF THE POC IS ACCESSED THROUGH ENGINEERING. This option does work with Multi-Probe Groups.

• **Detonate Probe [D]** – This will cause the selected probe to self-destruct. This is the first step in disposing of probes that are not useful when you need to make room for additional probes in the POC. Generally, the probes selected for this are in systems with no planets and no sign of the enemy. This option does work if the POC is accessed through Engineering. This option does work with Multi-Probe Groups.

Figure 20. Multi-Probe Group (2, 3, 5, 7, 8, 10)

Figure 21. After Detonated Probes Slots have been Freed

• **Free a Slot in the POC [F]** – When you select this, the highlighted probe will be removed from the POC table if it is destroyed (or detonated). All following probes will be moved up one place to fill this slot. If you have several probes you want to remove, then select the still active probes into a Multi-Probe Group and then detonate them all (Fig. 20). Then add any already destroyed probes to this group and select the Free Slot option. This will remove all the destroyed probes at one time (Fig. 21). This option does work if the POC is accessed through Engineering. This option does work with Multi-Probe Groups.

Strg cmd [N]/[N]/[S] – This command option transfers control to the War Map, which replaces the Navigational Map on the display. It is a shortcut to the Regional Strategic Command Menu (1.7.2), eliminating the need to go back through the command hierarchy and access this menu from the Bridge Display.

1.1.7.3 War Map [N]/[W] or [Alt][W]

Executing this command calls up the War Map Display, which shows information about the strategic situation in your current region. Figure 22 shows an example War Map. The definition of the region is given in Appendix xxxxx. Messages will appear overlaid on the star map in small windows. In some cases, you will be required to press a key to acknowledge receiving a message before you can execute another command. The window will then disappear. You can keep the message window up permanently by toggling the retain message CRT switch [Alt][K] on and remove it by toggling it off. This retained window will automatically change its position so that it does not cover your ship's location or the TDB. Significant items on the map that are unique to the War Map have been highlighted and are described below. Other items are described in the Navigation Map Display (Fig. 11). However, one difference between the two is that the color of the unmapped star systems ("*") is based on the status of the system, and not the stellar type, and will always be white (for unknown). The explanation of the colors is shown in Table 5.

Table 5. Definitions of Colors Used in War Map

Color	Status/Ownership
White	Unknown
Blue	Neutral
Green	Krellan
Red	Alliance (UGA)
Magenta	Contested (Krellan and UGA both present)
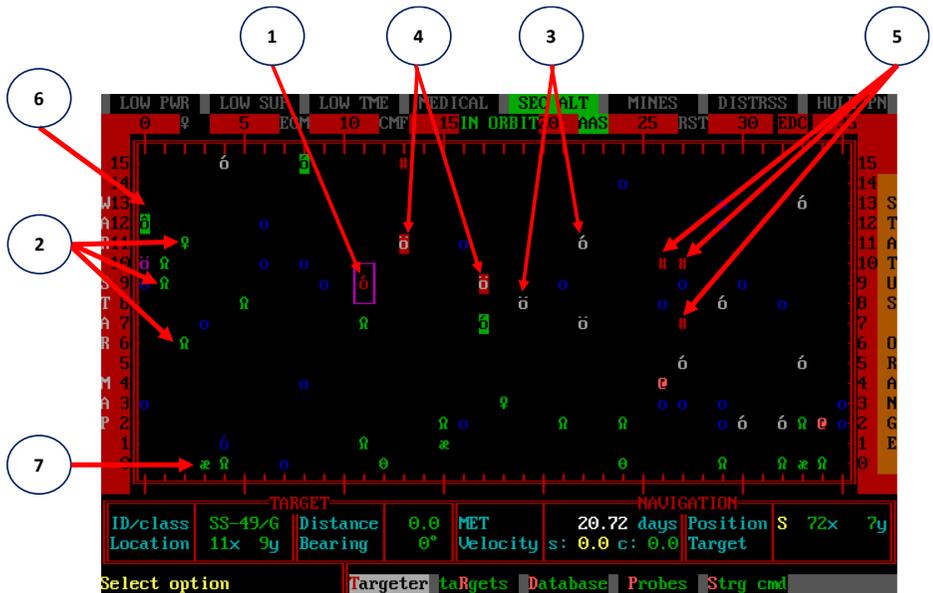
Figure 22. War Map Display

1) **UGA Star Systems (Mapped)** – If a star system has been mapped (i.e., scanned by a Krellan ship or a probe), then the "*" symbol will be replaced by the symbols showing the number of planets in the system (if any). The symbols are defined in Figure 12, but will appear in *red* to signify that there are planets in the system occupied by the Alliance (although there could be Neutral or Unknown planets in the system, which are a lower priority to determining the status of the system).

2) **Krellan Ships** – The location of Krellan ships in the region is designated by the ship's symbol if it is in interstellar space (i.e., between star systems), whether it is in hyperspace (the usual case) or normal space.

3) **Unknown Star Systems (Mapped)** – If a star system has been mapped (i.e., scanned by a Krellan ship or a probe), then the "*" symbol will be replaced by the symbols showing the number of planets in the system (if any). The symbols are defined in Figure 12, but will appear in *white* to signify that any planets in the system have not been scanned, so their ownership status is unknown.

4) **UGA Presence Detected** – If Alliance ship activity has been detected in a star system or regional location, then it is signified by a red block (which is the background to any symbol at this position on the map). This is a current, not historic indication, so it means that there are one or more UGA ships currently in that system. It doesn't matter if the planets in the system are not scanned (as shown in the examples in the map), in which case the system symbol is white for unknown status. If you have a probe working in a regional location where enemy (UGA) ship activity is detected, the War Map will show a "generic ship" symbol (see Figure A-6) in that location, unless that location also contains a star system, starbase, or starfort. In that case the latter symbol

will appear instead, and the symbol will be printed in black over a red background to indicate that Alliance ships have been detected there. To detect the presence of enemy ships in the system, there must be an active probe, Krellan ship, starfort, or planetary base in the system.

5) **UGA Starbase** – The red starbase symbol ("#") indicates the presence of an Alliance starbase in that regional location. This symbol has priority over the star system with the planets symbol, so to see if the location has any planets, you would need to look at the Navigation Map or the Database for that star system. Note there can only be one starbase in a system.

6) **Krellan Ship(s) Present** – If any Krellan ships are in the star system or regional location, it will be indicated by a green block (which is the background to any symbol at that position on the map).

7) **Krellan Starfort** – The green starfort symbol ("æ") indicates the presence of an Krellan starfort in that star system. This symbol has priority over the star system with the planets symbol, so to see if the location has any planets, you would need to look at the Navigation Map or the Database for that star system. Note there can only be one starfort in a system.

1.1.7.3.1 War Map Command Options - Listed on the command line of the War Map Display are the five options you can select at this level of the command hierarchy.

Targeter [N]/[W]/[T] – This command option operates in the same way as it does for the Navigation Map. Refer to Section 1.1.7.2.1.

Targets [N]/[W]/[R] – This command option operates in the same way as it does for the Navigation Map. Refer to Section 1.1.7.2.1.

Database [N]/[W]/[D] – This command option operates in the same way as it does for the Navigation Map. Refer to Section 1.1.7.2.1.

Probes [N]/[W]/[P] – This command option operates in the same way as it does for the Navigation Map. Refer to Section 1.1.7.2.1.

Strg Cmd [N]/[W]/[S] – This command option is a shortcut to the Regional Strategic Command Menu (1.7.2), eliminating the need to go back through the command hierarchy and access this menu from the Bridge Display.

1.1.7.4 Helm [N]/[H]
Executing this command calls up the seven command options that perform basic navigation functions.

1.1.7.4.1 Evasive [N]/[H]/[E] or [Alt][V] - Evasive maneuvering is an automatic navigation system, used primarily to escape fire from Alliance ships and starbases. When

you select this option, your ship will execute a series of frequent and random course changes. If you have escorts attached to you in a set formation, their navigation systems are slaved to yours and they will match your course changes. This option is a toggle; if you have switched on evasive maneuvering, selecting this option again will turn it off. When evasive maneuvering is on, " < ss >" will appear in the sideslip indicator of the Bridge Display (Figure A-3) and the System Map Display (Figure 7).

1.1.7.4.2 Orbit [N]/[H]/[O] - To go into orbit around a planet or a star, you must first move your ship to within one point of that position. When you are in position, execute this option. Your ship will enter a standard high orbit. You will receive a message informing you of your orbital altitude (in kilometers) above the object's surface, and a sensor scan of the planet will be performed if it has not been scanned before. The Tactical Display will be replaced by the Orbital Display (Figure A-4). Note that if the planet was your navigation target, your ship will be stopped adjacent to the planet and you will be asked if you want to orbit. If you answer in the affirmative by pressing [Y], then your ship will be put into orbit, bypassing this Helm command. If you have any escorts you will be asked if you want your escorts to orbit.

The Orbital Display contains a representation of the planet or star, with its identification number and name, if known, in the center. Your ship (a battlecruiser symbol) and any other vessels orbiting the object will appear in this display. The three concentric rings of dots indicate the three possible types of orbits: high (greater than 20,000 km), medium (1000 to 20,000 km), and low (less than 1000 km). Your orbital position as indicated on the Bridge Display (A-3) shows your orbit type (0=high, 1 =medium, 2=low), and position in the orbit, where zero is at the bottom of the display and the position increases moving clockwise. There are 32, 28, and 24 positions respectively in the high, medium, and low orbits. The lower your orbit, the faster your ship will move around the planet. You can increase or decrease your orbital altitude by pressing [+] and [-] respectively. Pressing [Alt][G] toggles the grid dots that describe the orbital paths on or off. You cannot change your direction of travel around the planet or star.

You can toggle between the Orbital Display and Tactical Display by pressing [Alt][O]. While you are in orbit, the symbol of the planet or star will replace your ship symbol in both the Tactical Display and the System Map, and your position will be given in system coordinates. You can fire your phasers and torpedoes at any enemy ship that is in orbit around the same object, or that is in normal space outside your orbit. and can also use your teleporters and tractor beam. To leave orbit, start your sublight engines and move away.

Orbiting a Sun - It has always been possible to orbit suns (stars), but that has been modified. It is not a usual thing to orbit a sun, so if you target one, you will not automatically be asked if you want to orbit, like you would if it was a planet. Instead you have to go to Nav/Helm/Orbit. Orbiting a sun will cause slow damage to your ship, and if you stay long enough, your hull will be penetrated and your ship destroyed. Shields offer

some protection (attenuation) of the deadly radiation and heat, but not completely. The damage increases the closer you are to the sun. Before you enter orbit, you will be warned to raise your shields and stay in the highest orbit. You can monitor the hull damage with the vertical bar in the system damage section on the upper right of the main display (yellow shows damage level) or you can call up Damage Control from Engineering.

One of the new options when you are orbiting a sun, you can beam captives into the sun using Personnel Transfer option in Teleporters. Note: captives is the ONLY thing you will be allowed to beam into the sun. When you select this option, you will be shown how many captives on board, and then you will have the opportunity to select how many are to be teleported. The default is the maximum number. If that's what you want, just press [Enter]. If you change your mind, [Esc] will exit you from the command without activating the teleporters. You can change the number of captives to be teleported by using the [+] or [-] keys, up and down arrows. This changes the total by one captive. If you want larger changes, hold the [Shift] key at the same time and the number will change by 10. Pressing [PgDown] will bring set the total to zero, while [PgUp] will set it to the maximum. For instance, the fastest way to select just a few captives, would be to set it to zero ([PgDown]) and then add captives with the addition key. Beaming captives into a star will increase your crew's morale and reduce the rate of using supplies. However, don't do this in a cavalier fashion – it also reduces the number of slaves you will awarded at the end of the mission.

1.1.7.4.3 Dock [N]/[H]/[D] - To dock with a starfort or a captured Alliance starbase, you must first move your ship within one point of their position. After you are in position and have selected this option, you will receive a report indicating that the docking is completed. Note that if the starfort or starbase was your navigation target, your ship will be stopped adjacent to the object and you will asked if you want to dock. If you answer in the affirmative by pressing [Y], then your ship will dock, bypassing this Helm command. If you have any escorts you will be asked if you want your escorts to dock.

When your ship docks with a starfort, your ship symbol at the center of the Tactical Display is replaced by the starfort symbol. Each starfort has a number of docks for Krellan ships and has a maximum capacity for how many of each type it can accommodate at once. If you press [Alt][O], the Tactical Display will be replaced by the Starfort Docks Display (Fig. 23), which shows all the docks and ships currently docked at the starfort. A dock consists of several berths, each of which accommodates one ship. A starfort uses three different types of berths: battlecruiser, destroyer, and transport (supply or troop). Ships can only be docked in the appropriate type of berth. Each starfort can accommodate 3 battlecruisers, 10 transports, and 12

Figure 23. Starfort Docks Display

destroyers. You can determine the identity of the ships docked by selecting the target designator, [Alt][T]. This works just like the TD in Science/Scanners where a box will

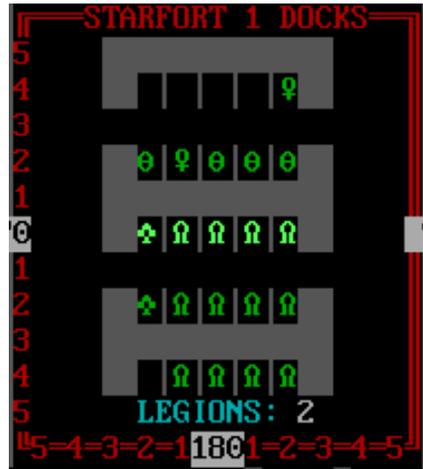**Figure 24. Berth Identification**

appear (Fig. 24) to tell you what is being highlighted by the TD (which can only move between berths). If the berth is empty, it will tell which of the three types of berth it is. If it is a ship, it will tell you the type, the number, and name of the ship. If you press [Enter] it will show you the Ship Data Box that gives you detailed information about that ship.

When you want to exit the Docks Display and return to the Tactical Display, just press [Esc].

When you dock with a starfort, your ship will be resupplied, all damaged systems will be repaired, your energy will be replenished, crew replacements obtained (if needed), and torpedoes and probes replaced. If you dock while enemy intruders are aboard your ship, the starfort will provide shock troops and security personnel to help you defeat or capture the intruders. The starfort's shields will protect your ship while you are docked , but if the starfort is destroyed, your ship will be destroyed as well. While you are docked, the symbol of the starfort or starbase will replace your ship symbol on both the Tactical Display and the System Map. To disengage from the object you are docked with, start your sublight engines.

1.1.7.4.5 Emergency Hyperspace Maneuver [N]/[H]/[H] - This command option allows you to enter hyperspace without using your sublight engines to accelerate your ship to light speed. It is a desperate and dangerous maneuver, usually used when your sublight engines are inoperative and you need to evade the enemy quickly. The hyperspace maneuver shunts 50 units of power directly to your hyperdrive engines, and is uncontrollable. Your ship is relocated at random within the current star system (not a different regional location) and there is a 10% chance that your ship will be destroyed due to catastrophic failure of your overloaded hyperdrive engines. Your ship will also be destroyed if it happens to emerge from hyperspace in the same location as another large object (star, planet, starfort, starbase, or ship). Even if the EHM is successful, it may damage your electronics and computer. *Some of your switches, like AAS, CMF, RST, and ECM may have flipped their settings.* You will have to manually restore them. A countdown sequence precedes the execution of this order. If you change your mind during the countdown, you can abort the option by pressing [Alt][S].

1.1.7.4.6 Pursuit [N]/[H]/[P] - This command option is used to chase enemy ships or follow other Krellan ships. After selecting this option, move the TDB in the Tactical Display to the ship you want to target and press [Enter]. Any targets previously entered into your Targeter are deleted when you begin pursuit. When you have an active pursuit underway, the Mode on the display will show "PURSUIT" and the target being pursued will be shown as the Target in the NAV box, To cancel a pursuit, execute the order a second time (to toggle it off) or use the Targeter to set a navigation target. Pursuit will also be canceled if you can no longer detect the ship being pursued if you enter hyperspace, or if you go into orbit or dock.

1.1.7.4.7 Targets [N]/[H]/[T] - This command option displays and manages your navigation targets. See Section 1.1.3 for a detailed explanation.

1.1.7.4.8 Circle [N]/[H]/[C] - When you select this command option, you are given two more options, [System] *Search* and *Patrol*. These options allow your ship to automatically circle around a given point (although the actual pattern is a square and not a circle). Once

you have initiated a Search or Patrol, you can cancel it by either selecting the option again (the Helm will ask if you want to cancel it) or by doing an Emergency Stop. In both cases, your ship will stop, and the navigation targets deleted. Your escorts will maintain their stations as you move in your pattern. You might want to select an escort formation that is optimal for the pattern you have selected.

Search [S] - If you specify this in a system, it will automatically conduct the same square search pattern that Krellan ships do when you order them to do a system search, except with some enhancements. The pattern for the System Search (Fig. 25) consists of the four corners (20,20) (20,60) (60,60) (60,20), with the sun (or system location 40,40 if there is no sun) at the center of the search pattern. When you order a Search, the Helm will ask if you want to do an [A]lpha pattern (CW) or [B]eta pattern (CCW) search. The Helm will then ask if you want to do a [S]ingle or [C]ontinuous sweep. The Nav Computer will then automatically target you to the closest corner point (20,20 etc.) of the search square and will set your navigation targets to go to the next corner in the pattern depending on which pattern you chose. When you arrive at that point, the next corner target will be loaded, and so on until the sweep is complete. If you specified a continuous pattern, then the sweep will repeat. If you specified a single sweep, then at the end of the sweep, your ship will stop and the nav targets are cleared. Your ship's mode will show "SYS SRCH" while the system search is in progress. The advantage of the System Search is that in a single sweep, your long-range sensors (LRS) will be able to cover the entire system, thus revealing any starbases, fleet headquarters, or enemy ships lurking there. Search is normally specified for a single sweep.

Patrol [P] - The Patrol option is similar to the System Search, except you specify the center and size of the pattern. The Patrol circuit pattern also consists of four corners, which will be calculated by your Navigation Computer once the center and size of the pattern are defined. You can order a Patrol when your ship is stopped or while you are moving in Normal Space. In the latter case your ship will stop and the navigation targets will be reset.

When you order a Patrol (Fig. 26), the Helm will ask if you want to do an [A]lpha pattern (CW) or [B]eta pattern (CCW) patrol. The Helm will then ask if you want to do a [S]ingle or [C]ontinuous sweep. A System Map will be displayed to allow you to specify the center of your patrol. Move the TDB to the desired center point and press [Enter]. The Helm will then ask you to specify the size of the patrol pattern, in sectors. The default value is five (5), which would have you patrol the equivalent of the edge of your Tactical Display around the center (your Tactical Display extends five sectors in the x and y directions). The minimum size is two sectors, and the maximum is 40 sectors. When you have specified your Patrol pattern, the Nav Computer will calculate the corners and target you initially to the closest corner to start the patrol pattern. It will set your navigation targets to go to the next corner in the pattern depending on

which pattern you chose. When you arrive at that point, the next corner target will be loaded, and so on until the sweep is complete. If you specified a continuous sweep, then the patrol will repeat, otherwise, at the end of the sweep, your ship will stop and the nav targets are cleared. Your ship's mode will show "PATROL" while the patrol is in progress. The Patrol is particularly useful to protect a starfort, especially if you
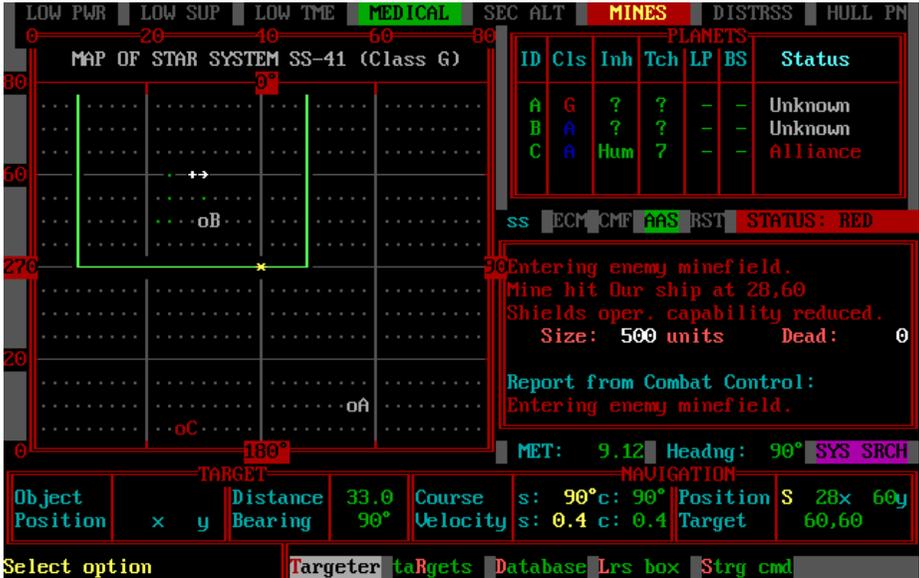

Figure 25. System Search
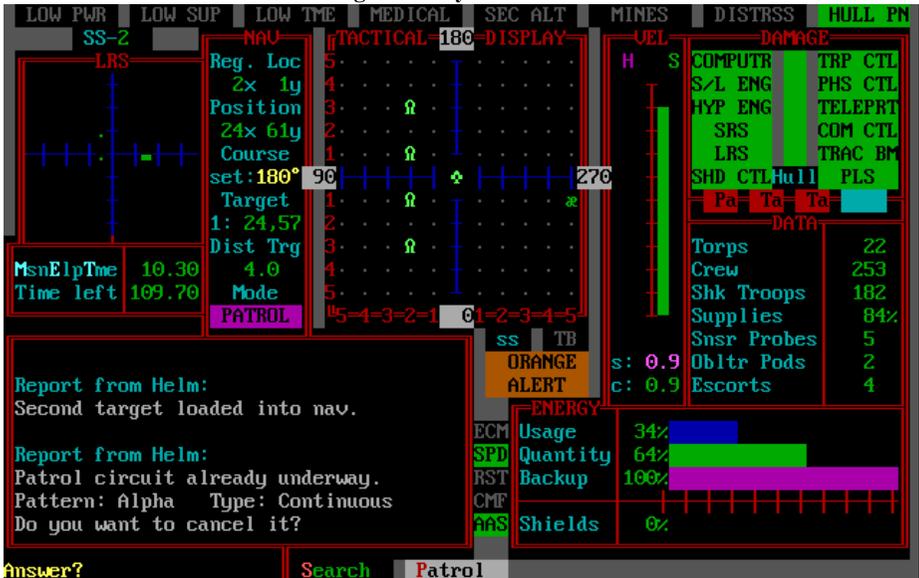
Figure 26. Patrol Around a Starfort

don't know which direction. the enemy is coming from or if you don't want to leave the protection of the starfort's weapons. Patrol is normally specified for a continuous sweep.

Krellan Priest uttering the War Prayer at the Four Moons

1.2 ENGINEERING CONTROL [E]

It is engineering that keeps your battlecruiser running smoothly and repairs any damage that may occur, as well as controlling many essential functions for your ship. The hierarchical command structure for Engineering Control is shown in Figure 27.
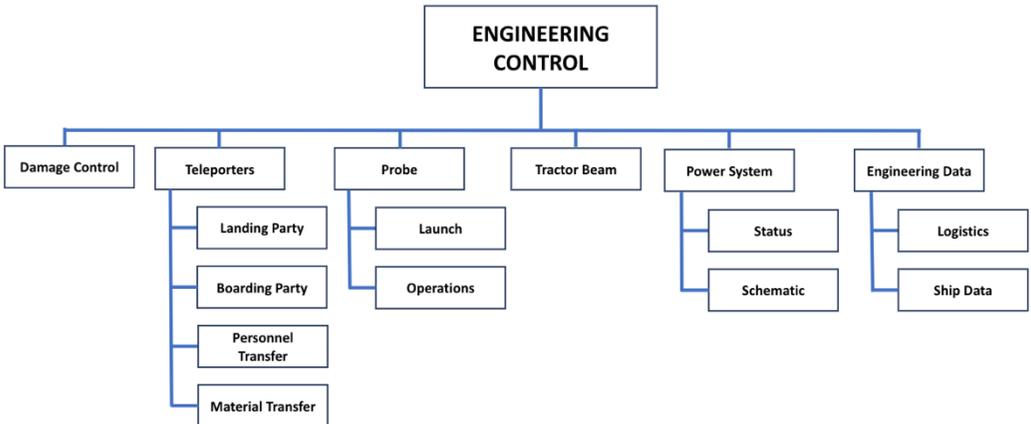
Figure 27. Engineering Control Command Structure

1.2.1 Damage Control [E]/[D]

This command enables you to view the condition of your ship's primary systems and to repair any damaged systems. When Damage Control is selected, the Damage Control Status Display will appear (Fig. 28). The systems shown here are the same ones listed in the Systems Status Display of the Bridge Display (Fig. A-3). The operational capability (**op.c**) of each system is expressed as a percentage. The number of repair teams (**r.t**) assigned to the system is also displayed. The bottom line of the status report shows hull damage as a percentage and gives the number of unassigned repair teams available. The color of the **op.c** of each system is related to its operational capability:

- Green for fully operational (above 75% **op.c**);
- Yellow for damaged but partially functional (25% through 75%); and
- Red for inoperative until repaired (1- 25%)
- Red with 0% **op.c** means it is destroyed and cannot be repaired until you dock with a starfort. This system status light on the Bridge Display of a destroyed system will be black with gray text.

The higher a system's operational capacity, the less likely it is to malfunction. It is possible for a fully operational system to malfunction if its operational capability is less than 100%. Sublight engines will show amber status if their operational capability falls below 60% since that is the point at which their performance is degraded enough to prevent a jump into hyperspace.

Damaged systems are repaired using engineering repair teams to assist the system technicians. When a system is damaged, one or two repair teams (if available) will be automatically assigned to work on it. You can send additional teams up to the limit of the 10 teams available. Move the highlight box to the system you want to repair using the cursor keys. To increase or decrease the number of teams assigned to that system, press [+] or [-]. When you are finished making assignments, confirm your choices to put the teams to work by pressing [Enter]. The amount of time it takes to repair a damaged system is related to the operational status (Green, Yellow, Red) and the number of repair teams assigned. Repairs will be made to a damaged system even if no repair teams are assigned to it, but much more slowly. When a system has improved its level of operational status, you will be informed by Damage Control. When a system is fully functional (Green status), the assigned repair teams are returned to the team pool for reassignment. If no systems are damaged, you will receive a message telling you that no repair teams are needed.

Figure 28. Damage Control Display

SYSTEM	op.c	r.t	SYSTEM	op.c	r.t
Main Comp	100	0	Torp Ctrl	47	2
SubLt Eng	100	0	Phsr Ctrl	100	0
Hyper Eng	0	0	Teleportr	100	0
Shrt R Sr	100	0	Communctn	55	1
Long R Sr	75	2	Trac Beam	53	1
Shld Ctrl	70	0	PrimaryLS	39	2
Hull Damage: 32 %			Avl.Repair Teams: 2		

1.2.2 Teleporters [E]/[T] or [Ctrl][P]

Teleporters allow you to send landing parties down to planets, board enemy vessels by transporting your shock troops into them, and transfer personnel or materials between your ship and planets, starforts, and other ships. To send personnel or materials to a planet, you must be in orbit around that planet. To teleport materials or personnel between your ship and another vessel, you must be adjacent to the vessel or both be in orbit. You cannot teleport to a target that has its defensive shields raised (but your own shields may be up). Your ship will use one unit of power for each person teleported. Teleporters Control is one of the primary systems of the ship that can be damaged or destroyed during combat or by other hazardous events. Each of the four options available under this command is explained below.
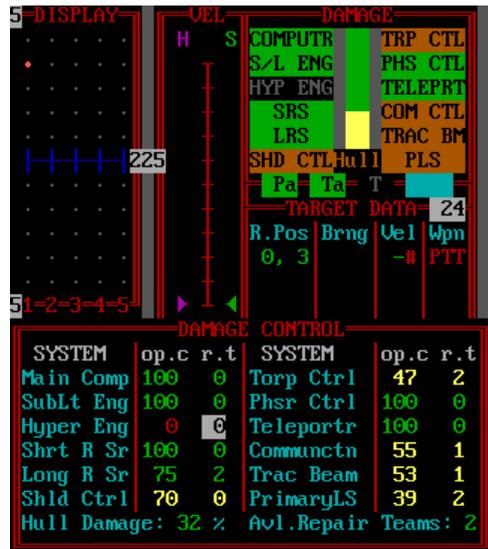
1.2.2.1 Landing Parties [E]/[T]/[L]

This command option allows you to send a portion of your crew to a planet's surface (excluding Class G planets), and calls up the Landing Party Mission Assignment Display (Figure 29).

Figure 29a. Landing Party Assignment Table

Figure 29b. Beaming Up Landing Parties

Before activating your teleporters to send down a landing party, you must choose one or more of the six missions that the teams in a landing party can perform. Move the highlight box to the mission desired and use [+] and [-] to assign teams to, or subtract teams from, that mission. You can assign different teams within the landing party to different missions. Each team is composed of 10 crewmen, a combination of regular crew members (RegCrw) and shock troops (ShkTrp). The combination differs for each type of mission, as explained in the mission descriptions below. The maximum number of crewmen available for landing parties is 275 regular crew and 150 shock troops (the number of personnel your standard battlecruiser has to begin with). The Total of all crewmen assigned to landing parties appears on the bottom line of the display.

You must teleport supplies with your landing party if the target planet has no natural supplies. To select a number of supplies (Supply), move the highlight box to the bottom line of the then use [+] and [-] to increase or decrease the amount of supplies allocated. As you change the amount, the number next to the "d" will change to reflect the number of days that these supplies will last based on the size of the landing party to be teleported. If your landing party runs low on supplies later, you can replenish them by using the Material Transfer option (1.2.2.4).

When you have decided on your landing party (number of teams, missions, amount of supplies), press [Enter] or [A] to activate the teleporters and send the personnel and materials to the surface of the planet. If you want to recall all or part of a landing party, select this option while you are orbiting a planet where a party is located. You will see a message informing you of the number of personnel previously sent to the planet, and how many are still alive. The question "Beam landing party up?" will appear in the instruction area of the Bridge Display. Press [Y], and the Mission Assignment Display will list the teams on the planet and their missions. Then decrease the number (just as if you were assigning missions), until you have specified the number of teams you want to remain on the planet. If you want to return all teams to your ship, press [Shift][A]. Then activate the teleporters to return the excess personnel to your ship. If you select [N], you can add new teams to the landing party you previously teleported.

A landing party will send a message if it is attacked. Even primitive natives with a low technology level may, by sheer weight of numbers, cause some deaths, especially among the regular crew. Your landing party will send a distress message if more than half of its members are killed. However, you will not be able to receive the message unless you are in the same star system, the landing party has established a base, or there is a Krellan ship or base in the same star system that can relay the message to you.

The status of any of your landing parties, including their progress to the completion of their missions, can be seen using the Landing Party command option of the Computer/Information command (1.4.2.1).

1.2.2.1.1 Mission Descriptions - Each of the missions a landing party can undertake is described in this section. The numbers in parentheses represent the regular crew and shock troops that make up each to-member team (Crew/Shock Troops). You cannot change mission assignments while a team is on the planet's surface, but you can add or delete teams assigned to the various missions.

Explore/Survey (5/5) - The landing party will perform a surface survey of the planet to discover its ownership, any objects of value that may be present, and possible dangers. One team will take about 1.4 days to complete a planetary survey; assigning extra teams will reduce the time needed, down to a maximum of 0.5 days.

Establish Base (6/4) - The landing party will erect a fortified military base, including a sensor platform, communications station, laser cannons, and a defensive shield. Bases are important because they expand your sensor capabilities, allowing you to keep track of Alliance ship movements even when your ship is in a different star system, and they provide a supply depot for you during your current sortie without needing to return to a starfort. Once a base is constructed, personnel will send you a message whenever any Alliance vessel enters or leaves the star system, but will not be able to identify the type of

ship detected. When operational, a base's offensive and defensive capabilities will help your landing party repel or resist attacks. Primitive natives (technology level less than five) cannot penetrate a base's defenses and will eventually break off the attack.

Bases can also store energy, torpedoes, sensor probes, and supplies to resupply your ship as needed. Note that planetary bases are not supplied with obliterator pods. They can only be obtained from starforts (we don't want the UGA to get their grubby mitts on them!). Krellan supply ships regularly visit the planetary bases and restock them to the standard maximum levels (50 torpedoes, 5 sensor probes, 4950 units of energy, and unlimited supplies). They will also provide 150 personnel (100 regular crew, 50 shock troops) for the base, regardless of how many personnel are there temporarily from ship landing parties. The bases thus can supply replacement personnel as needed.

One team can establish a base in 1.1 days; extra teams reduce the time, down to a minimum of 0.4 days. A base cannot be established on a planet that is under UGA ownership, but you can build one on a planet that is contested (Krellan and UGA forces in conflict). When a base is established, you will receive a message to that effect, and the planet will be classified as under Krellan ownership if four conditions are met:
    1) it is not being contested by the UGA;
    2) it is uninhabited, or its natives are classified as technology level 0 or 1;
    3) the landing party and base are not presently under attack; and
    4) the planet has been surveyed or contact made with the natives.

If your landing party returns to the ship before completing the construction of a base, then any remaining supplies they took with them will be returned. If a base is completed on an uninhabited planet that is not inside Krellan territory and you teleport your entire landing party back to the ship, then the planet is no longer considered Krellan (unless other Krellan forces are present on the planet), although the unmanned base remains there and may be reoccupied later. If your landing party leaves a completed base unmanned on a planet with hostile natives and a technology level of 6 or 7, the natives will destroy the base.

Hold/Reinforce (4/6) - The landing party will meet and reinforce any existing landing party and will hold prisoners (if any) that have been taken. This mission is useful if your base or landing party has been attacked and needs additional personnel. This team is also a good choice to leave on the planet to operate your planetary base.

Obtain Supplies (8/2) - The landing party will collect and process any available natural supplies (such as food and water), which will be teleported to your ship as it orbits. If you go into orbit around a planet with a supply team already on the surface, you will be asked if you want your ship to be supplied; press [Y] to start the process.

Combat (0/10) - The team has orders to find and attack any natives, and may take prisoners (captives). A combat team can also be used to reinforce a landing party under attack.

Negotiate (9/1) - If your short-range sensors show civilization on the planet's surface, or if your survey crew encounters any natives, you may decide to negotiate for a treaty. Successful negotiation enables you to get a foothold on the planet (obtain supplies, establish a base, and so forth) without battling the natives first.

A treaty is possible if these four conditions are met:
    1) a unified planetary government exists;
    2) at least one negotiating team is on the planet;
    3) the natives are not hostile to the Krellan Empire; and
    4) you have not initiated an attack against them.

It is also possible to negotiate with natives if they surrender to you after suffering heavy losses through bombardment (1.7.4.1) and there are no UGA forces present. If you violate a treaty, the natives on that planet will never again surrender or enter into another treaty with you.

1.2.2.1.2 Landing Parties from Other Ships - Landing parties that originated from other Krellan battlecruisers and supply ships will not show up on your Landing Party Mission Assignment Display, but you can teleport them up to your ship by using the Personnel Transfer option (1.2.2.3). Once they have been transferred to your ship, they become part of your crew. These "foreign" landing parties will not send messages to your ship.

1.2.2.2 Boarding Party [E]/[T]/[B]
This command option This option of the Teleporters command is used to send 10 member assault teams of shock troops to an enemy ship or starbase in an attempt to capture it. Capturing an enemy ship may yield slaves and booty for you (1.4.4.1). You can force the surrender of an enemy ship by either eliminating all the UGA space marines on board or capturing all the critical sections of the ship. If you select this option when you are adjacent to more than one enemy ship, a TDB will appear and you will have to specify which ship you are attempting to board by moving the TDB over the ship using the cursor keys and pressing [Enter]. You cannot teleport partial teams, so the minimum number of troops needed to attempt boarding is ten. The UGA marines are split up into squads of five, but in combat, squads can be reduced in size. It is possible (but very difficult) to board and capture UGA starbases. Any UGA ships inside a starbase that is captured will be destroyed by their crews, but you will get credit for them. Captured ships and starbases will become non-combatants and cannot be used by your side – the ships have to be delivered to a starfort, although captured starbases can be used as advance starforts, but without all the facilities of Krellan starforts. They must be supplied by Supply Ships like planetary bases.

Before you activate your teleporters to send the boarding party over, you must choose one of three missions for the group to perform:

Capture [C] - Take as many captives as possible, but eliminate any resistance. Captives make good slaves, provide entertainment for your crew, and may divulge important information. If the enemy ship had surrendered, then use this mission, but you only need to send over one boarding team, although two are recommended. They can be beamed into the same sector location.

Kill [K] - Slaughter all the Alliance weaklings on the ship; take no prisoners. This boosts your crew's morale and provides enjoyment for your shock troops. Note that if the enemy has surrendered and you board with this mission, the enemy will fight back, so send over a full boarding party.

Hit and Run [H] - Knock out some of the enemy ship's critical systems (top priority is the ship's auxiliary engines) as quickly as possible, then withdraw. This is useful if you think your boarding party is not strong enough to overpower the enemy force.

1.2.2.2.1 Boarding Display - After you choose a boarding mission, the Boarding Display will appear, as shown in Figure 30. A side-view deck plan of the enemy ship, placed over a grid. Only significant and accessible decks and sections are shown.
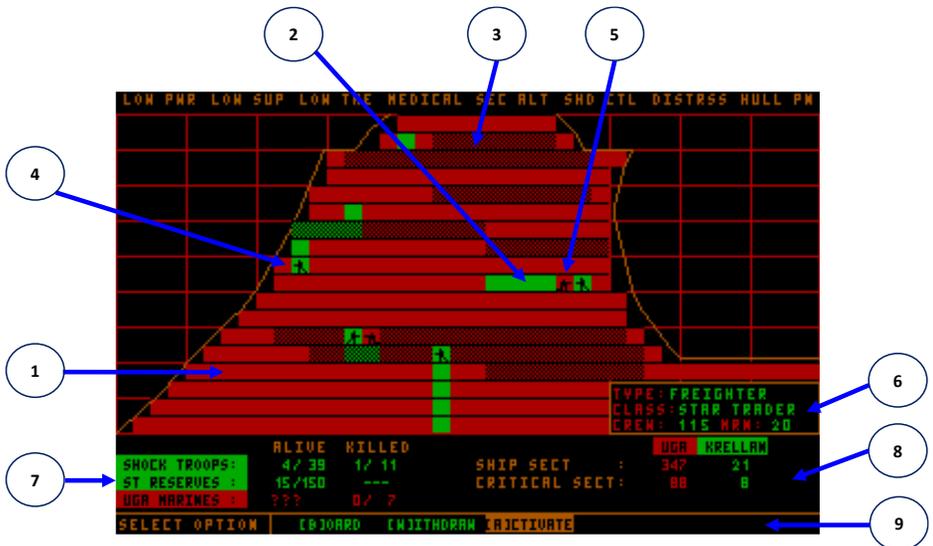
Figure 30. War Map Display

1) **Alliance-Controlled Sections –** Sections of the ship decks that are controlled by the Alliance forces.
2) **Krellan-Controlled Decks –** Sections of the ship decks that are controlled or have been cleared by the Krellan shock troops.
3) **Critical Sections** – Sections of the ship that contain critical infrastructure or systems, such as the bridge, engineering control, combat control room, shield control, main

computer, and primary life support. These sections are shielded and it is impossible to beam shock troops into them. They have to be assaulted and captured at deck level.

4) **Krellan Shock Troop Team** – This icon indicates the location of a team of Krellan Shock Troops. The team is initially 10 troopers, and the icon will remain the same, even if there is only one trooper left. Once all the team members are dead, the icon disappears, but the deck section will remain green until it is recaptured by Alliance Marines.

5) **Alliance Space Marine Squad** – This icon indicates the location of a team of Alliance Space Marines, which consists of five Marines. The icon only appears if the squad is visible to your Shock Troops. Once all the members are dead, the icon disappears, but the deck section will remain red until it is captured by Krellan Shock Troops. Even if the Space Marine squad is not visible, you can detect their presence if they recapture a deck section (i.e., it changes from green to red). This is because your troops lay sensors in the sections they have captured.

6) **Ship Class Information** – This box indicates the type and class of the ship being boarded, and lists the full complement of regular crew and Alliance Space Marines assigned to this class of ship (note that there could be few onboard if they have suffered casualties before boarding).

7) **Forces Status** – The ALIVE column shows the number of your shock troops that are in combat (SHOCK TROOPS), and the number of shock troops still in reserve on your ship (ST RESERVES). A "?" is displayed for the UGA MARINES, since you do not know how many there are. The KILLED column shows the number of casualties sustained by both sides (not including UGA regular crewmen, who may also fall in battle). In these entries, the format is "number of teams or squads/number of troops or marines".

8) **Capture Status** – This shows how much of the ship is controlled by each side, separated according to critical and non-critical sections. If all the critical sections are under your control, then the ship will surrender.

9) **Command Menu** – The three choices available at this step of the boarding operation are displayed here: *Board*, *Withdraw*, and *Activate*. (NOTE: The single keystroke commands in the following sections can only be executed from the Boarding Display, not the Main Menu.)

1.2.2.2.2 Board [B] - When you enter the Boarding Parties option, you will be in Board mode, in which you will select destinations for your boarding teams. Using the direction keys, move the flashing icon (target designator) to the section where you want to send a team, then press [Space] to commit the team to that location. A shock troop icon will appear under the target designator. You can put more than one team in a section by pressing [Space] as many times as desired. You cannot teleport into a critical section. Each time you allocate a team, the SHOCK TROOPS and ST RESERVES entries in the Troop Information Area will change to reflect the new totals. At this point, you have only selected the destinations for the boarding teams. To start the actual assault, use the *Activate* option.

1.2.2.2.3 Withdraw [W] - Use this mode to withdraw teams or cancel team boarding assignments. Move the flashing icon to the section from which you want to remove a team and press [Space] once for each team you want to withdraw. (In actuality, they have not left yet; you are just changing your mind about where you sent or planned to send them.) You can reassign withdrawn teams to different sections by using Board again. You can withdraw all of your troops at once, calling off the boarding attempt, by exiting from the Boarding Parties option.

Withdraw can also be used to recall your boarding party after you have taken control of the ship. Your team(s) will return with any UGA crewmen or marines they have captured, but will not bring back passengers from a starliner. In such a case, you must use Personnel Transfer (1.2.2.3) to teleport the passengers to your ship. When you recall a victorious boarding party, you may leave a team of guards on the ship. (Also see 1.2.2.2 for what happens when a ship is captured.)

1.2.2.2.4 Activate [A] - When you are satisfied with your boarding operation set up, use Activate to set the battle in motion. Your initial allocation of troops will teleport over and begin carrying out their orders (*Capture, Kill,* or *Hit and Run*). Combat is carried out automatically; you cannot control the fighting, but you can see how events are unfolding. Your troops are professionals and know their business. They will try to hunt down and kill the marines, and capture critical sections. Board and Withdraw are still available after the fight begins, so you can send over reinforcements or pull teams out of trouble.

Once they teleport over, your troops have a visual range of five sections in either direction on the same deck, so you will see UGA marines if any are spotted. However, you will not know where the marines are when you send your first wave of attackers over, and if any of your teams teleport into a section containing UGA marines, the shock troops will be destroyed before they can fire a shot (you will see a momentary explosion, then the troop icon will disappear). Teams/squads can see, but not shoot, past other teams/squads. The battle for the enemy ship will continue until resolved or you withdraw.

1.2.2.2.5 Boarding Party Strategy – Here are some tactical tips for successful boarding:
1) Try to concentrate your forces; put several teams together or in proximity to each other to increase their firepower. However, do not put all your teams in one or two sections, because if marines are already there, all your troops will be lost.
2) The UGA marines are dispersed throughout their ship to begin with, but generally keep the critical sections well-guarded. You risk beaming onto enemy marines if you try beaming directly next to a critical section. It may be better to start two or more sections away.
3) In warships with many marines, you might want to send just a few teams over to check that the way is clear, then follow up with the bulk of your force as reinforcements to the most promising sections already occupied.

4) The marines will rush to repulse any boarding attempts, so you might consider a feint with a small force to try and draw off the marines from your real target(s), then launch your main attack.

1.2.2.3 Personnel Transfer [E]/[T]/[P]

This command option allows you to transfer personnel between your ship and another ship, a starfort, a captured starbase, or a planet. Your ship can carry up to 500 captives, plus double its normal complement of Krellan crew members and shock troops (550 and 300 respectively). However, carrying extra personnel uses supplies and lowers crew morale faster. When you dock with a starfort, all captives and any surplus personnel will be removed automatically. Imperial Fleet regulations are quite strict regarding the size of crews. If your ship is adjacent to more than one possible target when you select this option, a Target Designator Box will appear so that you can identify the one you want. Then the Personnel Transfer Display will appear (Figure 31).

The left-hand column of the display shows the six types of personnel that can be transferred. The two left-hand columns are for your ship and are under the title **OUR SHIP**. The left-hand column shows in green numbers the current amount of each

Figure 31. Personnel Transfer Display

type of personnel on board your ship. The right-hand column shows in white numbers the number of personnel to be transferred from your ship to the target (which is on the right under its identification). This is the same for the two target columns under the target identification (in Fig. 31 it is the Supply Ship IKS CORONA).

You can only transfer personnel between your ship and a target when the target is Krellan or captured (the exception is captives). You can use this command to add personnel to an existing landing party if you are in orbit around the planet. Personnel Transfer is the only way to bring passengers from a captured UGA starliner aboard your ship. Before you transfer enemy personnel, they are distinguished by type (marines, crewmen, passengers) in the target columns, but when you transfer them, they all become captives. You can also use this command to put a prize crew aboard a captured ship. A prize crew consists of at least 20 crewmen (default setting for prize crew selection) and 10 shock troops. They will attempt to repair the engines (if necessary) and then fly the ship to the nearest starfort. You can transfer captives to a planet (if there are Krellan personnel there) or up from a planet (regardless of having a Landing Party there). Beaming down in this case keeps the captives alive (unlike beaming them to a gas giant or poisonous planet).

1.2.2.4 Material Transfer [E]/[T]/[M]

This command option is essentially the same as Personnel Transfer (5.2.3), except that it is used to teleport inanimate objects instead of people. You can replenish energy, torpedoes, supplies, sensor probes, and/or obliterator pods up to your ship's capacity to carry such materials (Appendix A.6). If your landing party on a planet is running low on supplies, you can send them extra using this command or through the Landing Parties command (where you

Figure 32. Material Transfer Display

can send only supplies with no team). When you select this option, the Material Transfer Display will appear (Figure 32).

The left-hand column of the display shows the five types of material that can be transferred. The two left-hand columns are for your ship and are under the title **OUR SHIP**. The left-hand column, labelled **Currnt** shows in green numbers the current amount of each type of material on board your ship. The right-hand column under **ToBeam** shows in white numbers the number of material units to be transferred from your ship to the target (which is on the right under its identification). This is the same for the two target columns under the target identification (in Fig. 32 it is the Supply Ship IKS CORONA).

Position the highlight box in the ToBeam column of OUR SHIP or the ToBeam column of the target, on the line pertaining to the type of material you want to transfer. Then use [+] and [-] to change the number in the box to the desired quantity. To start the transfer, activate teleporters by pressing [Enter] or [A]. You can perform a material transfer between your ship and another vessel (ship, starfort, starbase) only if it is Krellan or captured. You can perform a material transfer between your ship and a planet you are orbiting if at least one of these conditions is met:

    1) the planet is Krellan;
    2) a treaty has been established;
    3) a planetary base has been established; or
    4) Krellan legions are present on the planet.

1.2.3 Probes [E]/[P]

This command option is similar to the Probes option in the Navigational Star Map and War Map (1.1.7.2.1). However, selecting Probes from the Engineering Menu allows you to view the Probes Control Display without having to call up a star map. You cannot launch probes using this option, but you can destroy them. The Probes Control section of the Navigation Map specifies which of the commands cannot be executed from Engineering.

1.2.3.1 Launch Control [E]/[P]/[L]

This command option is the same as in the star maps, but is more restricted since you do not see the regional map. For *standard probes* the only Launch Control command that works is Detonate, assuming you have an active probe. For *advanced probes*, you can change the setting of any probe in your launch tubes, but nothing else.

1.2.3.2 Operations Control [E]/[P]/[O]

This command option is the same as in the star maps. For *standard probes* Operations Control is no operational – all control is done through Launch Control. For *advanced probes*, you have the full capabilities described earlier, except for Show Location and Targets, which are only available through the star maps.

1.2.4 Tractor Beam [E]/[B]

This command option enables you to use your ship's tractor beam to pull another vessel adjacent to your ship and then tow it with you as your ship moves. Tractor Beam is one of the primary systems of the ship that can be damaged or destroyed during combat or by other hazardous events.

When you select this option, a Target Designator Box will appear on the Tactical Display. Select the ship you want to pull in using the TDB, then press [Enter] to activate the tractor beam. Upon confirmation, your ship's defensive shield will be lowered, as you cannot use the beam with shields up, and your ship will be automatically turned, if necessary, since the beam only operates aft.

To place an Alliance vessel in tow, the ship must be captured or disabled (inoperative sublight engines or power down to less than 50 units). Once an enemy ship is secured in your tractor beam, it cannot fire at you, but you can fire phasers or torpedoes at it using manual mode (1.3.1.4). WARNING: *A hostile enemy ship in tow can transport marines aboard your ship because your shields will be down.*

The tractor beam will not work on an enemy ship that is not disabled, on any ship that has its engines on, or on any targeted ship if another object lies between it and your ship. Your tractor beam can be useful for towing one of your crippled escorts to safety, or bringing it alongside to resupply it.

The tractor beam also works while you and your target are in orbit with the Orbital Display up (Appendix A.3). In this case your target must be next to your ship in the orbital tracks (either on the same or an adjacent orbit level). You may have to change your orbit level (1.1.7.4.2) to get close to your target. The strong gravitational field of the planet or star has an adverse effect on your tractor beam while your ship is in orbit, thus requiring the proximity of your target.

Using the beam increases your ship's power usage by 20 percent while you are drawing in the target ship. This power drain decreases to 5 percent when the target is in tow. To disengage the beam, select this option when you have a target in tow, and you will be asked if you want the beam switched off. You can also cut it off by raising your shields.

1.2.5 Power System [E]/[R]

This command option allows you to check the status of your ship's power system by selecting one of two options.

1.2.5.1 Status [E]/[R]/[S]
This command option brings up a report in the message area of the Bridge Display, telling you the number of energy units your ship has left.

1.2.5.2 Schematic [E]/[R]/[H]
This command option shows a top-level schematic of your sub-light propulsion and power system (Fig. 33). It also shows the current status of the system. In the upper right of the display is the current operational capability of the system. If your sublight engines sustain significant damage, then this is also shown on the schematic display (Fig. 34). Note that these displays are for informational purposes only. You have skilled engineers to manage the engines.

1.2.6 Engineering Data [E]/[E]

This command option provides the status of your logistics (supplies and computer capacity) and allows you to view the Ship Performance Data that are recorded during your mission.
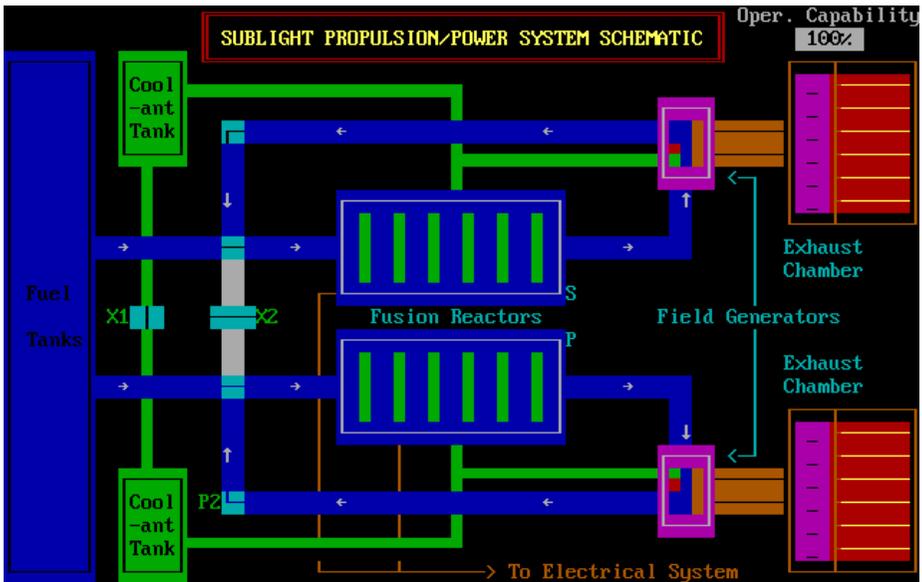
Figure 33. Sublight Propulsion/Power System Schematic - Nominal
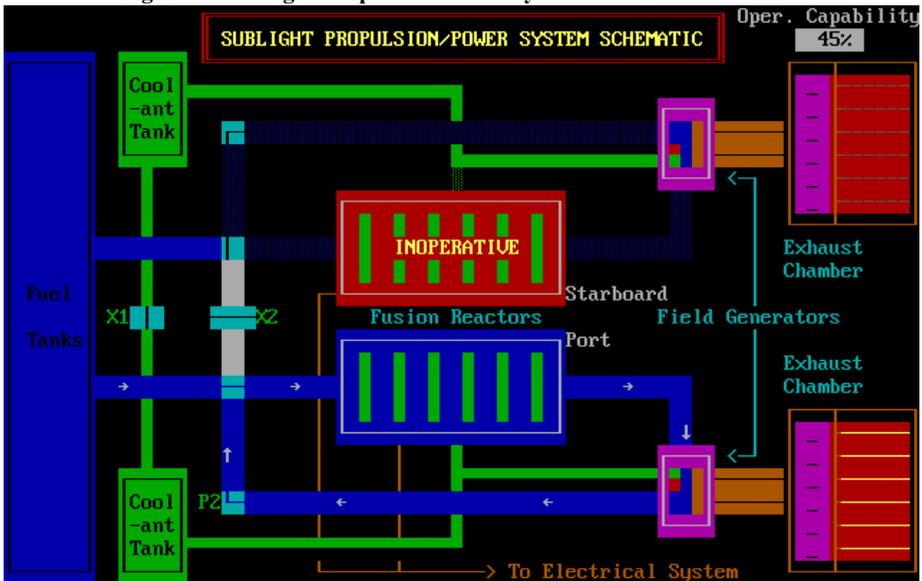
Figure 34. Sublight Propulsion/Power System Schematic - Damaged

1.2.6.1 Logistics [E]/[E]/[L]

This command option brings up a report on the status of your ship's supplies: the amount remaining (in units and in the percentage of maximum capacity), the current rate of use in units per day, and the number of days remaining before your current amount of supplies

will be depleted at the current usage rate. The report appears in the message area of the Bridge Display.

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1.2.6.1 Ship's Performance Data [E]/[E]/[D]

This command option enables you to view the *Ship Performance Data (SPD)* log, which is equivalent to the Flight Data Recorder on an aircraft. It records in a file the values of selected ship parameters approximately every 0.01 days MET. Each set of data parameters saved at a given MET is called a record.

When you select the *Data Log*, you will see the **SHIP PERFORMANCE DATA LOG** display (Figure 35). You can view the data in a list (tabular form) or as plots. The current parameters logged are:

Power Usage (%)
Supplies (supply units)
Energy Reserves (power units)
Morale (%)
Shield Strength (%)
Fatigue Level (%)
Note that in plots all parameters are shown as % capacity. In the Data List, the actual values are shown.
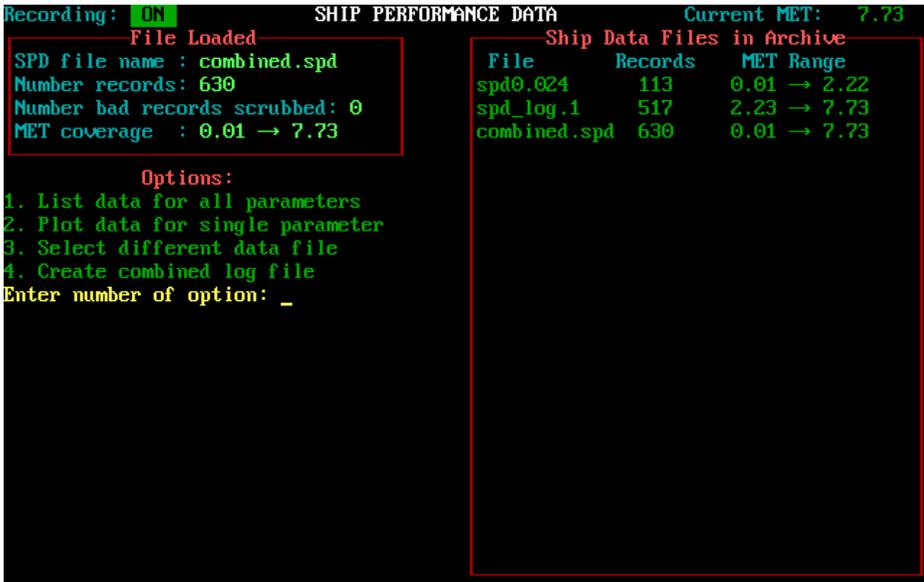
Figure 35. Ship Performance Data Control Display

KLAGAR-CLASS BATTLECRUISER OPS MANUAL

Data Logs Main Display

When you first enter the SPD Log program, your current spd log is loaded. It has the file name "spd_log.###" where "###" is your player number (which matches the number of your officer on the Fleet Personnel list accessed through the Fleet option in the Sign-On Options). When the log file is first loaded, the program automatically "scrubs" the file to remove any erroneous records. Although rare, an occasional glitch can be saved in the log file, which is out of place with the rest of the data. This scrubbing feature removes these anomalies permanently. At the top left of the main display is a red box that shows data about the current log file, including the number of records that were scrubbed, if any. The name of the file, the number of valid records in the file, and the MET range covered by the file are also shown in this box. On the right side of the screen is a list of all the spd log files for your current mission, including your current file (described previously) and any archived files. When you dock with a starfort, that is considered the end of your current sortie (voyage), and so your current spd log is archived and a new current log is started. The archived file is of the form "spd?.###" where "***" is the mission sequence number, which is shown on your orders. The "?" is the sequence number of the archived file, starting with zero. Thus the first time you dock with starfort the file will have the name "spd0.###" and the second time "spd1.###" and so on. Note that your current data log will become an archived data file. The list of archived log files on the Main Display will show you the number of records in the log and the MET range covered by the log. Below the information about the data logs is the options menu. There are four options:

   1. Data List – this lists the records from the log in a tabular form.
   2. Plots – this shows a selected data parameter in a time plot.
   3. Select log file – this enables you to select any of the listed log files to be examined.
   4. Combine logs – this enables you to combine the archived log files together with your current log file so you can see the data trends without interruptions. The combined file is only temporary and will be deleted once you exit. This only works if you have more than one spd file listed. The newly generated combined file will show as "combined.spd" at the bottom of your log files list. Pressing [Esc] here returns you to the main bridge display.

Data List - When you select this option, you are asked if you want the data displayed in Regular (28 records per page) or Compressed (58 records per page) mode. All the data are shown (Fig. 36) in either mode, it's just how much data is shown on each page. The default (by pressing [Enter]) is the Regular mode. Besides the parameters in the log file, the data list also shows the record number in white at the left. This helps you keep track of where you are in the data file. In the data list, when a parameter has a value that goes beyond a warning threshold, it will be shown in amber on the table. The normal color is green. The following controls are available while you are in the Data List:

[PageDn] or [Enter] – moves to the next page down in the data.
[PageUp] – moves one page up (i.e. towards the beginning of the list) in the data.
[Home] – goes to the beginning of the list (i.e., first page).

[End] – goes to end of the list (i.e., last page).
[Esc] – return to the Main Display

	MET	Supplies	Power	Reserves	Shields	Morale	Fatigue
1	0.01	1200.0	5%	5000	0%	100%	0%
2	0.02	1200.0	5%	5000	0%	100%	0%
3	0.03	1200.0	5%	5000	0%	100%	0%
4	0.04	1200.0	5%	5000	0%	100%	0%
5	0.08	1200.0	5%	5000	0%	100%	0%
6	0.11	1200.0	5%	5000	0%	100%	0%
7	0.15	1200.0	5%	5000	0%	100%	0%
8	0.18	1200.0	38%	4991	0%	99%	0%
9	0.21	1200.0	38%	4991	0%	99%	0%
10	0.22	1200.0	38%	4991	0%	99%	0%
11	0.23	1200.0	25%	4991	0%	98%	0%
12	0.24	1200.0	25%	4991	0%	98%	0%
13	0.25	1200.0	25%	4991	0%	98%	0%
14	0.26	1200.0	25%	4979	0%	98%	0%
15	0.27	1200.0	25%	4979	0%	98%	0%
16	0.28	1200.0	25%	4979	0%	98%	0%
17	0.29	1200.0	25%	4979	0%	98%	0%
18	0.30	1200.0	25%	4979	0%	98%	0%
19	0.31	1184.2	25%	4967	0%	98%	0%
20	0.32	1184.2	25%	4967	0%	98%	0%
21	0.33	1184.2	25%	4967	0%	98%	0%
22	0.34	1184.2	25%	4967	0%	98%	0%
23	0.35	1184.2	25%	4967	0%	98%	0%
24	0.36	1184.2	25%	4955	0%	97%	0%
25	0.37	1184.2	25%	4955	0%	97%	0%
26	0.38	1184.2	25%	4955	0%	97%	0%
27	0.39	1184.2	25%	4955	0%	97%	0%
28	0.40	1184.2	25%	4955	0%	97%	0%

PRESS KEY OR [Esc]   Current MET: 7.73

Figure 36. SFD Data List Display

Plots - When you select "Plots" you will be shown a list of the parameters recorded in the spd data file. Select the number of the parameters you want to plot. Invalid numbers will be ignored, and if you press [Esc] you will be returned to the Main
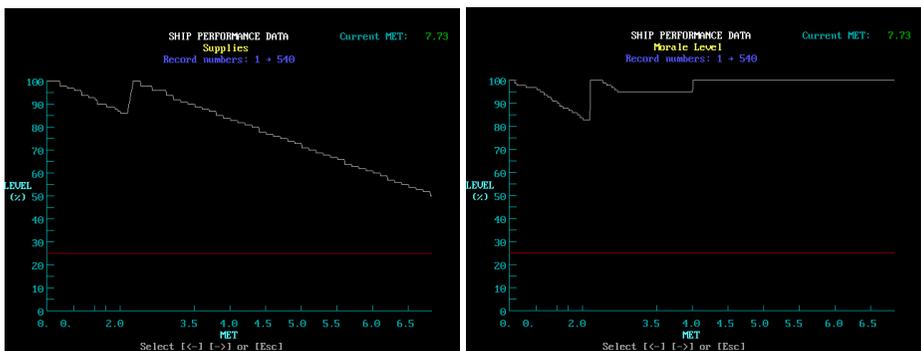

Figure 37. SFD Plot Displays – Supplies (left), Crew Morale Level (right)

Display. If you press [Home] you will immediately exit the log display program and be returned to the ship's bridge (Bridge Display). On the plot display (Fig. 37), the parameter being plotted is identified at the top and under it is the span of record numbers shown in the plot. The current MET is also displayed for reference. The program will plot the selected parameter vs. MET for the entire data set, through increments equal to the number of points that can fit in the plot (currently 540). The data points are connected by lines. Although Star Fleet II nominally records the SPD data every 0.1 days MET, there are times when the data are not saved exactly on that increment, such as during hyperspace travel, when the increments may be slightly larger. This means that the MET (x-axis) may not be linear since it is based on the number of data points rather than the time. Thus the x-axis (MET) tics, which are drawn when the MET of the record reaches 0.5 days, may not be evenly spaced but should be close. The warning level is shown as a horizontal red line on the plot, and any points that pass the threshold will be shown in amber, while normal points are in white.

The following controls are available while you are in the Plots section:
[-->] or [Enter] – moves to the next page in the data (i.e. towards end of the file).
[<--] – moves one page left in the data (i.e. towards beginning of the file).
[Home] – goes to beginning of the file (i.e., first page).
[End] – goes to end of file (i.e., last page).
[Esc] – return to the parameter selection list

1.3 COMBAT CONTROL [B]

Combat Control (Figure 38) manages your primary weapons and settings required for engaging in combat. Pressing [B] from the Main Menu enters Combat Control. The hierarchical command structure of Combat Control is shown in Figure 38. There are two primary control options from Combat Control – the *Combat Control Center* (CCC) and *Weapons Control*. Also included in this section are descriptions of the *Weapons* and *Electronic Counter Measures*. The *Target Data Display* ([Alt][D]) and *Electronic Counter Measures* ([Alt][E]) are described in Appendix B.
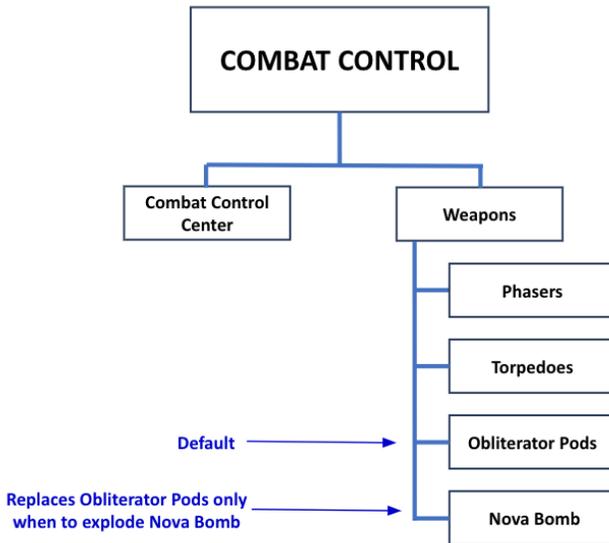
Figure 38. Combat Control Command Structure

1.3.1 Weapons

Your ship has two primary weapons, *phasers* and *torpedoes*, and one special planetary weapon, the *obliterator pod* (which will be described under Weapon Control in Section 1.3.3). Both weapon systems are primary systems of the ship that can be damaged or even destroyed during combat or by other hazardous events.

1.3.1.1 Phasers
Phasers fire energy beams that are cyclically "phased" into an alternate set of space-time continuum planes (known as hyperspace) until the target location is reached. The energy is then phased back into our space-time reality plane, passing through the continuum plane where the target is located. Defensive energy shields are phased throughout a broad

spectrum of planes and will intercept and absorb the energy of the phaser beam until the energy sinks of the shield generators become overloaded. When this occurs, the shield collapses and the remaining phaser beam energy passes through to the target. Phasers can only be fired at targets within your Tactical or Orbital Display. If you are in orbit you can shoot at ships or mines in normal space (i.e., not in orbit) within your Tactical Display. However, the converse is not true. *If you are in normal space you cannot shoot at targets in orbit.*

Phasers cannot shoot through planets. While your ship is in orbit, they will only fire if they have line-of-sight (LOS) to their target in orbit. If you try to fire phasers at a target that is occulted by the planet (or sun), i.e., you don't have LOS to the target, you will receive a message to that effect by your weapons console. When you don't have LOS to the target, the phaser lock indicator ("**P**") in the Targets Data Display will blink. If it is not blinking, that means you have LOS. To hit something on the other side of the planet you have to use torpedoes, or change your orbit to close the distance between you and your target until you have LOS for your phasers. Remember the lower the orbit, the shorter the orbital period (i.e., the less time it takes to orbit the planet) and vice versa.

Your phaser bank will fire a 100-unit burst when fully operational. If it is damaged, the strength of the burst is equal to the operational capability of the system; if less than 25% operational, it will not function. A phaser burst does more damage to the target (or its shields) the closer you are to the target. The current phaser target will be shown in reverse on the Tactical or Orbital Display. The weapons status indicator in the Bridge Display (Fig. A-3) will show when your phasers are ready to fire. After firing, your phaser bank will take time to re-energize, and cannot be used again until the "P" turns green.

1.3.1.2 Torpedoes

Torpedoes are self-propelled missiles with cobalt matter transmutation warheads and a range of 10 points. Each torpedo has a homing device so that it will track an enemy target even if it is moving. However, there is a chance that the enemy will use evasive maneuvers or electronic countermeasures, causing a torpedo to miss. Your ship has two torpedo tubes, and you must choose the fire setting and mode separately for each one. This allows you to fire at a different target with each tube. If the operational capability of your torpedo system is 75% or higher, both tubes will function; at 25% to 75%, only one tube can be used; and at less than 25%, both tubes are nonfunctional, as reflected by the torpedo status lights. Unlike phasers, the damage done by a torpedo hit is not affected by the distance from the target; a strike from maximum range is just as effective as a strike against a target adjacent to your ship, although only a direct hit can provide maximum hit value. The selected targets (if any) will be shown on the LRS Display if farther than 5 points away and will be shown in reverse on the Tactical or Orbital Display if within range of the Tactical Display. When both torpedo tubes are loaded and ready to fire, the "T T" symbols in the weapon status indicators will be green (tube #1 on the left, tube #2 on the right). After a torpedo is fired, the corresponding status light turns red as that tube is reloaded, and the weapon cannot be

used again until it is ready (the status light will turn green). If you are in orbit you can shoot at ships or mines in normal space (i.e., not in orbit) within your torpedo range. If the enemy ship leaves orbit while your torpedo is heading for it in orbit, the torpedo may track the ship out of orbit and hit it in normal space. *If you are in normal space you cannot shoot at targets in orbit.*

1.3.1.3 Weapons Settings

Phasers and torpedoes have four settings available, *Destroy*, *Disable, Standby* and *Conditional*. You can select the setting either by highlighting the setting on the command options line and pressing [Enter] or by pressing the highlighted shortcut letter for the desired setting option.

Destroy – maximum power will be allocated to the phasers until the target is destroyed.

Disable – maximum power will be allocated to the phasers unless the resulting hit will be enough to destroy the target. In this case, the power input to the phasers will be reduced so that the resultant hit will not quite destroy the target, but rather disable it (i.e., no shields left and unable to move).

Standby – no power will be allocated to the phasers and they will not fire even if firing is attempted manually or through continuous (auto) mode.

Conditional – if the phaser target is a warship, then phasers are set to *Destroy*, but if it is a non-combatant (freighter or starliner), then it is set to *Disable*.

1.3.1.4 Weapons Targeting Mode

The targeting mode for phasers and torpedoes determines how a target is selected, either by your ship's computers (*Auto*) or by you (*Manual*). However, actual firing is still up to you. You can select the mode either by highlighting the mode on the command options line and pressing [Enter] or by pressing the highlighted shortcut letter for the desired mode option.

Auto – In Auto mode, your weapons control computer will automatically identify and prioritize all possible targets, then lock your phasers onto the target it determines to be most threatening. All enemy vessels within 20 points of your ship are tracked by the computer, but any vessel actually targeted for phaser attack must appear in the Tactical Display (within the 5-point range of your phasers). The range for torpedoes is 20 points, which extends beyond the Tactical Display.

Manual – In Manual mode, a TDB will appear over your ship in the Tactical Display or the CID (depending on where you are accessing Weapons). Move the TDB to the object you want to fire your phasers at and press [Enter] to lock onto that target.

1.3.2 Combat Control Center [B]/[C] or [Alt][X]

The Combat Control Center (CCC) incorporates the Combat Information Display (CID) and provides nearly everything you need to monitor and control combat in the vicinity of your ship. It is a full-screen static display (Fig. 39), i.e., the MET (game time) is frozen while you are in the CCC. However, any orders or control settings made in the CCC take immediate effect once you exit.
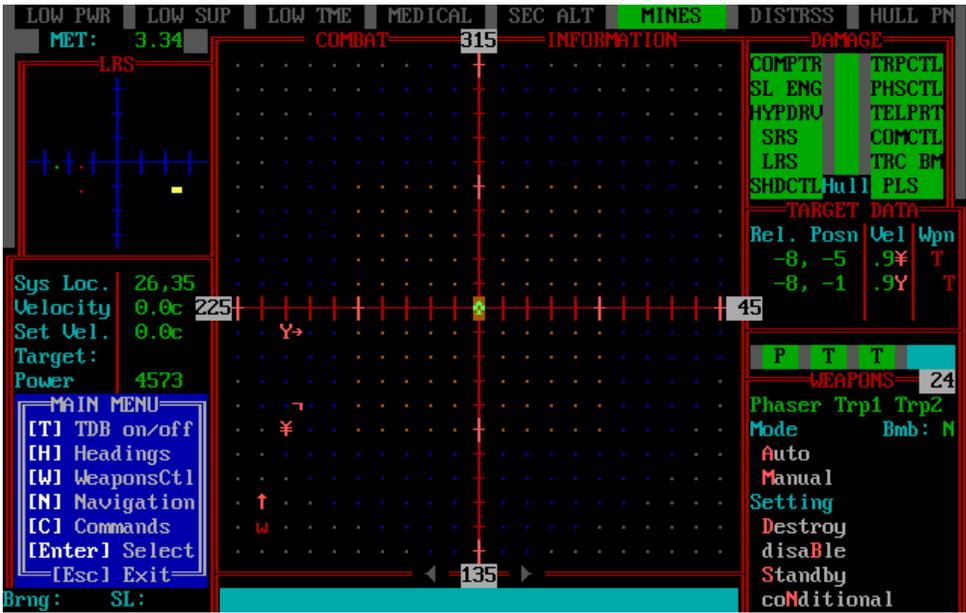
Figure 39. Command Control Center (CCC)

1.3.1.1 CCC Display Layout

The CCC is a full screen that was carefully designed to show all the necessary information needed for Tactical Combat. It looks similar to the Bridge Display with the Combat Information Display imposed, but there are important differences. As in the Bridge Display, in the upper left quadrant is the Long Range Scan (LRS) and in the upper right quadrant is the Systems Status (DAMAGE) Display. However, that is where the identicalness between the two displays ends.

Combat Information Display (CID)

The primary part of the planned CCC is the Combat Information Display. This is a static display (i.e., freezes the simulation) that can be displayed by pressing [Alt][X] from the Bridge Display, the System Map, or either of the star maps. The CID is similar to the Tactical Display but shows 10 sectors in each direction instead of five. It will thus show

all objects within both torpedo and phaser range, while the Tactical Display only extends to the range of the phaser.

The CID is color-coded. The square area of your tactical display, which is the range of your phasers, is indicated by brown grid dots. The range of the torpedoes is indicated by blue grid dots (note, that the range is based on the fuel capacity of the torpedoes, which is 10 sectors. The combat computer assumes x and y ranges of 10 points, which on oblique headings is greater than the fuel distance). In the lower-left corner of the screen is the menu for the CD. The CID controls are in Table 6:

Table 6. CID Controls

[T]	Target Designator Box (TDB) – starts on your ship. As you move it with direction keys, it identifies the object that is in the TDB. This is a toggle switch. Press [T] again to turn it off.
[H]	Heading indications – this shows the direction that each ship is heading using arrows like those used in the System Map with grid on, except the color of the arrow is green for Krellan and red for UGAS. This is a toggle switch. Press [C] again to turn it off.
[Enter]	When you have an object in the TDB, this will give you detailed information about it.
[Esc]	Exit the CCC

When you have selected the TDB by pressing [T], the bearing of the TDB from your ship is shown in the lower left corner of the display. This is a global angle (in the same angle system as your current heading) and not a relative angle, thus it is the angle you would need to set your course to move to the TDB location. Your ship is at the center of the display, and like with the Tactical Display, the heading of your ship is shown at the top and also the port, starboard, and aft angles. If your ship is in orbit or docked, then the planet or starfort symbol will be shown instead of your ship. If you just fired a torpedo, its symbol might also be shown instead of your ship.

On the left side, the MET is on top of the LRS, while below the LRS are some essential parameters that could be needed during combat, such as your system location, current and set sublight velocities, navigation (N), or pursuit target (P), and current power (energy reserves) level. Below the data on the left side is the current menu. The default is the Main Menu, which will be discussed subsequently. Below the menu is the bearing to the current target in the Target Designator Box (TDB) and the target's system location (SL). To the right of that under the CID is the identification of the object inside the TDB, and if it's a Krellan ship, its current orders.

On the right side of the display under the DAMAGE display is the TARGET DATA box. This only shows up to three targets that can be targeted by your weapons, unlike on the Bridge Display which shows up to nine targets, although only three can be targeted. This display shows the relative position of the target, its sublight velocity, the target icon, and the weapons status, which shows which weapon is targeted for which target and uses the same colors as on the Bridge Display – bright yellow indicates disable only, bright red is destroy, blue is on standby, and white is for a manual target. Below the TARGET DATA

box are the weapons status indicators (black means inactive, red is active but not ready, green is ready to fire, and blue is on standby). To the right of these is the "continuous fire" indicator, which flashes "cont" when active. Below this is the WEAPONS Box, which will be discussed later.

1.3.1.2 Main Menu

This is the default menu when you first bring up the CCC display, and the other menus can only be accessed through the Main Menu. As before you have the option to show the ships' headings by pressing [H], and you can toggle TDB on and off by pressing [T]. When you move the TDB over an object, its identity, system location, and bearing from your ship are shown on the bottom line. If you press enter, you will open a display that shows detailed information about the object. If it is a Krellan ship, then you will see the detailed Data Display for the ship. Other objects just have a more general and less detailed description. However, if it's a torpedo (Krellan or UGA) it will tell you the ownership of the torpedo, i.e., who fired it. The other three menus are accessed from the Main Menu: *Weapons Menu*, *Navigation Menu*, and *Commands Menu*. Note that the [H] and [T] toggle commands work in all the menus (with a couple of exceptions), although they are only shown in the Main Menu.

1.3.1.3 Navigation Menu

The Nav Menu allows you to select various navigation orders and settings for your ship that will take effect when you exit the CCC. On the bottom line of the CID frame on either side of the stern bearing (opposite of your heading), are the sideslip and evasive maneuvering indicators (◄ ►). Pressing [Tab] while in this menu activates *Right Sideslip* (the right arrow) and [Shift][Tab] the *Left Sideslip*. The corresponding indicator glows in green when active. If you press [V] then Evasive Maneuvering is activated, as is shown by both sideslip indicators being lit and flashing at the same time. Pressing [Esc] will return you to the Main Menu.

    Pursue [P] – when you press this key, you will be asked to select the target to pursue. The TDB will appear on your ship (even if you had it somewhere else when you selected this) and move it to your target to pursue (the target identification will appear on the bottom line), then press [Enter] to select it. You will receive confirmation that you are in pursuit of that target and in the Nav Data at the left, a "P" will appear next to "Target:" and the type of target will appear in the space next to it. Note that you can select a UGA ship, Krellan ship, or even a starbase or planet, etc., as a pursuit target, but of course, in the latter cases, the target won't move. To cease the pursuit, press [P] again and you will receive a message telling you what you are pursuing and asking if you want to cancel the pursuit. If you answer affirmative, the cancellation will be

confirmed and the target will be removed from the ship data info on the left side of the screen.

Nav Target [N] – this allows you to delete your current nav targets or to select a new nav system target within the CID, so that when you return to the Bridge Display, you just have to set speed and start engines. For example, this makes it easier to maneuver around a starbase. If you select this command, it will automatically cancel Helm Override and any Pursuit Target. When you press this key, you will be asked to select the new navigation target. The TDB will appear on your ship (even if you had it somewhere else when you selected this) and move it to the location within the CID to which you would like to move, then press [Enter] to select it. You will receive confirmation that you have selected that nav target and in the Nav Data at the left, a "N" will appear next to "Target:" and the target system location will appear in the space next to it. To cancel the nav targets, press [N] again and you will receive a message telling you that the navigation targets have been canceled. If you answer affirmative, the cancellation will be confirmed and the target will be removed from the ship data info on the left side of the screen.

1.3.1.4 Weapons Menu

The Weapons Menu (Fig. 40) puts you in *Weapons Mode* and essentially performs the same functions as *Weapons Control* and gives you complete control of your weapons and targeting in a single easy-to-use display. When the *Weapons Mode* is activated, the "WEAPONS" label in the lower right lights up in bright white and blinks. The current

Figure 40. Weapons Control in CCC

weapon selected (Phaser is default) shows in bright yellow, and the current mode and setting for that weapon are indicated by white asterisks "*". This display also shows the number of torpedoes remaining on the top line next to the WEAPONS label, and the Bombardment status is in the upper right part of the display (note: bombardment settings cannot be altered in the CCC – you have to do that through Strategic Command/Planetary). When the Weapons Menu first comes up, the TDB is inactive. You use the left and right arrows ([←] [→]) to select the weapon you want to control (as indicated by the bright yellow weapon label). To change a weapon mode or setting, press the red highlighted letter of the option you want, and the asterisk indicator will move to that mode or setting. Any changes will also show in the TARGET DATA display and in some cases on the target in the CID. Pressing [Esc] will return you to the Main Menu. The Weapons Menu has the following additional options:

Show Target [G] – when you press this key, the target of your selected weapon is indicated by a red TDB. Press [Enter] to remove the TDB.

Continuous Fire [C] – this is the toggle for the *Continuous Fire Mode*. When you press this key, you turn *Continuous Fire Mode* on or off. When on, the "cont" indicator above the WEAPONS box on the right will flash. If it's off, the indicator will be blank. *Continuous Fire Mode* means that all three weapons, if active, will fire at their targets as soon as they are energized (for the phaser) or torpedoes are loaded (for the torps). This allows you to fire your weapons at their maximum rate without any action on your part. Of course, with the phasers you have to watch your ship's power level to ensure you don't fire the phasers down below your red level (25%) and also watch the number of torpedoes available. Once you run out of torpedoes, then they will stop firing. If you don't want a weapon to fire in *Continuous Mode*, you can change its setting to *Standby*.

Manual Target [M] – when you press this key, your selected weapon will switch to *Manual Mode* if it is currently in *Auto Mode* and a TDB will appear for you to select your manual target. Once you have moved the TDB onto the target, press [Enter]. If your weapon is already in *Manual Mode* when you press [M], the TDB will appear and you can select your manual target. If the TDB is on when you press [M], the TDB will disappear and you will no longer be in *Manual Target Selection Mode*. When you exit the CCC you can fire your weapon(s) against their manual targets. This is a good way to clear out a path through a minefield by manually targeting a mine with phasers (torpedoes cannot be used against mines) and then firing them when you return to the Bridge Display. Note that phasers will not fire unless you are in Condition RED. If you have a mine targeted in Condition YELLOW, you can manually go to Condition RED by doing a double press of the Maximum Shields control, [Shift][F8]. This will energize your phasers so you can shoot.

1.3.1.4 Command Menu

NOTE: This Command Menu only appears if you are of rank PREFECT or higher. This menu provides a subset of the Strategic Commands menu that appears when you select a Krellan ship in the Space Forces table shown through Strategic Command ([M]/[G]/[R] or [L]/[S]/[T]). That Commands Menu gives you all the possible commands that you can give another Krellan ship (except Hold Fire), while this COMMAND MENU in the CCC provides you the commands you are most likely to need within your local area. It even provides a command that is otherwise in the Communications Command and not the Strategic Command area. The result is a streamlined set of commands where you can see the situation as you give the commands and it involves less keystrokes. Note that the current orders of the Krellan ship in the TDB are shown in the information area on the bottom line of the screen. Pressing [Esc] will return you to the Main Menu. To use any of these commands you must first put the TDB on the Krellan ship you want to command (except your escorts). Here are the command options available when you press the associated key:

Attack [A] – you will be prompted to move the TDB over the target you want your selected Krellan ship to attack. When the TDB is in place, press [Enter] to send the command. The Krellan ship will acknowledge the order.

Withdraw [W] – your selected Krellan ship (inside the TDB) is ordered to withdraw immediately to the nearest starfort. This is usually done when the ship is damaged or low on power but has not yet reached the level to initiate its own withdrawal. The Krellan ship will acknowledge the order.

Move To [M] – you will be prompted to move the TDB over the location to which you want your selected Krellan ship to move. When the TDB is in place at the destination location, press [Enter] to send the command. The Krellan ship will acknowledge the order and inform you of its destination location. Note that once the Krellan ship has reached its destination, its "Move to" order will automatically be changed to "Hold Position ." If you want it under a different order, you will have to change it.

Hold Fire [H] – the selected Krellan ship is ordered to hold its fire, i.e., not shoot any weapons until the order is canceled. You can cancel this order by selecting the ship and pressing [H] again. This order is particularly helpful if you want to capture the target or get credit for the "kill shot." Note that this is not a command found on the Strategic Command window for Krellan ships, but is instead ordered through the Communications Command ([M]/[M]/[S]/[K]/[H]). The commands in the Strategic Command window are all action commands for movement orders, while the Hold Fire is a targeting command (which is in a special Targeting window for Escorts). This order is independent of the other commands. No matter which command you select, it will not affect the Hold Fire orders. Even if you order a ship to Attack, it will not shoot at the target it is attacking if it is under *Hold Fire* orders. This could be useful if you want to distract the enemy starbase or ship you want to capture while ensuring that

your Krellan ship doesn't destroy the target. The Krellan ship will acknowledge the order and cease firing (or resume firing depending on its initial state). Any of the Krellan ship's torpedoes in flight will self-destruct when it accepts this order.

Position Hold [P] – your selected Krellan ship (inside the TDB) is ordered to stay in its current location, with the displayed order of "Hold Position." This is a toggle switch. If you press this key for a selected ship that is already holding position, then it will cancel that order and automatically switch to "Free Operation" – the default order. The Krellan ship will acknowledge the order and inform you what is its new order is.

Rendezvous [R] – your selected Krellan ship (inside the TDB) is ordered to rendezvous with your ship. The Krellan ship will acknowledge the order.

Free Ops [F] – your selected Krellan ship (inside the TDB) will have its current orders and objective cancelled, and will be under the local command of its commander.

1.3.3 Weapons Control [B]/[W]

The Weapons Control is an alternate way to control your primary weapons, *Phasers* and *Torpedoes*, and provides the only way to launch your special planetary weapon, the *Obliterator Pod*. There are three options for Weapons Control:

1.3.3.1 Phaser Control [B]/[W]/[P]
When you select Phaser Control, you will be shown the current phaser setting and mode. There are five command options available, the four phaser settings: *Destroy*, *Disable, Standby,* and *Conditional*, which are described in 1.3.1.3, and *Mode*, which if selected, allows you to change the firing mode of the phasers, as described in 1.3.1.4. The setting or mode is changed once you select the new setting or mode. Pressing [Esc] does not restore the original setting or mode – it just returns you to the Combat Control menu.

1.3.3.2 Torpedo Control [B]/[W]/[T]
After selecting torpedoes and receiving the current torpedo setting and mode, you will be prompted to select a new setting or mode for the torpedoes fired from tube #1, then tube #2 (the instruction area will indicate which torpedo tube). If you want to change tube #2, but not tube #1, you must respecify the current settings for tube #1 by pressing [Enter]. In Torpedo Control, there are five command options available, the four torpedo settings: *Destroy*, *Disable, Standby,* and *Conditional*, which are described in 1.3.1.3, and *Mode*, which if selected, allows you to change the mode of the phasers, as described in 1.3.1.4. The setting or mode is changed once you select the new setting or mode. Pressing [Esc] does not restore the original setting or mode – it just exits you from Torp #1 prompt to Torp #2 prompt, or if you are in Torp #2, it returns you to the Combat Control menu.

1.3.3.3 Obliterator Pods [B]/[W]/[O]
These weapons is a matter-disruption bombs whose purpose is to destroy an entire planet (also known as "planet-buster" bombs). They are very unstable and only effective in a

strong gravitational field (although they have no effect on stars). Obliterator pods can be used as an offensive weapon to wipe out a planet where your ground forces have met very stiff resistance or as a way of demonstrating Krellan superiority to other planets in a star system.

To detonate a pod, you must be in orbit around the target planet, and the planet must not have its planetary shields raised. Individual city shields do not matter. One pod will cause 50% damage to a planet; thus, unless a planet already has more than 50% damage, two pods will be needed to destroy it. A planet destroyed by a pod is annihilated (nothing left but scattered dust and debris) and thereafter will not show up on any display. Do not use obliterator pods recklessly. Remember, it is best not to destroy planets that could be of value to the Empire. Obliterating a planet earns you 30 Krels. Each city destroyed costs you 20 Krels. Therefore, if a planet has more than one city it is not profitable to destroy the planet. However, destroying a planet can cause fear among enemies or potential enemies, and does raise the morale of your crew. When you select the second (last) obliterator pod to fire, it will warn you that this will obliterate the planet and ask for confirmation. Obliterating a planet will now also destroy any ships that are in orbit around the planet, so once you confirm the firing of the last pod, a warning is sent out to all Krellan ships in orbit and, if able, they will immediately flee into the sectors surrounding the planet. To be able to flee they must have enough power, operational sub-light engines, and at least 20 crew. Just before the bomb explodes, your ship will also leave orbit. Any ships and torpedoes still in orbit, Krellan or UGA, will be destroyed when the planet explodes. If you happen to be towing a ship at the time, that ship will safely flee orbit with you. This could be an effective way to eliminate any UGA ships also in orbit since they won't get the message to flee. However, it's possible that a very astute UGA commander might notice all the Krellan ships leaving and take it as a hint to also depart forthwith. This is not likely, but could happen.

To use the obliterator pods, select to from Combat. If the Weapons Console confirms that you are orbiting a planet with no planetary shields up, you will be prompted to confirm the launch of the pod. Answer yes and a countdown starts. The message, "Pod released!" is soon followed by a report of planetary damage level (around 50%),_cities destroyed, and estimated killed. The presence of the planet will be removed from all the maps and databases. If you send a message asking them to surrender now, you'll probably get it. However, if you're determined to see them blow, select "O" again. This time, after the planetary damage report, the planet will be destroyed as you watch, and it will say, "Planet has been obliterated. Only space debris and asteroids are left." The Orbit display changes back to Tactical Display, the_"o" disappears off the SYSTEM MAP, and the PLANET MAP is erased.

1.4 COMPUTER CONTROL [C]

Many functions of your ship are controlled through Computer Control. Press [C] while in the Main Menu to enter the computer control section of the command hierarchy (Figure 41). From here, you have a choice of five command options: *Combat Status, Information, Self-Destruct, Special Services,* and *Commander's Log*. These are displayed on the
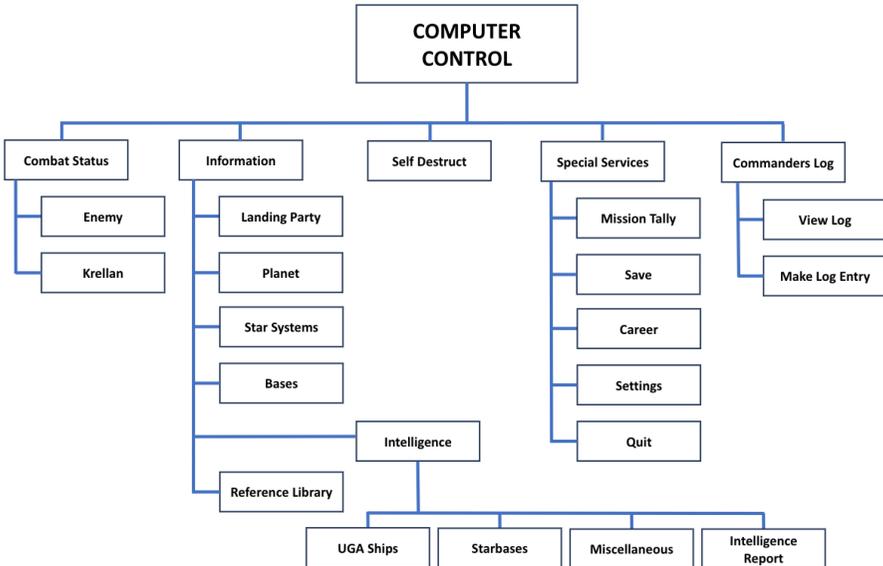
Figure 41. Computer Control Command Structure

command line of the Bridge Display and comprise the Computer Control Menu. Your Main Computer is one of the primary systems of the ship that can be damaged during combat or by other hazardous events, and affect other systems, such as Navigation. However, if the Main Computer is out, most of the functions in Computer Control are still operational, because they work through ancillary computers.

1.4.1 Combat Status [C]/[C]

This command enables you to view information that your ship's computer has amassed about the forces in your current regional location.

1.4.1.1 Enemy [C]/[C]/[E]
This command option is automatically activated when you execute the Combat Status command, and the Enemy Combat Status Report is displayed. This display contains the most recently reported information about Alliance ships and starbases. Not all facts about an object will be available or current if it is outside the range of your sensors. Information

will be updated for all enemy vessels that have been detected by your sensors or by the sensors of a starfort or another Krellan ship in the regional location. The most complete information will be given for objects within range of your Tactical Display.

The following information appears in the status report:

OBJECT - the identity of the enemy starbase or ship. A starbase can be identified by a long-range scan, but a ship must be within range of your Tactical Display before you will know what type it is.

REl. POS - the latest known position of the object, relative to your ship's position. A negative x coordinate signifies a location to the left of your ship; a negative y coordinate refers to a location behind your ship.

BNG - the bearing from your ship to the object - the course you would have to set in order to intercept the object at its present position.

VEL and **HDG** - the latest known velocity and heading of the object.

L and **T** - LRS Display and Tactical Display indicators. An "x" in either column indicates that the object is within range of that display.

POWER - the latest estimate of the object's total power, with a number representing units of energy and a percentage indicating how much of its maximum energy the object has remaining.

AX.E and **MN.E** - indicators of the latest known status of the object's auxiliary (sublight) and main (hyperdrive) engines, either "ok" or "down".

DAM - the object's latest known damage level, either "zip" (none), "1gt" (light), "med" (medium), or "hvy" (heavy).

S - shield status indicator for the object, either " ↑ " (up) or " ↓ " (down).

STATUS - one of four conditions: "Hostile", "Disabled", "Captured", or "Unknown".

1.4.1.2 Krellan [C]/[C]/[K]

If you select this option while the Enemy Combat Status Report is displayed, you will see a screen of information about starforts and other Krellan ships in your regional location. 'I'he Krellan Combat Status Report shows the following information about every vessel, including ships docked at a starfort:

NAME, the unique name of each Krellan ship. Starforts do not have names.

TYP, ship type, either "dst" (destroyer), "sup" (supply transport), "trp" (troop transport), or "bcr" (battlecruiser).

ID #, the ship or starfort identification number, where "E-" designates one of your escorts, "S-" any other Krellan ship, and "SF-" a starfort.

REL.POS, described in Appendix A. An entry of 0,0 indicates that your ship and another one is in the same system location, which occurs when you are both docked at the same starfort or both orbiting the same planet.

CRS and **Vel**, the ship's current course and velocity.

POWER, current total power in units.

SPPLY, current supplies in units, unlimited ("unl") for starforts.

S and **H**, the status of the ship's sublight and hyperdrive engines: "↑" for operational, "↓" for inoperative.

D, the ship's current number of damaged (inoperative) systems.

P, the status of the ship's phaser banks (only applicable to battlecruisers and starforts): "↑" for operational, "↓"for inoperative.

TRP, how many torpedoes are currently in the ship's supply. An arrow indicates the status of the ship's torpedo control system ("↑" - operational, "↓" - inoperative). No arrow is shown for transport ships, which do not have torpedo tubes. For all practical purposes, a starfort has an unlimited number of torpedoes and shows "∞" on this display.

CREW, the number of regular crew members aboard.

S. TP, the number of shock troops aboard (not including legionary troops).

STATUS, one of four conditions: "Normal", "Docked", "Orbit", or "Disabled".

1.4.2 Information [C]/[I]

Each of the six options under this command gives you facts about a certain aspect of the current situation as well as general information as a reference. The command options are *Landing Party, Planets, Star Systems, Planetary Bases, Intelligence,* and *Reference Library*. The first four options are databases that provide essential information in tabular database form, while the last two are special options.

1.4.2.1 Landing Party Database [C]/[I]/[L]

Selecting this option calls up the Landing Party Database Display (Fig. 42). Character symbols with special meanings in this display include "x" for yes, "-" for no, "c" for a mission that has been completed, and "?" for an unknown fact or quantity. The display contains the following information:

LP, the number assigned to the landing party.

Planet, the ID number of the planet on which the party is located.

Bs, indicates whether or not a base has been established.

Crw and **STr**, the number of regular crew members and shock troops in the party.

Dead, the number of landing party personnel who have been killed.

Captv, the number of captives that are with the landing party.

Sup/Day, the amount of supplies the landing party has, and how many days those supplies will last at the current rate of consumption.

Sup, the number of teams assigned to a supply mission.

H/R, the number of teams assigned to a hold/reinforce mission.

Srv, the number of teams assigned to a survey/explore mission.

Cmb, the number of teams assigned to a combat mission.

EBs, the number of teams assigned to establish a base.

Neg, the number of teams assigned to negotiate with the natives.

OBB, indicates whether or not a team has been sent down to start Operation Big Brother (XXX).

Status of the landing party, either "BATTLE" (under attack), "CRITCL" (in immediate need of reinforcements or supplies), "EXTNCT" (landing party has been wiped out), or "NORMAL" (all is well).

```
 LANDING PARTY                    DATABASE
 LP Planet Bs Crw STr Dead Captv Sup/Day Sup H/R Srv Cmb EBs Neg OBB Art Status

  0 SS-0A   x 100  50    0     0   ∞ / ∞    0   0  0c   0   0   0              NORMAL
  1 SS-16A  -  22  18    0     0  10/20     0   0   2   0   2   0              NORMAL
  2 SS-23A  -   2  35   13     0   ∞ / ∞    0   0  3c   2   0   0              BATTLE
  3 SS-40A  x  33  37    0     0   ∞ / ∞    0   0  3c   1  3c   0              NORMAL
  4 SS-44A  -   0   0   50     0   ∞ / ∞    0   0  4c   1   0   0              EXTNCT



 [PgUp]:prev. page   [PgDn]:next page   [S]:status   [CR]:select   [Esc] :exit

 Landing party out.                         CMF
 COMPUTER CONTROL                           AAS Shields    0%

Select Landing Party
```

Figure 42. Landing Party Database Display

Landing Party Status Display [S] - If you press [S] while in the Landing Party Database a display window appears (Fig. 43) that shows the current status of the landing party and its progress in completing its missions. This information box has been enhanced to show more information, such as the number of crew, shock troops, dead, and captives in the Landing Party, and also its distance from you and its current orders and overall status. The information in the status window is:

PLNT -Shows the planet identification number and if the name of the planet is known, that is also shown.

DIST -The distance in light years that the base is from your ship.

OURS – "Y" means it is your landing party, while "N" means that the landing party belongs to another ship.

ORDERS -The possible orders are:

- **mission order** – just doing the orders defined for each of the Landing Party teams. This is the default setting.
- **take captives** – their orders are to take and hold captives.
- **kill captives** – their orders are to kill any captives being held and any that they take.

Figure 43. Landing Party Status Display

STATUS -The possible states for the landing party status are:

- **NORMAL** – situation going according to plan.
- **BATTLE** – under attack by natives or UGA forces.
- **CRITICAL** – the Landing Party has sent out a distress call. This could be due to excessive losses in battle, or running out of supplies on a planet with no supplies.

BS -"Y" means has base has been established, while "N" means no base.

CREW, ST, and **CAPTV** – are the current number of crew members, shock troops, and captives that are still alive on the planet, while **DEAD** is the number of crew and shock troops that have been killed.

The *progress bars* shown for each mission are an indication of how much progress the landing party has made to the completion of its missions. These are only indicators of the *estimated* progress to completion. The mission could be completed before the bar has turned all green, or the bar could turn green before the mission is completed. The "ElpTm" shows how many days have elapsed since the landing party started the mission.At the bottom right corner of the window, it shows the current stocks of supplies (i.e., all replenishable material) that the landing party possesses. Until a base is built, this will only consist of supplies. Once the base is built, a supply ship will visit the planet and stock up the base.

When you exit from the Landing Party Status window (by pressing either [Esc] or [Enter]) you will be asked if you want to go to the location of that landing party. If you select "Y" then your navigation computer will take you to the planet in the star system where the landing party is located without your participation. You can just sit back and enjoy the ride.

1.4.2.2 Planets Database [C]/[I]/[P]

Selecting this option calls up the Planetary Database Display (Fig. 44), containing data on every planet in the region that has been scanned. To view the Planetary Map Display of any planet in the list, use the cursor keys to highlight the planet and press [Enter].

ID#	Name	Cls	Inh	Cty	Tch	Mnrl	Sup	Rd	LP	BS	Lgn	Tre	Hos	UGA	Inv	Status
0A	IIUIOO	P	–	0	–	rich	–	×	–	×	11	–	–	–	–	Krellan
0B	none	G	–	0	–	none	–	–	–	–	0	–	–	–	–	Neutral
9A	unknown	G	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
9B	unknown	D	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
12A	unknown	K	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
16A	AAVULYUT	P	Rep	3	1N	rich	–	–	×	×	0	–	×	–	–	Neutral
20A	unknown	A	Mam	1	2N	poor	×	–	–	–	0	–	?	?	–	unknown
20B	unknown	I	Hum	5	1N	fair	–	–	–	–	0	–	?	?	–	unknown
20C	unknown	P	Rep	3	1N	poor	–	–	–	–	0	–	?	?	–	unknown
22A	unknown	D	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
23A	AXAUEO	D	Mam	13	5N	rich	×	–	×	–	0	–	×	×	–	Alliance
25A	unknown	K	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
26A	unknown	K	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
27A	unknown	P	?	?	?	?	?	?	–	–	0	–	?	?	–	unknown
27B	OWOCY	A	Mam	14	5N	rich	×	–	–	–	0	–	×	×	–	Alliance

[PgUp]: prev page [PgDn]: next page [D]: dist [CR]: select [Esc]: exit

COMPUTER CONTROL   CMF AAS Shields   0%

Select planet

Figure 44. Planets Database Display

Character symbols with special meanings in this display include "x" for yes, "-" for no, and "?" for an unknown fact or quantity. The display contains the following facts:

ID#, the planet identification number.

Name of the planet, if known.

Cls, the planet class (A.4).

Inh, the predominant type of intelligent natives, if any (A.4).

Cty, the number of significant cities on the planet (A.4).

Tch, the technology level of the inhabitants (A.4).

Mnrl, the relative quantity of valuable mineral resources on the planet.

Sup, indicating whether or not supplies are available.

Rad, whether or not dangerous radiation is present.

LP, whether or not a Krellan landing party is on the surface.

BS, whether or not a Krellan base has been established on the planet.

Lgn, the number of Krellan legions on the planet.

Tre, whether or not a treaty has been established with the inhabitants.

Hos, whether or not the planet's natives are hostile. ("-" - uninhabited). A Krellan-occupied planet can still be hostile; the natives may not like you!

UGA, whether or not UGA forces are present on the planet.

Status, the planet's ownership, either "Krellan", "Neutral", "Alliance" , "Contested", or "Unknown".

1.4.2.3 Star Systems [C]/[I]/[S]

Selecting this option calls up the Star System Information Display (Fig. 45). The display contains the following facts:

SS, the star system number.

Rx and **Ry**, the regional coordinates of the system.

Cls, the star's class (XXX).

Plt, the number of planets in the star system. Until a system is scanned by a Krellan ship or probe, a "?" will indicate unknown information.

Figure 45. Star Systems Database Display

For each star system, there is an indicator that shows the ownership of the system by color (unknown ▢, neutral ▪, Krellan ▪, UGA ▪, or contested ▪) using the same color definitions used in the War Map. The War Map also shows systems with current enemy activity detected (using a red block background). The SS table shows the same thing, but the difference is whereas the War Map shows *currently* detected activity, the SS table shows in which systems enemy activity *has ever been detected*. The definitions for all this are part of the table that is displayed so you don't have to remember all this. Although the War Map and SS Table may be different in their showing of enemy activity, both are very useful. You can select a star system from the table and be transferred directly to the Navigation or War Map to view the system database and/or initiate navigation to go there. Notice in Fig. 45 that for star system SS-16, there is no data shown, only a line of asterisks. This means that the SS-16 star system has been destroyed by a supernova (1.1.6.3) and will no longer appear on the star maps.

1.4.2.4 Planet Bases Database [C]/[I]/[B]
This option show all the Krellan planetary bases in the region in a tabular form (Fig. 46). This database is to provide a quick summary of all the Krellan bases in the region, not just

PLANET BASES					DATABASE				
Planet	RgLoc	SyLoc	Crew	ShkTrp	Energy	Supplies	Torps	Probes	Status
SS-24A	3, 6	46,60	33	27	4250	1054	40	2	NORMAL
SS-20A	1,15	11,21	33	27	4750	2575	40	4	NORMAL
SS-2A	32, 0	16,24	100	50	∞	3177	50	5	NORMAL
SS-1A	16, 1	56,70	100	50	∞	∞	50	5	NORMAL
SS-2B	32, 0	27,73	100	50	∞	∞	50	5	NORMAL
SS-45A	6, 2	53,18	18	17	4950	1083	40	2	BATTLE
SS-47A	13,11	57,23	10	10	0	∞	0	0	BATTLE
SS-8A	2,14	15,32	33	27	4950	1072	40	2	NORMAL

Figure 46. Planet Bases Database Display

the ones with Landing Parties. Besides the planet identification and the regional and system locations, it shows the number of crew and personnel at each base. These can provide a source or replenishing your crew losses without returning to a starfort. The database also shows the amount of energy and supplies, and the number of torpedoes and sensor probes currently stored at each base. This material is also available for your use by using your ship's teleporters. The "Status" indicates the status of the planetary base using the same categories as described for the Landing Party database. By seeing the situation of the bases and what they have in their replenishment stock will help you to decide where to go for replenishment if needed.

Unlike the Landing Party and Planets Databases, you cannot select a planetary base and initiate an automatic move to it. You have to note the planet identification and then select it on the Landing Party or Planets Database to initiate the move.

1.4.2.5 Intelligence [C]/[I]/[I]
This command allows you to call up military intelligence information on enemy ships and starbases, using one of two options. The other two options are for miscellaneous intelligence and to view the Intelligence Report for this Level of the campaign.

1.4.2.5.1 UGA Ships [U] - This option lists the number of each type of UGA ship currently known to be in the region, plus the number of each type that you have destroyed and captured.

1.4.2.5.2 Starbases [S] - This option reports on the current status of all known Alliance starbases (Fig. 47): the number of the star system where a starbase is located; the base's regional and system coordinates; and its status: "HOSTILE", "DESTROYED", "CAPTURED" or "Suspected". Until a Krellan ship or sensor probe locates a starbase, this display will be blank. If a probe or Krellan ship enters a star system and there is an unusual amount of enemy activity detected, then they will report that there may be a starbase in the system. This causes the status report of "Suspected".

Figure 47. Starbases Intelligence Display

1.4.2.5.3 Miscellaneous Information [M] - This is where you can gain access to other information gathered about the enemy other than on UGA warships and starbases, which are other options in the Intelligence command. If you board and capture a starliner, then
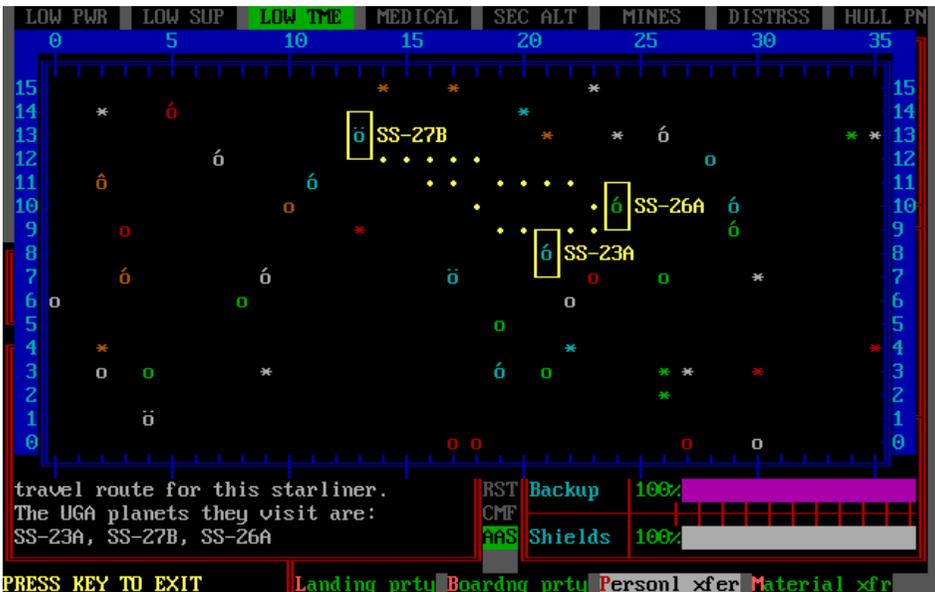

Figure 48. Captured Starline Route Map

there is a chance that your boarding party might extract the route of the starliner from their navigation computer. This will reveal the three UGA planets that the starliner services on its set route. The starliner route is added to your computer, and when you have one or more onboard, you can look at each route map with this command. A star map will appear which will show you the starliners route (Fig. 48) and the three UGA planets of call on the route. There are typically three starliners that travel three different routes with at least one hub planet that intersects multiple routes so that a passenger can travel to any of the planets serviced by the starliners.

1.4.2.5.4 Intelligence Report [R] - In Career Mode, when you start the first mission at a new level (i.e., after just being promoted or starting your career as an Altern), and after you have selected a new mission, you will receive an intelligence briefing from headquarters concerning what you can expect to find in your region at this level (Fig. 49).
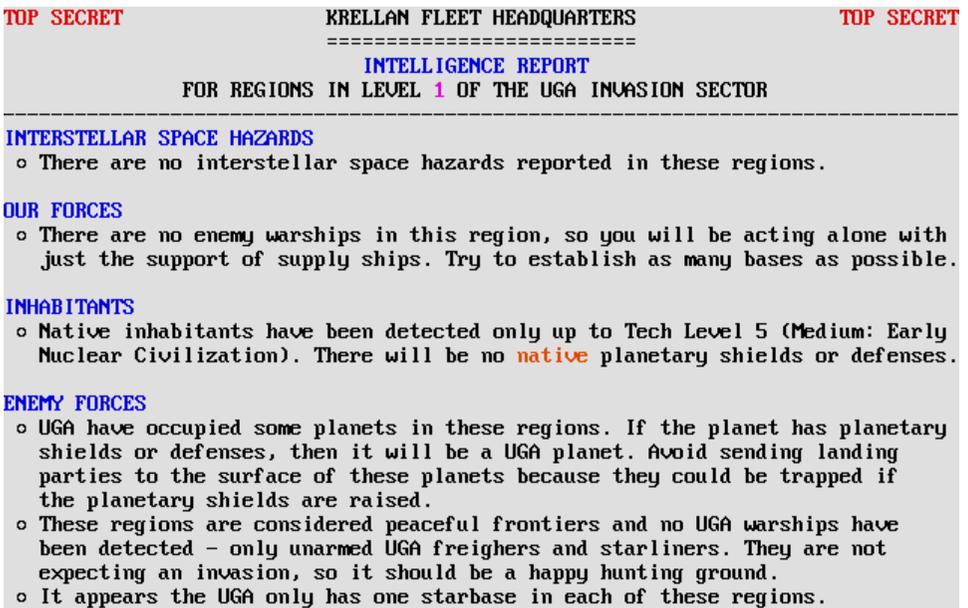
```
TOP SECRET                KRELLAN FLEET HEADQUARTERS            TOP SECRET
                          ==========================
                              INTELLIGENCE REPORT
                  FOR REGIONS IN LEVEL 1 OF THE UGA INVASION SECTOR
-------------------------------------------------------------------------
INTERSTELLAR SPACE HAZARDS
 o There are no interstellar space hazards reported in these regions.

OUR FORCES
 o There are no enemy warships in this region, so you will be acting alone with
   just the support of supply ships. Try to establish as many bases as possible.

INHABITANTS
 o Native inhabitants have been detected only up to Tech Level 5 (Medium: Early
   Nuclear Civilization). There will be no native planetary shields or defenses.

ENEMY FORCES
 o UGA have occupied some planets in these regions. If the planet has planetary
   shields or defenses, then it will be a UGA planet. Avoid sending landing
   parties to the surface of these planets because they could be trapped if
   the planetary shields are raised.
 o These regions are considered peaceful frontiers and no UGA warships have
   been detected - only unarmed UGA freighters and starliners. They are not
   expecting an invasion, so it should be a happy hunting ground.
 o It appears the UGA only has one starbase in each of these regions.
```
Figure 49. Intelligence Report for Level 1 Regions

1.4.2.6 Reference Library [C]/[I]/[R]
Accessing this option provides you with a wealth of information about planets, stars, meaning of icons used, detailed information about every ship type, both Krellan and UGA, and detailed description of all the Krellan awards and decorations, Krellan military organization, ranks and missions, i.e., provides a lot of the reference information contained in this Battlecruiser Operations Manual. The main page of the reference library has the definition of the symbols used in the battlecruiser displays as well as the definitions of the different types of star systems, planets, and Technology Levels (Fig. 50). Also shown in

this figure is the Reference Library Menu which you can access by pressing [M]. To remove the menu you can press [M], or you can select any of the options shown on the menu. If you press [Esc] anywhere in the Reference Library you will exit the Reference Library.
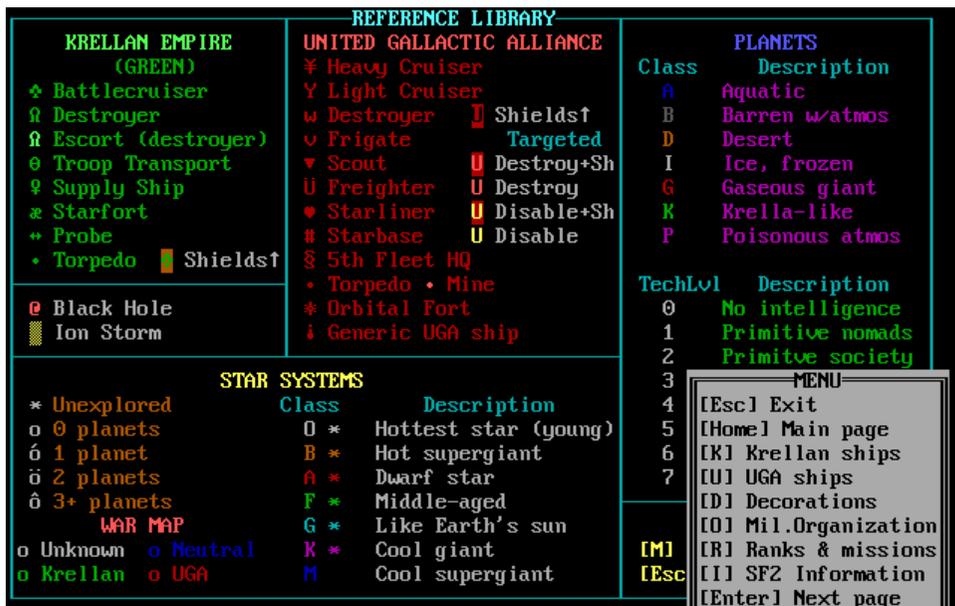


```
┌──────────────REFERENCE LIBRARY──────────────┐
  KRELLAN EMPIRE        UNITED GALLACTIC ALLIANCE      PLANETS
      (GREEN)           ¥ Heavy Cruiser          Class    Description
  ♣ Battlecruiser       Y Light Cruiser            A   Aquatic
  Ω Destroyer           w Destroyer   ▌Shields↑     B   Barren w/atmos
  Ω Escort (destroyer)  v Frigate        Targeted   D   Desert
  θ Troop Transport     ▼ Scout       U Destroy+Sh  I   Ice, frozen
  ♀ Supply Ship         Ü Freighter   U Destroy     G   Gaseous giant
  ӕ Starfort            ♥ Starliner   U Disable+Sh  K   Krella-like
  ↔ Probe               # Starbase    U Disable     P   Poisonous atmos
  • Torpedo   ▌Shields↑ § 5th Fleet HQ
                        · Torpedo • Mine          TechLvl    Description
  @ Black Hole          * Orbital Fort              0    No intelligence
  ▓ Ion Storm           ¡ Generic UGA ship          1    Primitive nomads
                                                     2    Primitve society
            STAR SYSTEMS                             3 ┌─────MENU─────┐
  * Unexplored     Class      Description           4 │[Esc] Exit    │
  o 0 planets      O *   Hottest star (young)       5 │[Home] Main page│
  ó 1 planet       B *   Hot supergiant             6 │[K] Krellan ships│
  ö 2 planets      A *   Dwarf star                 7 │[U] UGA ships │
  ô 3+ planets     F *   Middle-aged                  │[D] Decorations│
         WAR MAP   G *   Like Earth's sun             │[O] Mil.Organization│
  o Unknown  o Neutral  K *   Cool giant        [M] ││[R] Ranks & missions│
  o Krellan  o UGA      M     Cool supergiant   [Esc]│[I] SF2 Information│
                                                      │[Enter] Next page│
```

Figure 50. Reference Library Main Screen with Menu

1.4.3 Self-Destruct [C]/[D]

Having your ship captured by the enemy is a fate worse than death; hence, the Self-Destruct option is provided for you to avoid that shameful and dishonorable event by blowing up your battlecruiser. REMEMBER: You must NOT allow yourself or your ship to be captured by the enemy!! When you select this command option, you will be asked to confirm your intentions; press [Yl to proceed or [N] to cancel. If you answered Yes, you will be asked if you want to abandon ship before the detonation; press [Y] to allow yourself and a limited number of crew members to escape in life pods, or [N] to die in glorious battle and rise as a servant of Zagar, the God of War. After you answer the second question, a 10-second countdown will begin. You have that much time to change your mind and to cancel the Self-Destruct order by pressing [AIt][S]. If you let it go to zero, your ship and mission will be terminated.

1.4.4 Special Services [C]/[S]

This command allows you access to information and operations related to your mission or enabling you to communicate with your computer system or control the simulation. There are five command options: *Mission Tally, Save, Career Information, Simulation Settings,* and *Quit*.

1.4.4.1 Mission Tally [C]/[S]/[M]
This command calls up the Mission Tally Display, which is initially blank. This is like a score sheet for your current mission, showing your running totals. Selecting one of the options shown will fill the tally display with the relevant data.

```
┌PERSONAL───────────────MISSION TALLY──────────────────────────────────┐
│  OBJECT   │DEST│CAPT│DELV│TOTAL│KRELS│       EVENT        │NUMBR│KRELS │
│                                                                       │
│Heavy cruiser│ 2 │ 0 │ 1 │  3  │ 250 │Crew killed         │  51 │  -5  │
│Light cruiser│ 0 │ 0 │ 0 │  0  │  0  │Shock troops killed │ 106 │ -10  │
│Destroyer    │ 0 │ 0 │ 0 │  0  │  0  │Ships lost          │  0  │  0   │
│Frigate      │ 0 │ 0 │ 0 │  0  │  0  │Escorts lost        │  12 │ -60  │
│Scout        │ 0 │ 0 │ 0 │  0  │  0  │Starforts lost      │  0  │  0   │
│Freighter    │ 0 │ 1 │ 0 │  1  │ 30  │Planets lost        │  0  │  0   │
│Starliner    │ 0 │ 0 │ 0 │  0  │  0  │Legions lost        │  0  │  0   │
│                                     │Cities destroyed    │  0  │  0   │
│   TOTAL     │ 2 │ 1 │ 1 │  4  │ 280 │                                 │
│                                     │    TOTAL PENALTIES    │   -75   │
│UGA personnel│ 0 │ 0 │354│ 354 │ 70  │                                 │
│Passengers   │ 0 │ 0 │ 0 │  0  │  0  │Star systems mapped │  16 │  16  │
│                                     │Planets scanned     │  10 │  50  │
│   TOTAL     │ 0 │ 0 │354│ 354 │ 70  │Planets surveyed    │  4  │  60  │
│                                     │Planet w/supplies   │  6  │ 120  │
│(Booty-Fines)│-- │-- │-- │ --- │  0  │Planet w/rich minrls│  5  │ 100  │
│Starbase/OrbF│ 2 │ 0 │-- │  2  │ 200 │Planet w/fair minrls│  4  │  60  │
│UGA HQ       │ 0 │ 0 │-- │  0  │  0  │Bases established   │  4  │  40  │
│Planets      │ 0 │ 2 │-- │  2  │ 148 │Treaties made       │  0  │  0   │
│                                                                       │
│              SLAVES     67     KRELS      1069                         │
│Select option        ║Personal Krellan  Values  Orders                 │
└───────────────────────────────────────────────────────────────────────┘
```

Figure 51. Mission Tally Showing Personal Data

Personal [P] – Shows your personal tally and scores for your current mission (Fig. 51).
Krellan [K] – Shows the current tally and scores for the other Krellan ships in the fleet combined.
Values [V] – Shows how much each of the items in the display is worth (Fig. 52).
Orders [O] – This will display your current orders with your progress towards accomplishing your assigned mission objectives (Fig. 53). If you have completed an objective, it will show "COMPLETED".

MISSION TALLY

OBJECT	DEST	CAPT	DELV	TOTAL	KRELS
Heavy cruiser	80	85	90	--	---
Light cruiser	60	65	70	--	---
Destroyer	35	40	45	--	---
Frigate	20	25	30	--	---
Scout	5	10	15	--	---
Freighter	10	30	40	--	---
Starliner	5	10	20	--	---
TOTAL	--	--	--	--	---
UGA personnel	1/10	1/10	1/5	---	---
Passengers	1/10	1/50	1/50	---	---
TOTAL	--	--	--	---	---
(Booty-Fines)	--	--	1/10	--	---
Starbase/OrbF	100	200	--	--	---
UGA HQ	800	900	--	--	---
Planets	30	vary	--	--	---

EVENT	NUMBR	KRELS
Crew killed	-1/10	---
Shock troops killed	-1/10	---
Ships lost	-100	---
Escorts lost	-5	---
Starforts lost	-50	---
Planets lost	-30	---
Legions lost	-5	---
Cities destroyed	-20	---
TOTAL PENALTIES		---
Star systems mapped	1	---
Planets scanned	5	---
Planets surveyed	15	---
Planet w/supplies	20	---
Planet w/rich minrls	20	---
Planet w/fair minrls	15	---
Bases established	10	---
Treaties made	40	---

SLAVES   KRELS

Select option   Personal Krellan   Values   Orders

Figure 52. Mission Tally Values

COMMUNICATION FROM KRELLAN FLEET HEADQUARTERS
===
```
To      : Tribune Sorensen, Battlecruiser IKS ZEUS
From    : Tribune Kreg, Commander 7th Sector
Subject : Orders for Reconnaissance Mission into Region #1-B
Mission #: 037          PRACTICE MISSION
```
----
1. You will take the battlecruiser, IKS ZEUS, on a Reconnaissance mission
   into the region of the United Galactic Alliance in front of our sector.

2. Your primary objective is to locate and survey with landing parties at
   least 5 new Krellan-inhabitable planets (A,D,K class with supplies &
   no radiation).
   INCOMPLETE- located: 5 surveyed: 2
3. Your battlecruiser will be acting alone on this mission, as few UGA
   warships are expected. However, supply fleets will be available for
   your support.

4. You have 25 days to complete this mission.

PRESS ANY KEY TO EXIT

Figure 53. Sample Mission Orders with Progress Towards Objectives for Practice Mission

1.4.4.2 Save Mission [C]/[S]/[S] or [Alt][V]

This command option allows you to save a mission in progress. You will be prompted for a file name; type in any valid name (plus drive and directory paths, if applicable), then press [Enter]. It is recommended that you create a new hard disk subdirectory for the saved file. In addition to the file you specify, the planet data files for the mission in progress and your personal configuration file will also be saved. After saving the simulation, you will be returned to your mission. If you subsequently do the *Quick Save* shortcut ([Ctrl][Q]), the mission will automatically be saved using the last name you specified in this command.

1.4.4.3 Career Information [C]/[S]/[C]

At the end of a mission, you are shown your *Career Update Summary*, which is your current progress in your career, and either there or in the *Sign-On Options*, you can view your *Career Statistics*. Both of these displays are available during the mission through this computer command option. When you select this option, the *Career Update Summary* will first appear, and when you press a key, your *Career Statistics* will be displayed. Pressing any key will return you to Computer/Special Services menu.
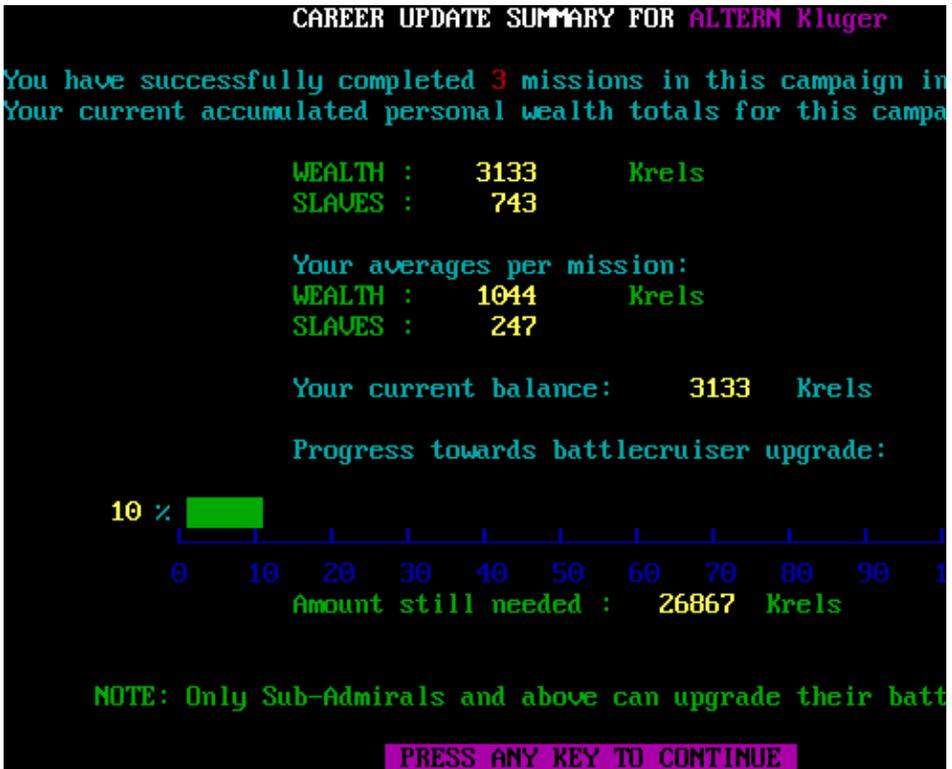
Figure 54. Career Update Summary

1.4.4.3.1 Career Update Summary - At the end of a mission that counts (i.e., not a Practice mission), you will see the Career Mission Summary Page (Fig. 54). In addition to the data previously shown (Accumulated Career and Average Mission Krels and Slaves as well as your Current Balance of Krels), it now shows your progress towards accumulating enough Krels to upgrade your personalized battlecruiser to the Klagar-Prime Class. The cost for the upgrade is 30,000 Krels, and the display now shows your progress to achieving this total in a bar graph expressed as a percentage of the total needed, as well as the amount still needed to acquire. Note that his progress to upgrade data are not shown if you have already upgraded your battlecruiser.

1.4.4.3.2 Career Statistics - Although at the end of each mission you can see your mission tally, which shows the statistics for that mission, the only statistics that are kept for your entire career are the number of Krels and Slaves that you earned. Starting with Version 1.7, the game will keep track of your cumulative statistics for your entire career. The values from your current mission tally are added to your career statistics, which can be viewed in the Career Statistics Display (Fig. 55). This display will automatically be displayed at the end of your career mission (it is not updated in Practice Mode missions) after your mission summary page, and your notifications of promotions and awards (if any). This display can also be viewed through the Service Record option of your Sign-On Options (see Training Manual). Note that the Career Statistics feature is only implemented for new recruits. It is not implemented retroactively for existing players because career statistics are meaningless if the entire career is not included.

CAREER STATISTICS

OBJECT	DESTD	CAPTD	DELIV	TOTAL	EVENT	NUMBER
Heavy cruisers	0	0	0	0	Star systems mapped	13
Light cruisers	0	0	0	0	Planets scanned	4
Destroyers	0	0	0	0	Planets surveyed	3
Frigates	0	0	0	0	Planets w/supplies	3
Scouts	0	0	0	0	Planets w/rich minerals	3
Freighters	2	1	1	4	Planets w/fair minerals	1
Starliners	0	0	1	1	Bases established	2
					Treaties made	0
TOTAL	2	1	2	5	Successful OBB	0
UGA personnel	0	0	214	214	LOSSES & PENALTIES	
Passengers	0	0	1905	1905	Crew killed	0
					Shock troops killed	47
TOTAL	0	0	2119	2119	Ships lost	0
					Escorts lost	0
Starbases/UFHQ	0/0	0	--	0/0	Starforts lost	0
Planets	0	0	--	0	Planets lost	0
Colonies	0	0	--	0	Legions lost	0
Booty (Krels)	--	--	--	10	Cities destroyed	0
					Failed OBB	0
KRELS	429	SLAVES	190		Fines (Krels)	0

Figure 55. Career Statistics Display

1.4.4.4 Simulation Settings [C]/[S]/[T]

This command option allows you to view and change the simulation (game) settings that you reviewed when you were signed on as a new Altern. This command is also available as one of the Sign-On Options (see the Training Manual). When you select this option, the Default Settings display is shown (Fig. 56). On the right side are the definitions for the two
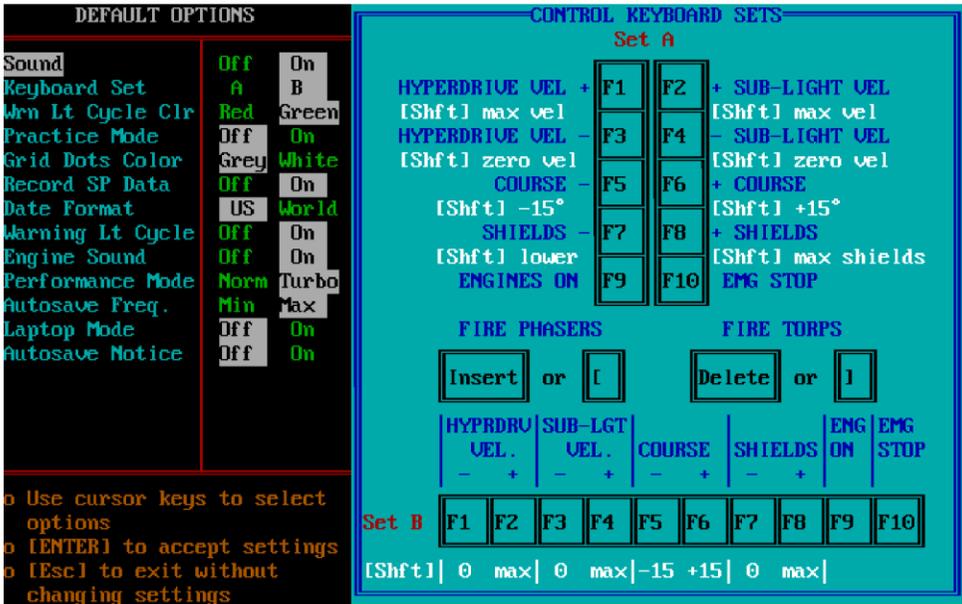
Figure 56. Simulation Settings Display

types of function key sets used on PC computers. The original PC computer keyboards usually had Type a, which is why that is listed first. After about 10 years, Type B keyboards were almost universally used, which is why that is default. The battlecruiser control keys associated with each function key set is shown here.

On the left side of the display are listed the parameters that affect the user interface and running of the simulation with their current settings shown. Use the arrow keys to select a parameter you wish to change. All parameters are toggled between two positions using the left and right arrow (cursor) keys. Press [Enter] to enter the new value. Repeat this process until all changes are made. If you make a mistake, you can elect not to save the changes (press [N]) when given the prompt, "Do you want to save these settings?" You can press [Esc] to return to the Special Services menu.

The parameters are listed below. The original default values are shown in { }.

Sound {On} - When active it provides engine whine, hyperdrive zoom, warning klaxons, and alarms, battle sounds, etc.. Sound will not operate when the simulation is Frozen [Alt] [F].

Keyboard Set {B} – This tells the computer which definitions to use for the function keys as defined on the right side of the display. The use of F1-4 are different for the two sets. F5-10_are the same.

Wrn Lt Cycle Clr {Green} - This will be the color that indicates warnings on top of your displays. You can select Red or Green.

Practice Mode {Off} - This indicates if your current mission is a Career Mission or a Practice Mission. This parameter cannot be changed here – it can only be changed before starting a mission. See the Training Manual.

Grid Dots Color {Grey} – Your Tactical Display, Orbital Display, System Map, Navigation Map, and War Map each has the option of showing a grid of dots to aid in navigation for judging bearing and distance, and identifying the location of objects. When on, a series of faint dots appears on these displays. If on, the grid stays there all the time. It can also be toggled on/off via [Alt][G]. This parameter allows you to set the color of the grid dots – grey for more subtle appearance, while white is for more distinctive. It is a personal preference.

Record SP Data {On} – The ship's computer regularly records some important parameters of your ship during the mission, known as the Ship's Performance Data (SPD). This switch toggles the recording of the data on and off. Since it has to write to a disk file each time it records data, turning this off could slightly affect the smoothness of the simulation. See 1.2.6.1 *Ship's Performance Data*.

Date Format {US} – Dates are expressed either in the format most commonly used in the USA (month/day/year) or as used in the rest of the world and by the US Military (day/month/year). The date is only used for listing saved games. Mission times are always in days.

Warning Lt Cycle {On} – The cycling of the green (or red) warning lights across the top of the displays is annoying to some commanders, so this provides the option of turning the cycling off. The warning lights will be off except if that warning has been tripped.

Engine Sound {On} – This provides the comforting sound of your sublight engines in Normal Space to give you audible verification that your engines are active. However, some Commanders find this sound annoying, even though there is an Engine Sound Control ([Ctrl][E]) described in Appendix B that allows you to change the frequency of the sound. If that doesn't work, you can toggle it off here. This will not affect your other sounds if you have Sound enabled. If Sound switch is OFF, then that will also silence the engines.

Performance Mode {Turbo} – On old computers (386 or 486 PCs), the method of interrupt calling can make a difference in speed. This switch toggles between the two to get the better performance. This can be accomplished on modern computers running DOSBox or similar emulators by changing the speed setting, so this parameter should not need to be changed unless you are playing on an old computer.

Autosave Freq {Max} – The program automatically saves the game in an autosave file on a regular basis. However, writing the save data to a disk file takes up to a second and that can be disruptive to the flow of the game, so this switch enables you to choose

between the maximum save rate (every 0.5 days MET) or the minimum save rate (every 1.0 days MET).

Laptop Mode {Off} – It has been reported that persons playing Star Fleet II on certain laptops are at a disadvantage because the functions keys are not single-press keys, but also require the simultaneous pressing of the [Fn] key, which means that when the game requires a [Shift][F#] key, such as to fire phasers or torpedoes, three keys have to be pressed simultaneously. Alternative keys for some common commands have been introduced that make playing easier on laptops. You can toggle between laptop mode or regular mode by using this switch. The laptop mode keys are:

Control	Regular Mode	Laptop Mode
Start engines	[F9]	[Home]
Emergency stop	[F10]	[End]

Autosave Notice {Off} – . If you want to receive notification every time the game auto-saves the game, you can change this to ON.

1.4.4.5 Quit [C]/[S]/[Q]

This command option will return you to the Sign-On Options after your confirm that you want to exit the current mission. After you answer in the affirmative, you will be given the opportunity to delete all the mission-specific files. If you plan to come back to this mission at some point, then press [N]. You will then be asked it you want to save the log files from the mission in a special directory. Again, answer [N] if you want to return to the mission. You will then be taken to the Sign-On Options menu. You can resume the mission you just quit from the last point it was saved, either through a named saved game or through its autosave file.

1.4.5 Commander's Log [C]/[L]

The Commander's Log allows you to keep a personal journal during your mission (known as the *Chronicle of Glory*). When you first start the mission docked in starfort you receive some reports from your XO. You then are shown the Commander's log, which contains the heading automatically generated by your computer (Fig. 57). From that point on, it is up to you to make log entries.

The Commander's Log enables you to view your log or to make entries in it.

1.4.5.1 View the Log [C]/[L]/[V]

The only way to view the current log is by using this View command option in the Commander's Log Command. You cannot edit the log while in *View Mode*, in fact, you cannot edit or delete any entries once they have been entered into the log. They become part of the official record of your ship. There are several options available to you in *View Mode* (Fig. 58) to maneuver through or search the log for a particular text string. The

available options are shown in the menu that can be viewed if you press [M]. If you press [M] again, it will remove the menu. These view options are similar to the options available to view the Reports, Messages, and Combined Logs. The exit the log, press [Esc].

Figure 58. View Mode of Commander's Log with Menu

1.4.5.2 Log Entry [C]/[L]/[E] or [Ctrl][L]

There are two ways to make entries, press the *Log Hot Key* ([Ctrl][L]), or access the *Entry* option in the Commander's Log. Whichever method you use to access the log for entries, it will bring up the log with the current MET at the top of the entry (Fig. 59). You start typing your entry on the line below the MET. All the edit commands available in for the Notepad are also available for log entries (see menu in Fig. 59). Note that you cannot edit the MET, and your entry is limited to the size of the Log Window. If you want to see the display underneath the Commander's Log, you can press [Ctrl][R], which temporarily removes it. Press another key and it is restored. If you want to make a longer entry than will fit in the window, you can save the entry ([Ctrl][S]) and then open it for Entry again. You can then make a second entry under the same MET.

Figure 59. Entry Mode of Commander's Log with Menu

1.5 SECURITY CONTROL [S]

Internal security of your ship is vital, whether it is handling captives (enemy prisoners) or defending the ship against armed intrusions by enemy space marines. All aspects of internal security are controlled through Security Control. Press [S] while in the Main Menu to enter the computer control section of the command hierarchy (Figure 60). From here, you have a choice of three command options: *Security Status, Internal Defense,* and *Interrogation of Prisoners*. These are displayed on the command line of the Bridge Display and comprise the Security Control menu.
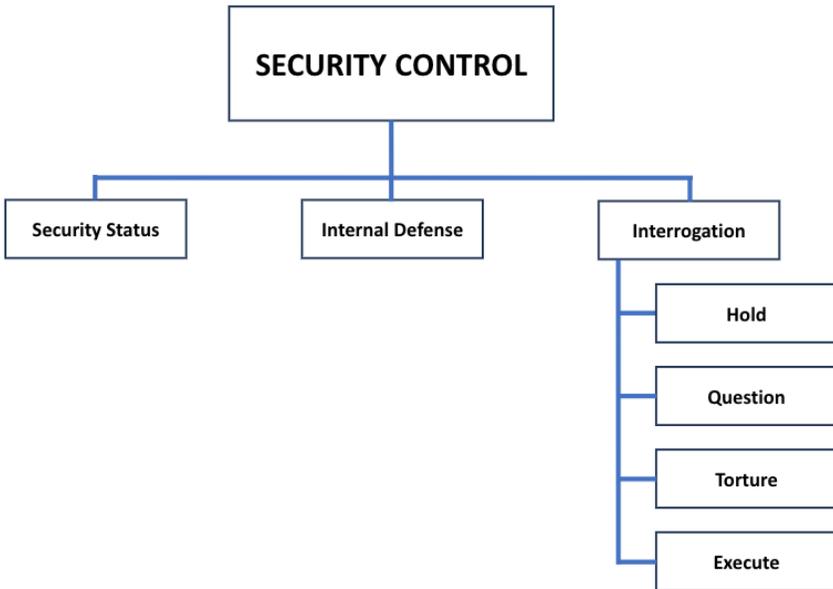
Figure 60. Security Control Command Structure

1.5.1 Security Status [S]/[S]

Selecting this option brings up a display showing the number of live captives on board your ship, their current general health (good, fair, or poor), and the number of captives that have died since being taken on board.

1.5.2 Internal Defense [S]/[D]

An Alliance ship adjacent to yours can transport space marines aboard your ship if your shields are down. This is most likely to occur when you are towing a disabled but hostile

enemy ship. Selecting this option allows you to defend your ship from enemy boarders. The process is similar to the way you send a boarding party to attack an enemy ship (5.2.2). The Internal Defense Display (Figure 61) appears on your screen.

Figure 61. Internal Security Defense Display

The display shows a profile of your battlecruiser. Initially, all of your shock troops will be in one section near the center of your ship. Move the cursor icon to that location ([Shift][F5] will move the cursor directly there) and press [Spacebar] to pick up a shock troop team. Then use the direction keys to move that team to the section where you want to station it, and press [Spacebar]. Unlike the procedure for a boarding party, you can locate defenders inside critical sections. Repeat this process for as many teams as you want to put on defense. When your deployment is complete, press [Enter] to confirm your selections. You cannot control the movement of your troops after enemy marines have boarded your ship (tactical decisions are made automatically), but you can set or move your shock troops at any time before the enemy has boarded. To view the progress of the battle, continue to watch this display, or reselect this option after you have executed a different command.

1.5.3 Interrogation [S]/[I]

This command option allows you to try to gain important information from captives. The chance that a prisoner will talk is related to the method of interrogation used, and to the captive's resistance factor. In general, UGA space marines have a high resistance factor (least likely to talk), regular crew members have a medium resistance factor, and civilians (captured passengers from a starliner) have low resistance. If you don't have any captives

onboard, when you select this option, you will receive a message from Security saying there are no captives and the Security Interrogation options will not be shown. If you do have captives, then there are four interrogation options:

1.5.3.1 Hold [S]/[I]/[H]
This option gives your prisoners a chance to recover from injuries and improve their health if they have been wounded or tortured. This will ensure that as many captives as possible will live to become slaves and healthy slaves bring a higher price.. However, while prisoners are simply being held in their cells, they will not talk.

1.5.3.2 Question [S]/[I]/[Q]
This is the lowest level of interrogation; you do not either harm or help the health of captives by merely questioning them. Few prisoners talk under questioning. This is the default mode when captives are first brought aboard.

1.5.3.3 Torture [S]/[I]/[T]
Torturing captives is the method most likely to elicit information, but harms and may even kill them. However, since humans are a puny and weak species, there is a good chance that some will talk shortly after you begin torturing them.

1.5.3.4 Execute [S]/[I]/[E]
Executing prisoners as a means of getting information has varying results, Alliance Space Marines become twice as determined to suffer and die without divulging information. Passengers become twice as eager to do whatever you ask. Either way, an execution, done in style by your chief of security (who learned his techniques from the Emperor himself!), boosts the morale of YOUR crew. There are also creative ways to execute captives and boost the morale of your crew, such as using teleporters to beam them into a sun, a gaseous giant, a planet with a poisonous atmosphere, or into empty space.
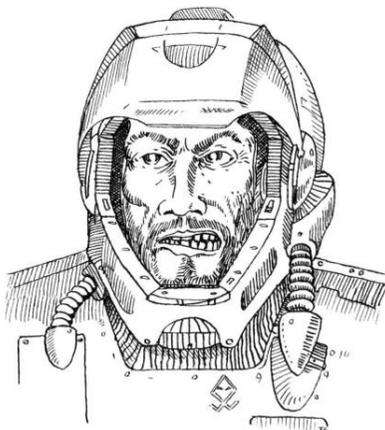
1.6 COMMUNICATIONS CONTROL [M]

The Communication System of your battlecruiser includes both internal and external communications. It is managed through Communications Control (Fig. 62). It is one of the primary systems of the ship that can be damaged during combat or by other hazardous events. There are five command options in the Communications Control menu:
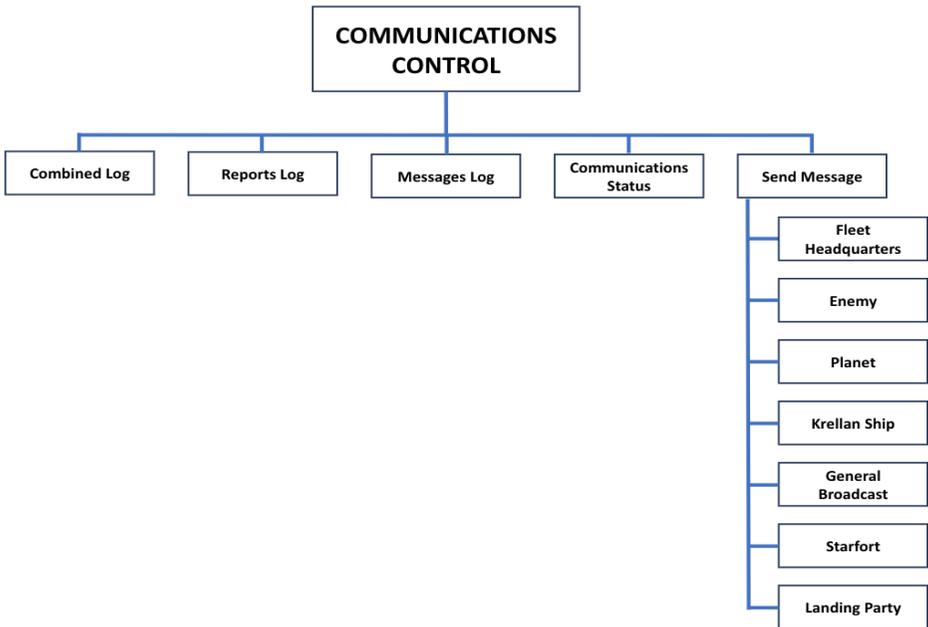
Figure 62. Communications Control Command Structure

1.6.1 Combined Log [M]/[C]

Unless ship logs have been turned off (via a switch in the Settings command in Computer/Special Services), all internal reports you receive are kept in the Reports Log with the MET of the report. All external messages received by your ship are kept in the Messages Log, also with the MET of reception. However, there are times when it is more convenient to look at the reports and messages together in the sequence they were received. For this purpose, a new log has been added – Combined Log (Fig. 63). The program keeps track of the order the reports and messages were received and shows them together in that order in the Combined Log. There are still times when you are definitely looking for a specific report or a specific external message, so it is more convenient to look at the shorter specialized logs. You have the same options available with the Combined Log as you do

for the other logs, such as Find. The available options are shown in the menu by pressing [M]. You remove the menu by pressing [M] again.
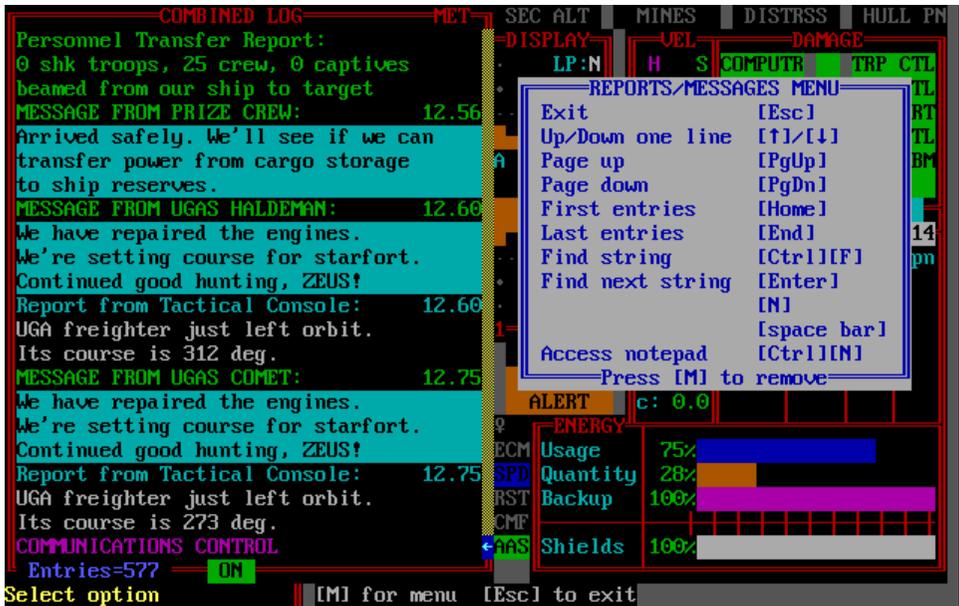
Figure 63. Combined Log with Menu

At the bottom of the Log window (applicable for all three message logs), there is an indicator switch that shows the status of the logs – "ON" means that the logs are being updated automatically, while "OFF" means that logging has been switched off. *Currently this switch has been disabled and is always in the ON position.*

1.6.2 Reports Log [M]/[R]

This option opens a Reports Display window, which allows you to review the most recent reports you have received from any of your ship's officers or console operators. When the reports window is filled and new reports become available, they will be inserted at the bottom of the screen, and the oldest reports will be scrolled off the top. In the heat of battle, you may need to freeze the simulation and use this option to view the reports that moved by too fast for you to read. Along with each report is a number indicating the mission elapsed time (in days) when the report was received. To remove the Reports Display and continue with your mission, press any key.

1.6.3 Messages Log [M]/[M]

Selecting this option brings up a window that is similar to the Reports Display, but which contains communications received from sources outside your ship. You can receive

messages from your landing parties, starforts, your escorts, Alliance ships, or any Krellan vessel.

1.6.4 Communications Status [M]/[T]

This option provides information about your Communications System (Fig. 64). The Communications station reports on the functional status of communications and the current operational capability (0-100%). It also reports the number of log entries that have been made in any of the three message logs (Combined, Reports, and Messages). It also provides information about the distress call(s) by enemy ships that have been detected. If a distress is being detected, then the Comm Console will report on the UGA ship type and system sector location if it is in your local system, or that it is in orbit with you if that's the case. If the enemy ship is not in your system, then the report will tell you that an enemy ship in an unknown regional location is sending the distress call. If your communications system is above 50% operational, then the

Figure 64. Communications System Status Report

comm will give you the bearing to the target. If you then move to another distant regional location and get another bearing on the target, you will be able to triangulate its location.

1.6.5 Send Messages [M]/[S]

This command allows you to transmit communications to one of several destinations. The Send Message Window will appear across the bottom of the display (Figure 65):

Figure 65. Send Message Window

First, you must select a destination; a list of messages you can send to that destination will then be displayed. Move the highlight box to select the message you want to send, or press the appropriate key. After you make your selection, the command line will show Send and Cancel. Press [S] or [C] as desired. When you send a message, you will not see the actual text of the communication, but you will receive an acknowledgment or reply (if appropriate).

An "*" in the A column of the display indicates an active message - a request that has been sent but not yet fulfilled or acted on. To cancel an active message, select that message and press [C]; the asterisk will disappear. The TIME/LAST column shows when the corresponding message was last sent.

The six possible destinations for messages are:

1.6.5.1 **Fleet HQ [M] / [S] / [F]**
The messages you can send to Imperial Krellan Fleet Headquarters are *Emergency Distress Call* [E], *Request Help* [H], *Request Supply Fleet* [S], and *Request Invasion* [I].

1.6.5.2 **Enemy [M] / [S] / [E]**
You can send a message to an enemy ship or starbase that appears on your Tactical Display or Orbital Display. When you select this destination, a Target Designator Box will appear, and you must choose which target will receive the message. The messages you can send to an enemy ship or starbase arc *Demand Surrender* [D] and *Offer to Surrender* [O].

1.6.5.3 **Planet [M] / [S] / [P]**
You must be in orbit around a planet in order to communicate with it. The messages you can send to a planet are *Establish Contact* [E], *Demand Surrender* [D], *Request Treaty* [T], and *Request Supplies* [S].

1.6.5.4 **Krellan Ship [M] / [S] / [K]**
When you select this destination, a display of all Krellan ships in the region will appear. Move the highlight box to designate the ship you want to communicate with. The messages you can send to another Krellan ship are *Request Help* [H], *Request Tow* [T] and *Request Rendezvous* [R].

1.6.5.5 **General [M] / [S] / [G]**
Selecting this destination will send a message to all Krellan-occupied areas in the region - ships, planets, starforts, and bases. The messages you can send to general destinations are *Emergency Distress Call* [E] and *Request Help* [H].

1.6.5.6 **Starfort [M] / [S] / [S]**
When you select this destination, you can send a message to the starfort located within your current regional location. The only message allowed is *Request Tow* [T]. If you are within

10 points of a starfort, its tractor beam will be effective; if you are farther away, the starfort may or may not be able to send a ship out to give you a tow.

1.6.6 Message Descriptions

All of the valid messages are described below.

1.6.6.1 Demand Surrender [O]
Asks a planet, enemy ship, or starbase to surrender to your ship.

1.6.6.2 Emergency Distress Call [E]
A top priority call for help; should be sent only as a last resort.

1.6.6.3 Establish Contact [E]
If you do not know anything about the natives of a planet you are orbiting, you may be able to contact them by sending this message before you survey the planet with a landing party. Their technology level must be high enough to at least have radio (technology level 4).

1.6.6.4 Offer to Surrender [O]
Asking for an enemy ship or starbase to accept the surrender of your ship. The Alliance will usually only believe your offer if your ship is badly damaged, but if so, will probably stop shooting long enough for you to blast them to space dust.

1.6.6.5 Request Help [H]
A call for reinforcements, not a distress call.

1.6.6.6 Request Invasion [I]
Asks for the planet you are orbiting to be the target of an invasion. If Krellan Fleet Headquarters grants your request, an invasion fleet will be dispatched to the planet. This message can only be sent if you are in orbit around the planet you want to have invaded. If you are of rank Commander or higher, Fleet Headquarters will give you the option to personally lead command of the invasion.

1.6.6.7 Request Rendezvous [R]
Asks a ship to move adjacent to you so that you can perform a material or personnel transfer.

1.6.6.8 Request Supplies [S]
Asks the natives of a planet to provide you with supplies, avoiding the need to send a landing party to the surface to gather supplies. If the planet has no supplies, the message will not be sent.

1.6.6.9 **Request Supply Fleet [S]**
Asks for a supply transport to be sent to rendezvous with you.

1.6.6.10 **Request Tow [T]**
Asks for your vessel to be taken in tow by the tractor beam of a starfort or another Krellan ship and towed to the nearest starfort.

1.6.6.11 **Request Treaty [T]**: Asks for the establishment of a treaty between the planet's government and the Krellan Empire. If the planet is Krellan-owned or jf a treaty already exists, the message will not be sent.
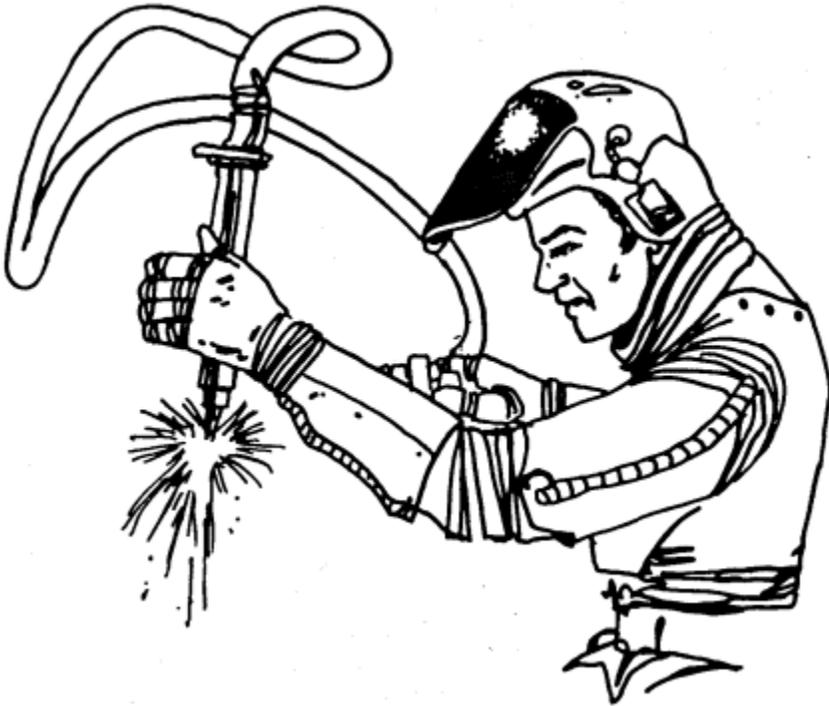
1.7 STRATEGIC COMMAND [G]

This command enables you to access the rest of the fleet for information at the lower ranks or to command at the higher ranks. It is also the command that provides access to planetary Orbit Control, conducts or monitors planetary invasions, sets up bombardments, and controls your Battle Fleet escorts. There are six command options in the Strategic Command menu as shown in Figure 66:
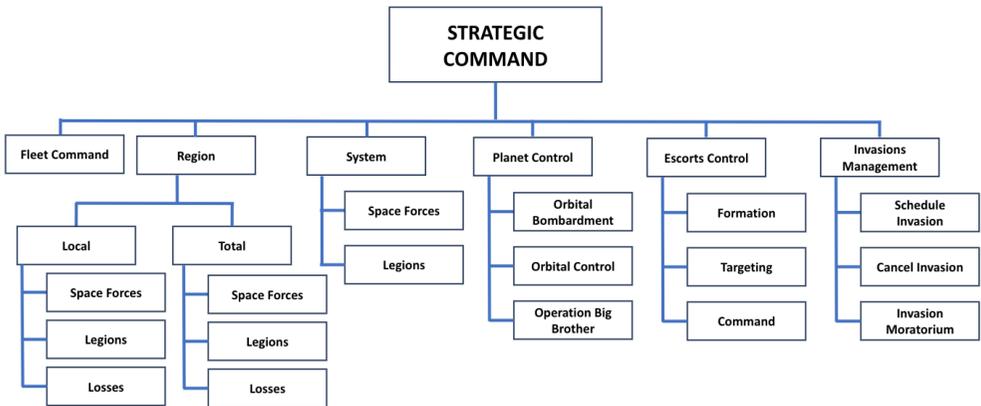
Figure 66. Strategic Command Structure

1.7.1 Fleet Command [G]/[F]

This command option takes you to the Fleet Command Display from where you monitor and give commands (if you are of sufficient rank) to any or all of the ships in the Krellan fleet, as well as monitor the status of invasion fleets, starforts, and even captured enemy ships or starbases. This is an alternate way of managing the Krellan forces to the Space Forces option and is described in PART III – COMMANDING THE FLEET.

1.7.2 Region [G]/[R]

Selecting this option allows you to observe or control the Krellan forces anywhere in the region. When you execute this command, a War Map (1.1.7.3) will be displayed, from which you can obtain information about all other Krellan forces in the region. In addition, if your rank is Subadmiral or higher, you can send orders to all other Krellan ships in the

region, instructing them to move to particular regional locations and perform certain duties. Executing the Region command takes you to the part of the menu where you can view a summary of the status of Krellan forces. The options *Local* and *Total* will appear on the command line. To examine the Krellan forces within a particular star system, move the Target Designator Box to that regional location and press [L] for Local. To examine the Krellan forces within the entire region, press [T] for Total. After you select local or total, the command line will display the options *Space Forces* and *Legions*. If you selected Total you have an additional option, *Losses*. This option is only meaningful in the regional context which is why it is not available if you chose the Local option.

1.7.3 System [G]/[S]

When you execute this command, a System Map (1.1.7.1) will appear on your screen. The options available under this command have the same function as in the Region (1.7.2), except that information and orders pertain only to Krellan forces within your current regional location and the *Losses* option is not available. If your rank is Prefect or higher, you can send orders to all other Krellan ships in your regional location, instructing them to move to particular system locations and perform certain duties.

1.7.3.1 Space Forces [G]/[R]/ ([L] or [T]) /[S] or [G]/[S]/[S]

This command displays and controls all the Krellan ships and starforts in the currently selected domain (*Region*, Selected *Local* System, or Current *System*). This command is described in PART III – COMMANDING THE FLEET.

1.7.3.2 Legions [G]/[R]/ ([L] or [T]) /[L] or [G]/[S]/[L]

This option calls up the Legions Information Display (Fig. 67). Legions are used to conduct planetary invasions and defend planets from invasion by the Alliance. The display contains the following facts about each legion:

ID#, legion identification number, from 1 to 100.

Name, awarded to a legion when it earns five battle honors.

Warriors and **Shk Trps**, number of each type currently in the legion. A full-strength legion has 7000 warriors and 3000 shock troops.

Hnrs, the total number of battle honors the legion has received for all missions counted in your service record. Each battle won earns one or more battle honors, depending on the quality of the opposition defeated.

S.Rt, the legion's battle rating (combat effectiveness), expressed as a percentage. A legion with no combat experience starts with a battle rating of 70%. The rating increases as battles are won, and decreases if battles are lost. If a legion suffers heavy casualties and is later supplied with inexperienced replacement troops, its battle rating will drop because of the number of soldiers in the legion who have not seen combat.

R.loc, the legion's current regional location.

Status of the legion, one of eight possibilities:

In KS-##: Aboard troop ship KS-## .

Invasion SS-##X: Invading planet SS-##X.

Figure 67. Legions Information Display

In KS-##/Orbit SS-##X: In troop ship KS-## orbiting planet SS-##X.

In KS-##/Docked SF-#: In troop ship KS-## docked at starfort SF-#.

In SF-#: In starfort SF-#.

On SS-##X: On planet SS-##X, but not invading.

Destroyed: Eliminated, no longer available.

In reserve: Has not yet been committed to this region or has left to be refurbished..

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1.7.4 Planet Control [G]/[P]

This command allows you to control combat on the planet you are orbiting. You can use your ship's weapons to bombard targets on the planet surface, control an invasion of the planet, or start Operation Big Brother.

1.7.4.1 Orbital Bombardment [G]/[P]/[M]

Executing this command brings up the Bombardment Command Display, which provides information on the planet you are orbiting and your ship's current bombardment settings (Fig. 68).
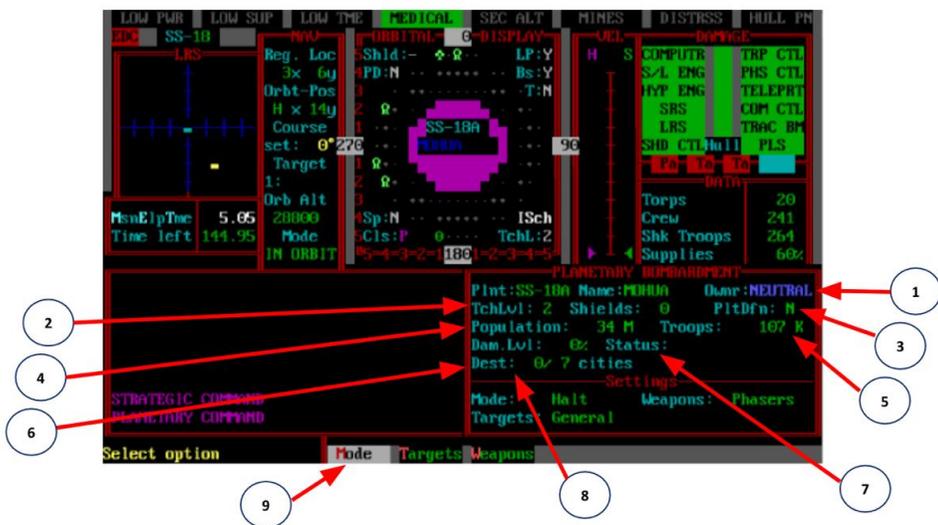
Figure 68: Planetary Bombardment Display

The display contains the following facts:

1) **Plnt, Name, Ownr**:, the planet's ID number, name, and ownership (if known).
2) **TchLvl**: the planet's technology level (A.4).
3) **Shields** and **PltDfn**: the current strength in units of the planet's defense shields, and whether or not the planet has an activated planetary defense system.
4) **Population** of the planet in millions ("M") or thousands ("K").
5) **Troops**: the number of military troops present, if known.
6) **Dam.Lvl**: the current damage level of the planet surface, in percent.
7) **Status** of the planet (if known), "Hostile", "Friendly", "Treaty", or "Surrender".
8) **Dest/cities**: the number of cities that have been destroyed and the total number of cities on the planet.
9) **Settings**: your ship's current bombardment settings: Mode, Weapons, and Targets (see the following sections).

1.7.4.2 Mode [G] / [P] / [M] / [M]

This command allows you to set the firing mode for the weapon(s) with which you are conducting the bombardment:

1.7.4.2.1 *Halt* **[H]** stops a bombardment in progress and allows you to direct your weapons against other targets in the star system.

1.7.4.2.2 *Salvo* **[S]** sets your weapons so that only one round is fired at a time, on your command.

1.7.4.2.3 *Continuous* **[C]** sets your weapons to fire repeatedly without any direct control from you; as soon as your phaser bank is recharged or your torpedo tubes

are reloaded, the weapon(s) will be fired again.

The default mode setting, in effect at the start of a bombardment, is *Halt*.

1.7.4.3 Targets [G] / [P] / [M] / [T]
This command allows you to select the type of targets you want to fire at:
> 1.7.4.3.1 *Cities* [C] will target your weapons to fire only upon areas that are heavily populated or of military importance.
> 1.7.4.3.2 *General* [G] will leave the selection of targets up to your Weapons Officer (who may select a city or a military target, but may also choose to devastate a section of countryside just for fun).

The default target selection is *Cities*.

1.7.4.4 Weapons [G] / [P] / [M] / [W]
This command allows you to select which weapon systems you want to use in the bombardment, either *Phasers* [P], *Torpedoes* [T], or *Both* [B]. The default selection is *Phasers*.

1.7.5 Orbital Bombardment

Once you have selected an active firing mode (*Salvo* or *Continuous*) and chosen your targets and weapons, begin the bombardment by pressing [Alt][B] for continuous bombardment, or your weapons keys: [Insert] or [Delete], In Salvo mode, your weapon(s) will fire once each time you press [Alt][B]. In Continuous mode, the command acts as a toggle; once you start the bombardment, it will continue until your weapons are depleted or until you press [Alt][B] a second time.

> **WARNING:** While in Continuous mode, an enemy with planetary defenses will continuously return your fire, which could cause the rapid destruction of your ship.

If your bombardment inflicts a great amount of damage and the planet's natives can communicate with your ship, they may attempt to surrender. To formalize the surrender, you must send down a landing party team to negotiate [E] / [T] / [L]; as a result, you may be able to establish a treaty.

During a bombardment you will receive a message from your weapons console each time your weapons are fired. You will be notified of the size of the hit, the current strength of the planet's shields, and if any weapons of the planetary defence system have hit you. A planet that is destroyed by your phasers and torpedoes as the result of a bombardment is sterilized and turned barren, and is reclassified as a Class B planet.

The function key commands used to fire your weapons will still operate as usual while a bombardment is in progress.

1.7.5.1 Orbit Control [G]/[P]/[O]

This command allows you to initiate and control an invasion of a planet you are orbiting, if certain conditions are met; or, if the planet is Krellan, allows you to transfer legions between the planet and any orbiting troop transports. Executing this command will bring up the Orbital Control Display (Fig. 69).

Figure 69: Orbital Control Display

You can initiate an invasion if all of these conditions are met: 1) your rank is at least Subcommander; 2) all of the planet's defence shields have been knocked out; 3) there is a Krellan invasion force (one or more troop ships with legions on board) orbiting the planet; and 4) there are no enemy ships in orbit around the planet.

1.7.5.1.1 Orbiting an Enemy Planet - If you execute the Orbital Control command while in orbit around a planet that is not under Krellan ownership, refer to Section 2 for instructions on how to conduct an invasion.

1.7.5.1.2 Orbiting a Krellan Planet - You cannot initiate an attack of any kind against a planet under Krellan ownership. However, if your rank is Subcommander or higher, you can order the transfer of legions between the planet and any orbiting troop transports, using one of three options:

Pick Up [G] / [P] / [O] / [P]: Transfers as many legions as possible, one by one, from the planet to orbiting troop transports (up to the limit of four legions per ship).

Drop off [G] / [P] / [O] / [D]: Transfers all the legions from orbiting troop transports to the planet surface, one by one. A Krellan base will automatically be established on the planet (if one was not located there already) as soon as one legion is dropped off.

Halt [G] / [P] / [O] / [H]: Stops any transfer in progress; if you do not want to pick up or drop off all available legions, select this option when you want the transfer to be discontinued.

1.7.4.3 Operation Big Brother [G]/[P]/[B]

Operation Big Brother is the Krellan plan to capture low or medium- Technology Level (3, 4, or 5) planets that can support Krellan life (Class *K, A,* or *D*). It cannot succeed on a planet with Alliance troops present, or a planet that has a unified government. After selecting this option, you will be told if the target planet is suitable for conducting the operation (although you may not know if the planetary government is unified). If it is a legitimate target, you will be prompted for confirmation to begin the operation. A special assault team is sent down to establish a puppet emperor in a city. Then, by using Krellan manufacturing technology combined with the planet's manpower and resources, the Empire can begin to conquer the planet. The special assault team consists of 10 crew members (eight production/technology experts, one doctor, and one alienologist) and 20 shock troops (a commander, chief of staff, eight training experts, and ten security personnel). The minimum number of days required to successfully complete the operation is equal to the planet's technology level multiplied by 10; for example, if the target has a Technology Level of 4, Operation Big Brother will require at least 40 days to conquer the planet.

When you get the survey report from your landing party, if the planet and conditions are suitable for OBB, your Executive Officer will let you know. In summary, the criteria are:
- TL 3-5 planet of class K, A, or D
- no unified government for the planet
- neutral planet, i.e., no UGA presence (e.g., UGA forces)
- there are at least (TL planet) x 10 days left in the mission
- you have enough crew (10) and shock troops (20) for the OBB landing party. As with any landing party, they can only be formed if it will leave enough crew and shock troops to run your ship at a minimum level.

If you decide to initiate Operation Big Brother, you first have to beam up your landing party on the planet. OBB cannot be started with any other Krellans there. From the Main Menu you should select Strategic Commands/Planetary/Operation Big Brother/Initiate to get to the initiation of OBB. However, from the Landing Party display, you can very

quickly get to the OBB initiation thanks to the buffering of keystrokes in the command line. As soon as your LP is aboard, press [Alt][M]/[G]/[P]/[B]/[I] without any pause and you will be taken right to the OBB display where you will be asked if you want to initiate OBB. If you answer affirmative, your landing party of 30 members will beam down and send you a message that they have arrived and initiated their mission. You can only have two Big Brother Operations occurring at a time.

You can get the status of your Big Brother Operation at any time by accessing the OBB command and selecting Status. This shows a box that can show the status of two OBBs currently underway (Fig. 70). In the first column is

Figure 70. OBB Status Window

the identification of the planet where the OBB is located. The second column shows the number of the landing party (LP) members that are still alive (30 is full strength), then is the *Operation Elapsed Time* (**OpET**) which shows how many days the landing party has been on the planet since the initiation of OBB. To the right is a bar that shows the progress of the operation. It is measured as a percentage of the total number of cities remaining on the planet (destroyed cities do not count). The planet starts with all red (enemy-controlled) cities. When your team is leading a planetary army to capture a city, it is labeled as disputed and colored magenta. There can only be two disputed cities at a time. Once a city is disputed, it can go either way – back to enemy control (red) or Krellan control (green). Hopefully, during the mission, you will see the progress bar turn more green and less red with a magenta band between them. The tic marks on the horizontal line mark the 10% points on the progression bar. At 70% the tic color is bright yellow. This is the point the green bar has to reach before the enemy will consider surrendering. If the enemy gets the upper hand, you might have to go back and cancel the operation and retrieve the surviving members of your landing party. If you don't make it back in time, they might all be killed. This will happen if the enemy recaptures all the cities. If your operation is successful, the landing party will send you a message and the planet will become part of the Krellan empire and a base will be established there. If the operation is not going well and you don't want to lose the survivors of your landing party, you can cancel the operation if you are orbiting the OBB planet. In this case, the OBB will be cancelled and your landing party beamed aboard. This will count as a failed invasion mission.

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1.7.5 Escorts Control [G]/[E]

When you reach the rank of Centurion, four destroyers will be assigned to you as escorts, to provide support for your battlecruiser. You can assign them to a particular formation around your ship, order them to attack a particular target within the star system you are in

(they are armed with torpedoes, but not phasers), and give them other commands. When you dock with a starfort, any escorts under your command will also be automatically repaired and resupplied. The achievements of your escorts (ships destroyed, planets scanned, etc.) are counted as part of your Personal Mission Tally (1.4.4.1) for as long as the ships remain attached to you. If an object comes within range of the sensors of one of your escorts, you will be able to obtain information about that object just as if you had scanned it yourself. (This is especially useful when your escorts are in System Search formation (1.7.5.1.1)

There are three Escort Control options: *Formation*, *Targeting*, and *Command*.

1.7.5.1 Formation [G]/[E]/[F]
This option allows you to designate how your escorts are deployed around your ship: either one of fifteen set formations, a random formation, no formation (which releases your escorts to operate on their own), or the System Search formation (1.7.5.1.1).

Executing this command calls up the Formation Command Window. To view the formations, press [+] and [-] or [↑] and [↓]. When the currently assigned formation is displayed, an "*" will appear next to the formation number in the window. When you have the desired formation in the window, press **[Enter]**. The available escort formations are shown in Figure 71.
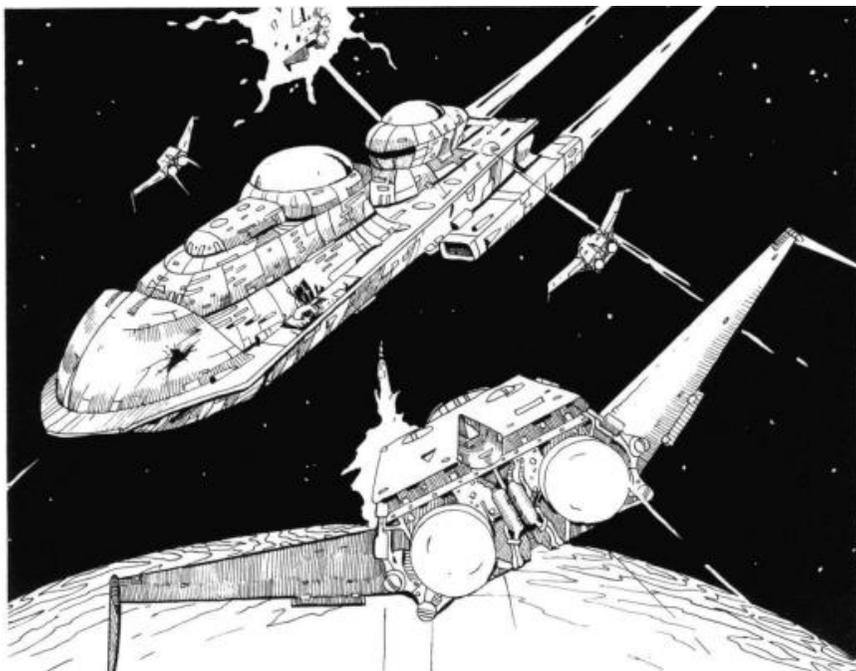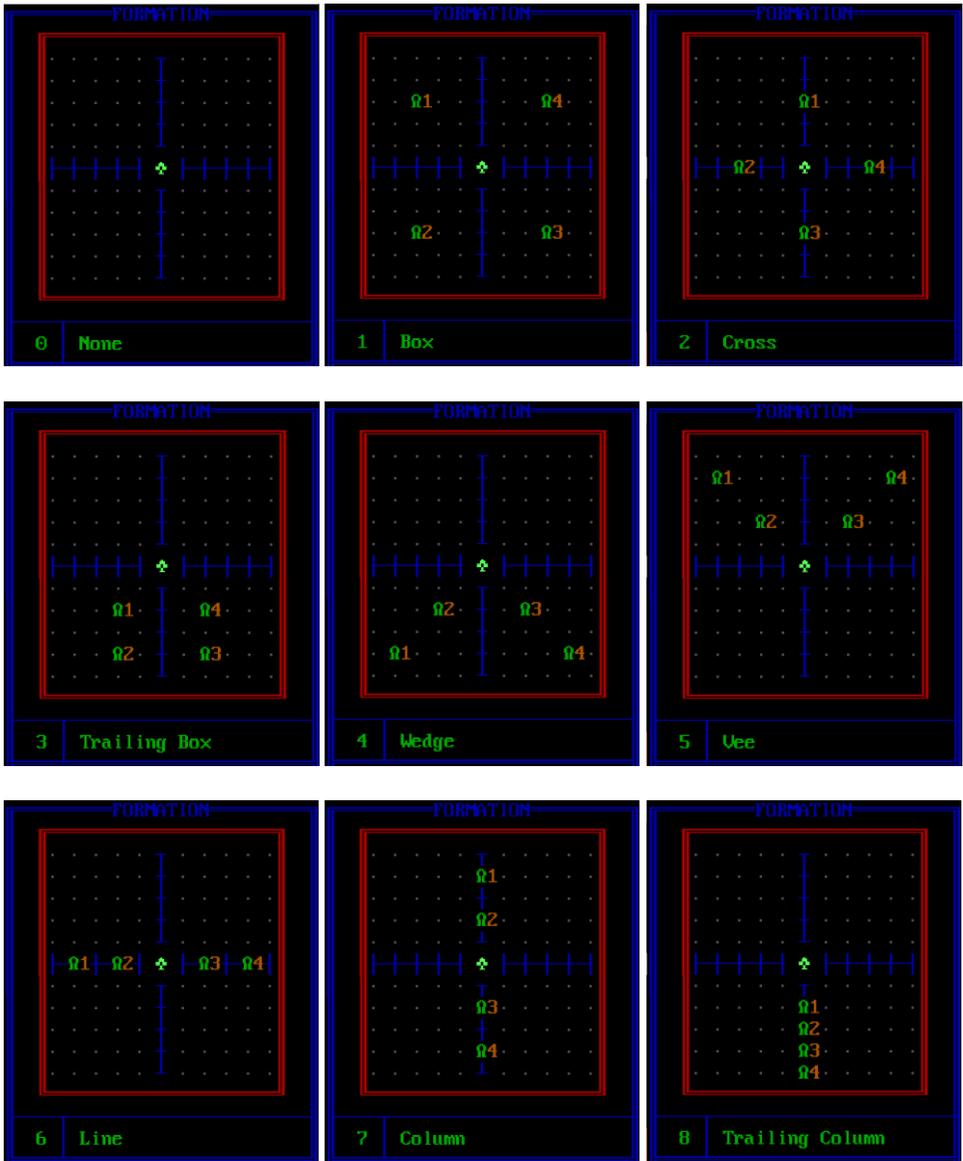
Figure 71a. Escort Formations 0 – 8
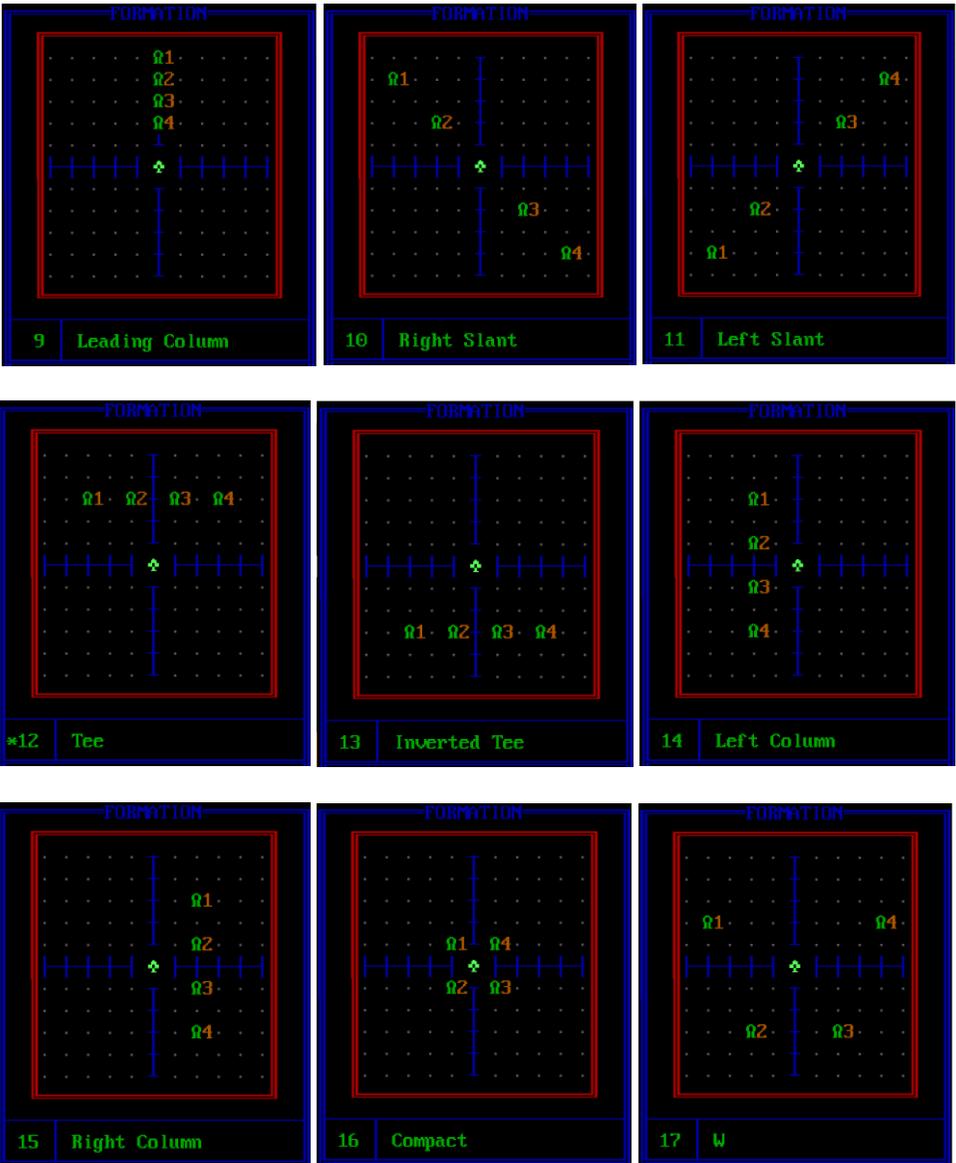
Figure 71b. Escort Formations 9 –17
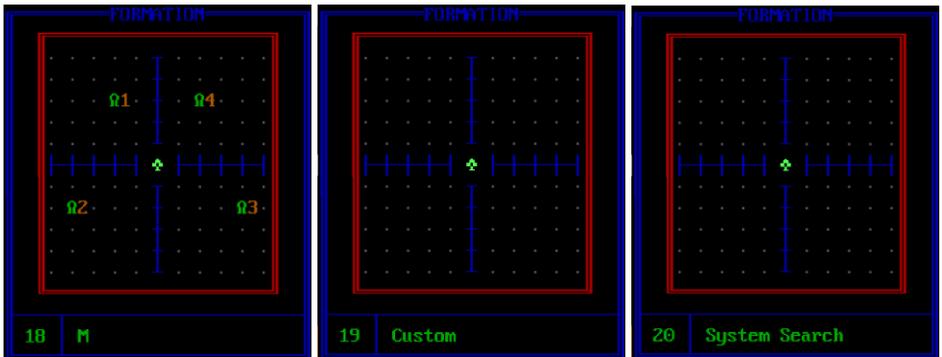
Figure 71c. Escort Formations 18-20

When you are eligible to have escorts, four destroyers will be docked with you at the starfort at the beginning of each mission. If you want them to follow you, you must assign them to a formation before leaving the starfort.

Once your escorts are on-station, they will mimic the movement of your ship - even during evasive maneuvers - unless it is necessary for one of them to break formation to avoid hitting an object. After the collision has been averted, the escort will move to resume its position in the formation.

If you change formation while moving in normal space, your escorts will gradually move to their new positions while your ship is moving. If your ship is stationary when you order a new formation, you must then execute the Rest state command. While your crew is resting, the escorts will move into their newly assigned positions. When they are in formation, you may terminate the Rest state and continue with the mission.

1.7.5.1.1 System Search - This is a special formation useful for obtaining a quick survey of a regional location. When you select the System Search formation, your escorts will move to the four corners of the system. Their long-range sensors can then scan the entire star system. You will be informed if the destroyers detect any enemy objects. Once in position, the escorts will remain there until you assign them a different formation.

1.7.5.1.2 Escort Formation Editor - When selecting a new formation in the Escort Formation Command, if you select Formation #19 *Custom*, then the Escort Formation Editor will appear adjacent to the Formation Window (Fig. 72). The display in the editor is blank, i.e., it does not show any escorts. It only shows the x and y axes with your ship at the center, and with the grid pattern for the sectors within the display. At the bottom of the window is the menu for the editor.
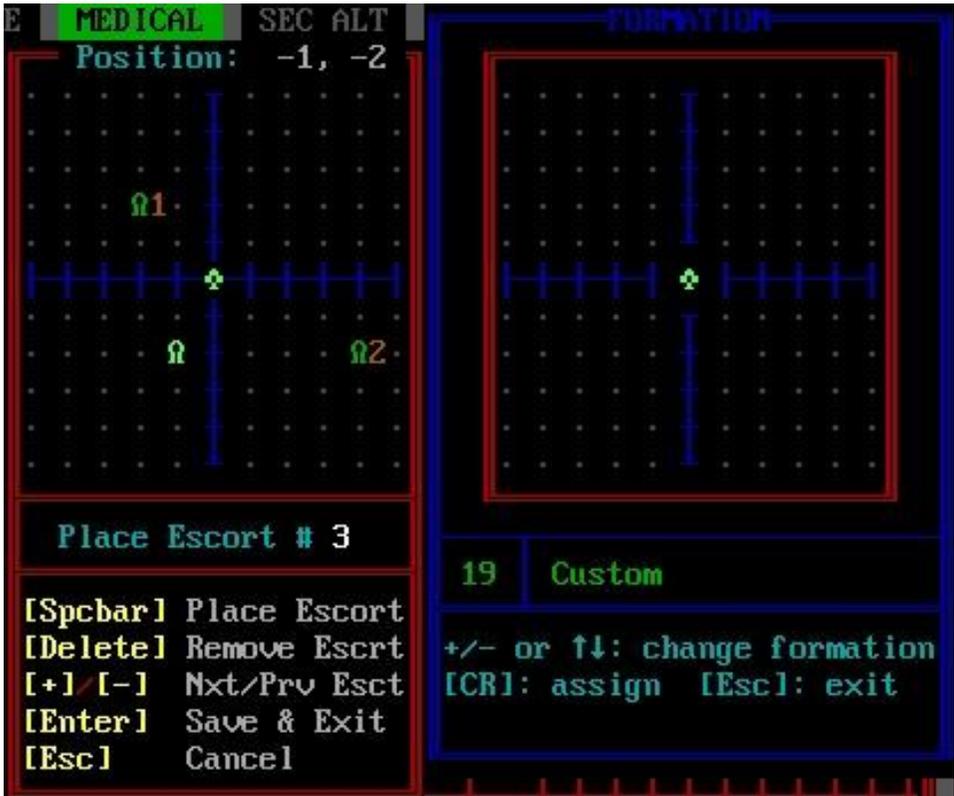
Figure 72. Escorts Targeting Command Window

How to Use the Editor
Note that pressing [Esc] at any time will exit you from the editor without saving anything you have done.
1. *Placing the Escorts*
    • The cursor starts centered on your ship. Move the cursor to the position you want to place Escort #1. The moment the cursor moves from your ship's position, it will be designated by a bright green Krellan destroyer (escort) symbol. Between the display and the menu, the instruction will appear telling you which escort you are currently placing. The current position (x, y) of the cursor relative to your ship's symbol is shown at the top of the display. Looking at the figure, the bright green destroyer symbol (cursor) is at an x-position one point to the left of center,

so x=-1, and the y-position is two below center, so y=-2, and the cursor position is -1, -2.

- When you have reached the desired position, press the [Spacebar] and the escort will be placed there. It will change to standard green, and the number of the escort will appear adjacent to it in brown. The selection will automatically increment to the next escort.
- Repeat this cycle for the remaining three escorts.

2. *Removing an Escort*
   - You can only remove the escort that is the current selected one as shown in the central instruction window, and only an escort that has been placed.
   - If the current selected escort is not the one you want to delete, you can press the [+] or [-] keys to change it.
   - Once you have selected the number of the placed escort you want to delete, press [Delete] and it will be deleted. This will not affect the numbers of other escorts that have been placed.

3. *Saving the Formation*
   - Once you are satisfied with your formation, you can save it by pressing [Enter]. Note that it will not save a formation if you have not allocated positions for all four escorts.
   - The Escort Formation Editor window will disappear, and your saved formation will appear in the #19 Custom Formation window on the right. From this point on, whenever you bring up the Formation Window, this formation will always be shown and can be selected or deselected like any of the other formations. If you want a different formation, then just go back to the editor, design the new formation, and when you save it, it will replace the former formation.

1.7.5.2 Targeting [G]/[E]/[T]

This option allows you to specify weapon settings and firing orders for your escorts from the Escorts Targeting Command Window (Figure 73).

Figure 73. Escorts Targeting Command Window

This window is divided into the following four parts:

1) Escort List - A list of your current assigned escorts, each with its identification number (lD#), NAME, and relative position (REL.POS) to your ship. The relative position is given in x,y system coordinates, where positive x is to your right, and positive y is in front of your ship. The letter in the T column indicates the current targeting orders of the escort, and is the first letter of the corresponding targeting option.

2) Escort Selection - This is where you select the escort(s) you want to command. The numbers correspond to the identification numbers to the left of the escort name in area 1. To select an escort, move the highlight cursor box to the escort numbers using [←] and [→]. To set your selection, press [+] or [Ins], after which an "*" will appear next to the number. You can issue the same command to all the escorts by selecting "ALL".

To deselect an escort, move the highlight box to that escort and press [-] or [Del] To deselect all escorts, move the cursor to "ALL" and press [-]

3) Escort Commands - These are the commands you can issue. First, select the escort(s) you want to command. Then move the highlight box to the command you want using [←] and [→] and press **[Enter]**, or press the capitalized letter in the command name.

4) Controls Summary - This area summarizes the keystrokes necessary to select and command your escorts.

The commands available to your escorts are:

Free fire [F]: The default command; allows escorts to choose their own targets and fire their torpedoes at will.

Disable only [D]: Similar to free fire, but escorts will fire to disable rather than destroy; they will not shoot at a target that is already disabled. If the target is disabled after the torpedo is fired, the torpedo will not abort further affect the target.

Slave to us [S]: The selected escorts will target the same object(s) and use the same fire setting(s) as you have assigned to your ship's torpedo control system.

Exclusive fire [E]: Escorts can shoot at targets not targeted by your ship.

Hold fire [H]: The escorts will cease fire and not use their weapons again until you issue them a different targeting command.

Bombardment [B]: If escorts are orbiting a planet, they will use their torpedoes to bombard it at will, in Continuous firing mode. If your ship is also conducting bombardment, you can achieve a similar effect with the Slave to Us command; the escorts' firing mode will be the same as yours.

1.7.5.3 Command [G]/[E]/[C]
This option allows you to issue commands to one or more of your escorts, and to view data on the condition and status of each destroyer. The Escorts Command Window will appear, and is identical to the Escorts Targeting Command Window (Fig. 74) except for the list of available commands. The commands and their effects are as follows:

Data [D]: Gives you a full report on the status of the selected vessel(s). This command brings up a display identical to the Krellan Ship Data Display (Fig.100). Press any alphanumeric key to remove the window. If you have issued this command for more than

one escort, the next ship display will automatically appear when you remove the current one.
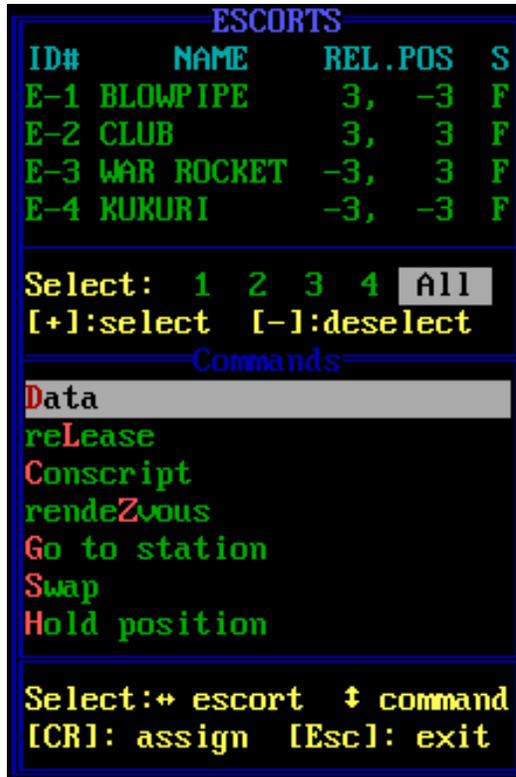
Figure 74. Escorts Commands Window

Release [R]: Releases the selected destroyer(s) from escort duty. A released destroyer becomes an independent ship, and its achievements thereafter are recorded with the Krellan Mission Tally rather than your personal record.

Conscript [C]: If you have fewer than four escorts, you can press a ship into service by using this command. The would-be escort must be a destroyer within range of your Tactical Display. When you issue this command, a Target Designator Box will appear in your Tactical Display. Move it to the destroyer you want to conscript and press **[Enter]**. You can only conscript independent destroyers that are not escorting another ship. If you try to conscript an escorting destroyer, you will receive the message "ALREADY AN ESCORT". If you are at least of Prefect rank, you will be prompted to override the escorting duties of the destroyer attached to another ship.

If you want to assign the new escort to a specific position, select that position in the Escorts Command Window before executing the *Conscript* command. If you do not specify a

position, the new ship will be assigned to the lowest-numbered available slot. For example, if you have escorts in the #1 and #2 positions and you want to conscript a destroyer into position #4, you must select that position. Otherwise, the new escort will be put in the #3 position.

Rendezvous [Z]: Orders the selected escort(s) to move adjacent to your ship and remain stationed there. This command is useful if you want to use teleporters to transfer material or personnel between ships.

Go to station [G]: Orders the selected escort(s) to resume the preassigned formation after a rendezvous.

Swap [S]: Transposes the position and escort number of two escorts, or of a escort and an empty slot. For example, if you have an escort in the #1 position but not in the #3 slot, you can make the #1 ship into #3 by swapping the two positions. You must select two escort positions for this command to function.

1.7.6 Invasions Management [G]/[I]

Executing this command brings up the Invasions Display (Fig. 75), which contains information about any planetary invasions that are scheduled or underway. If your rank is Subadmiral or higher, you can use the options under this command to schedule or cancel
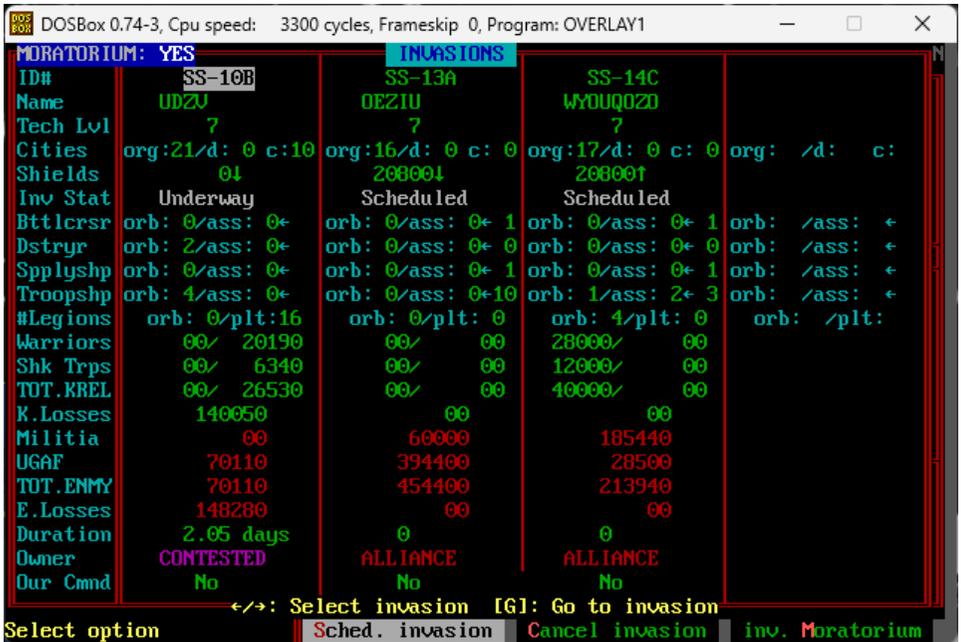
Figure 75. Invasions Management Display

invasions. Regardless of your rank, Krellan Fleet HQ will schedule invasions of suitable planets without consulting you. As many as four invasions can be scheduled or in progress at one time. A typical invasion fleet consists of one battlecruiser, one or more troop transports, one supply transport, and any destroyer escorts those ships may have.

The display contains the following information:
ID# and **Name** of the planet being invaded.

Tech Lvl, the technology level of the inhabitants (A.4).

Cities, the number *left* on the planet (left)/ the number it *originally* had (org).

Shields, the current strength of the planet's shields, in units, plus an arrow indicating whether the shields are down or up.

Inv Stat, the invasion status, either "Scheduled" (ordered but not started), "Underway" (Krellan forces are on the planet), or "Completed" (the planet has been conquered, but Krellan Fleet HQ has not yet canceled the invasion designation).

Bttlcrsr, Ostryr, Spplyshp, and **Troopshp**, the number of each type of ship assigned to the invasion: those in *orbit* around the planet (orb), and those that have been *assigned* (ass) to the invasion but have not arrived in orbit yet.

#Legions, the number of legions located at the planet, either aboard a troop ship in orbit (orb) or on the planet surface (plt).

Warriors, Shk Trps, and **TOT.KREL**, the number of legionary warriors, legionary shock troops, and Krellan" soldiers of both types located at the planet, in the format "in orbit/on planet".

K.Losses, the total Krellan legionary troop casualties to date.

Militia, the number of organized native planetary troops remaining.

UGAF, the number of UGA Regular Forces troops remaining on the planet.

TOT.ENMY and **E.Losses**, the total number of enemy troops (militia plus UGA forces) remaining, and the total enemy casualties to date.

Owner, current status of the planet, "ALLIANCE", "NEUTRAL", "CONTESTED" (invasion underway), or "KRELLAN" (planet has been captured).

Our Cmnd, indicating whether an invasion is under your control ("Yes"), or commanded by another battlecruiser ("No"). An invasion you are scheduled to command will not start until you enter orbit and initiate the assault.

Ships Allocated to Invasion - In addition to showing you how many ships of each type are in orbit around the planet being invaded, and the number assigned but not yet arrived, the number of ships of that type needed for the invasion is now also shown. It is on the right of the other two numbers with a left arrow pointing towards them (see Fig. 75). In the figure, the invasion of SS-33A needs 1 troopship (← 1) and has 0 troopships assigned (ass: 0), which means it's on its way, but it has 1 troopship in orbit (orb: 1). It also shows it has 1 battlecruiser and 4 destroyers assigned (your Battle Fleet) and 1 destroyer in orbit. Destroyers aren't selected for invasions, they are just escorts for the capital ships that are, which is why the number needed is always 0 (← 0). The number of ships needed is only shown for scheduled invasions. Once the invasion is underway or completed, all the ships needed will be in orbit or assigned. For the invasion of SS-27A, the 3 troopships it needed are in orbit (orb: 3), and 1 supply ship is assigned (invasions can start without the supply ship).

Duration of Invasion - The Invasion Elapsed Time measured in days is now shown for each invasion in the table once it is underway (see Fig. 75). In this figure, the invasion of SS-27A has been underway for 1.05 days, and that for SS-16A for 0.15 days.

Got To Invasion [G] - The currently selected invasion is highlighted at the top of the display (see Fig. 75). Use the left and right arrow keys to select another invasion. If you press [G], your ship will automatically navigate to the planet of that invasion at top speed upon confirmation.

1.7.6.1 Schedule Invasion [G]/[I]/[S]

If less than four invasions are scheduled or under way and your rank is Subadmiral or higher, you can schedule an invasion by using this option. The Invasions Display will be replaced by the Planetary Information Display (Fig. 44). Move the highlight box to the planet you want to invade and press **[Enter]**. Krellan Fleet HQ will assess your decision and inform you whether it will allow the invasion to take place. If so, you will be asked if you want to command the invasion. If you answer yes, the invasion will not start until you orbit the planet and begin the assault. If you answer no, another battlecruiser (when available) will be assigned to lead the invasion.

1.7.6.2 Cancel Invasion [G]/[I]/[C]

If your rank is Subadmiral or higher, you can use this option to cancel any invasion, whether it is scheduled or underway. A highlight box will appear on the ID# of the first invasion; move it to the invasion you want to cancel using [←] and [→], then press **[Enter]**.

When an invasion is cancelled, all the ships that had been assigned to it are returned to free operation (except for escorts), and Krellan Fleet HQ will never again schedule that planet for invasion. However, you can schedule an invasion of the same planet at a later time if you so desire.

1.7.6.3 Invasion Moratorium [G]/[I]/[M]

For Subadmirals and Admirals who are looking to conduct an invasion to fulfill mission requirements, it can be annoying to discover a suitable planet only to have Krellan HQ undercut you and schedule an invasion of that planet either without you in command or before you are ready. In this case you have to go in and cancel the invasion, until the next time that Krellan HQ does it to you. To prevent this, you can order a moratorium on new invasions by Krellan HQ using the new command option inv. Moratorium in the Invasions Management screen (Fig. 75). When you select this option you will be told the status of the Moratorium and asked if you want to change it. The current state of this order is also shown on the upper left of the Invasions Table. As long as the moratorium is in effect, Krellan HQ will not schedule any invasions. Only you will be able to do that.

1.8 SCIENCE CONTROL [I]

This command enables you to access the functions of the Science Division, which includes scanning objects, medical functions, and the science laboratories. There are three command options in the Science Control menu as shown in Figure 76:
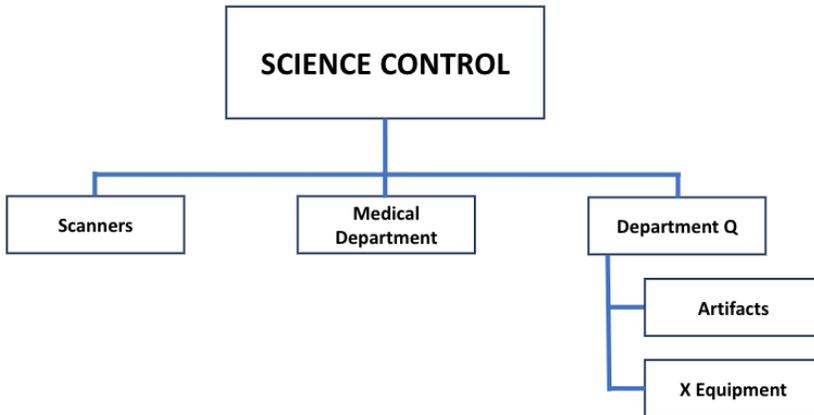
Figure 76. Science Control Command Structure

1.8.1 Scanners [I]/[S]

This option enables you to scan any object that appears in your Tactical Display, assuming your short range sensors are operational. Move the TDB over the object you want to scan and press [Enter] to obtain a Scan Analysis Summary in the message area of the Bridge Display. New reports and messages that add to the body of information will appear at the bottom of the display, and the top line(s) of information will be scrolled up and out of the message area. After this summary is displayed, you will be asked if you want detailed data (if available). If you press [Y], you will see a Planetary Map Display (Fig. 10) for a planet, or a Krellan Ship Data Display (Fig. 100) for another Krellan ship.

1.8.2 Medical [I]/[M]

Selecting this option brings up a report in the message area of the Main Message Display concerning the current health of your crew: the number of casualties (dead) they have suffered; the state of their morale; their rest level; and whether there are any contagious

diseases on board. Information will scroll off the top of the screen to make room for new messages and reports as they are received.

1.8.2.1 Crew Morale
The morale level of your crew affects their performance, and if it ever drops to zero, they will mutiny. Morale will decrease rapidly if you run out of supplies or if you are carrying extra personnel (1.2.2.3), which will use supplies more rapidly. It will also decrease if you allow the crew's rest level to get too low, if the crew suffers many casualties in combat, or if a contagious disease is brought aboard. Morale will increase - initially, at least - when you go to Red Alert, encounter a planet with a civilization that can be conquered, or get into fierce combat. Krellans like nothing better than a good fight! One of the best ways to increase morale is to bring some captives aboard and let your crew have some fun interrogating them (1.5.3) by torture and execution. Morale will also increase if you dock at a starfort, which enables you to pick up new supplies and give your crew some rest and relaxation.

1.8.2.2 Crew Morale
Your crew must be rested periodically in order to remain at its peak performance level. If the Rest level drops below 25%, a medical emergency will be declared and noted in the caution and warning panel at the top of the primary displays. When your ship is in Condition Green (no enemy threat present) or Docked, the crew rest level will increase automatically. You can also increase the rest level by turning on the Rest State switch (Appendix B.3). When your ship is in Condition Orange, the crew rest level will slowly decrease and will decrease more rapidly in Condition Red.

1.8.2.3 Disease
When a landing party returns from a planet to your ship, there is a chance that a contagious disease will be brought on board with them. If the disease is a deadly one, crew members will start dying and the morale of the survivors will begin to decrease. If it is not deadly, the crew's rest level and morale will both decrease. Sometimes a disease will run its course and disappear. It may be possible for your medical section to find a cure and thus halt the spread of the disease. Or, you can "cure" it by docking at a starfort (where diseased crew members will be replaced by healthy ones).

1.8.3 Department Q [I]/[Q] or [Alt][Q]

Department Q is a special research laboratory for analyzing and testing new technology, whether alien or Krellan. This comes under the Science group and consists of two elements, *Artifacts* and *Experimental Equipment*.

1.8.3.1 Artifacts [I]/[Q]/[A]

Artifacts are unknown objects usually found on a planet in the ruins of a lost civilization by your landing party when they are surveying/exploring the planet. The artifacts are generally pieces of alien technology, but could be something else of value. When your landing party discovers an artifact in the ruins, they will send it up to your ship, where it will be stored in the Department Q laboratory. When you select the Artifacts command, if there are any artifacts that have been discovered, an Artifacts Window appears (Fig. 77). There are several command options for dealing with artifacts in Department Q:

Describe [B] – this provides a detailed description of the artifact if it has been analyzed.

Analyze [Z] – this is the first thing you should do to determine what the artifact is. Depending on the type of artifact, this will take anywhere from about 0.5 to 2.0 days to complete the analysis. Once the analysis is completed, you will be so informed. You can then go back to the Artifacts table in Dept. Q to get a full description of the artifact and how to use it or the options available to you for its use. Once the artifact is analyzed, you just have to select it in the table and press [Enter] to get its description.

Install [I] – artifacts that can be used by your ship have to first be installed. This can only be done after the analysis is complete. Like analyzing an artifact, installing it takes time. You will be informed when the installation is complete, and the artifact will be listed as being installed in standby mode. It will not use any power in this mode and it has to be activated before you can use it.

Store [S] – if the artifact is installed (whether active or not), this will uninstall it and put it back into storage. If you want to use then, then you will have to install it and possibly activate it again.

Activate [A] – some artifacts use a considerable amount of power when used, so you don't want to leave them active all the time – just when they are needed. If the artifact is installed, it can instantaneously be activated using this command. Some artifacts need a single command to use, but that won't work unless they are active. If it is an artifact that uses power when active, you can press [A] again to deactivate it and return it to the installed (standby) state after confirming the action.

Deliver [D] – this command will designate the artifact to be delivered to Krellan FHQ the next time you dock with a starfort. Some technical artifacts that aid your ship do not have to be delivered during your mission, while other artifacts that might be valuable, but not useful, should be delivered. If the artifact is marked for delivery and handed over to the authorities at starfort, you will be rewarded with a booty of 10% of its value as per standard Krellan procedure. When your battlecruiser docks with a starfort, inspectors come on board to look for contraband or anything amiss. If you have a valuable artifact not being used in your ship, you may attempt to keep it hidden from the inspectors by just keeping it in storage and not marking it for delivery. If you are successful and the inspectors miss it, you will be rewarded with the full value of the artifact (which will be offloaded and sold in secret at the starfort) and the amount will be added to your booty tally. However, if you attempt to hide it and the inspectors find it, not only will they confiscate it, they will fine you 2000 Krels (which will appear

as a negative booty in your tally on the line which has been relabeled booty/fines). You can undo this command by selecting the Deliver command again. This will give you the opportunity to remove the Delivery designation and return the artifact to storage.

Figure 77. Artifacts Window in Department Q

1.8.3.2 X-Equipment [I]/[Q]/[X]

This section of the Q-Department laboratory accepts new experimental technologies developed by the Krellan Empire for space testing in actual combat situations. If these experiments are successful, then the technologies may be adopted in the future by the Krellan fleet for standard operational use. Two experimental devices may be supplied to your ship for testing at Level 7 (Admiral) only. The two devices are:

1.8.3.2.1 Klink Drive - Probably the most important alien artifact discovered to date is the *Blink Drive*. When installed, this allows you to transport your ship and adjacent escorts instantaneously to any specified point in the region with an accuracy of two sectors. You can activate this from any location, not just outside of the star system boundaries, and from orbit (but not while docked). The brilliant Krellan scientists and engineers have reverse-engineered the Blink Drive and produced the Krellan equivalent of the Blink Drive called the Klink Drive (collectively this class of propulsion is called *jump drives*). It performs the same function as the alien Blink Drive, but so far it is not as good. It cannot carry any adjacent ships – only your ship, and although it will also transport your ship instantaneously from any location, its destination accuracy is not as good. It will put your ship at random

in the target system, instead of at a precise location. Like the Blink Drive, there is a chance it will be destroyed upon completing its jump. In order to obtain a Klink Drive from Department Q, you first have to locate a Blink Drive in a mission and mark it for delivery to KHQ when you dock with starfort (there is a slight chance that another battlecruiser might discover and deliver one). In a subsequent mission, once the technical types have developed the Klink Drive, you may be issued with one. If you are provided with a Nova Bomb (see next section) you will also be provided with a Klink Drive, because you cannot use the Nova Bomb without a jump drive. There will only be one Klink Drive issued per Level 7 mission. If you do not use the Klink Drive, it will not be carried over to your next mission. To use the Klink Drive, you must first Install and Activate it through the X-Equipment menu. Then select a target in another system using your Targeter. You must set a velocity, although the setting is ignored in a Klink Drive jump. You then press [Alt][F9] to initiate the jump. If you are not using it with the Nova Bomb, then you will have a 10-second countdown which can be interrupted and canceled. If used in conjunction with the Nova Bomb, the jump is instantaneous with no countdown and no chance to cancel.

1.8.3.2.2 Nova Bomb - This is the next generation of the Obliterator Pod, except that instead of planets, it destroys suns by turning them into supernovae. It will destroy everything in the system, including the sun, planets, bases, and ships. When the supernova is complete, the sun is replaced by a black hole. You must be in orbit around the sun to use the Nova Bomb. When the Nova Bomb is put onboard, it is in storage. Before you can use it, you have to go to Department Q. Install, then *Activate* it. The control for launching the Nova Bomb is in the *Combat Weapons Control*. You will not be allowed to launch the Nova Bomb unless you have an active jump drive (i.e., a *Blink Drive* or a *Klink Drive*). Once you launch the Nova Bomb, it starts a 10-second countdown timer. During the 10 seconds, you must leave the system using a jump drive. Because of the emergency situation, the normal 10-second countdown timer for the jump drive is not used – the jump is immediate upon pressing [Alt][F9]. Note that the Nova Bomb is only provided in Level 7 (Admiral) missions, and you will only receive one per mission. Only you, as the Commander of all Krellan Forces in the region, have the authority to carry and use the Nove Bomb. It is always provided with *Klink Drive*, so you must have fulfilled the requirements (stated in the previous section) to obtain a Klink Drive. Note that you must do this mission alone. Even if you are using the *Blink Drive* instead of the *Klink Drive*, your escorts will be left behind and destroyed. Escorts will not be able to enter solar orbit with you, and there is not enough time to leave orbit and gather the escorts adjacent to you before the bomb explodes. It is usually best to leave your escorts in the regional location (preferably one without an enemy presence) of your jump drive destination. It is recommended that you reserve using the Nova Bomb to eliminate a system containing a colony, especially if it also contains a starbase. It would also be effective for destroying UGA 5th Fleet Headquarters, but remember, it can only be used in star systems. If you do not use the Nova Bomb, it will not be carried over to your next mission.

1.8.3.2.3 X-Equipment Section Command Options - The commands available to the X-Equipment Section are similar to those of the *Artifacts Section* except that the X-Equipment does not have to been identified/analyzed, nor marked for delivery to KHQ. The command options (Fig. 78) available are:

Describe [D] – This gives you a brief description of the apparatus and the instructions on how to use it in a pop-up window.

Install [I] – With this command, the apparatus is taken from storage in Department Q and installed in the ship in preparation for its use. The estimated time of installation is given in days. You will be informed once it has been installed.

Store [S] – When the apparatus is brought on board it is put into storage. Once you have installed or activated it, you can return it to storage if you like.

Activate [A] – Once the apparatus is installed, you can activate it for use. What happens with this command depends on the nature of the apparatus. You may have another command to actually use it. For example, to use the Klink Drive after it has been activated, you have to press [Alt][F9], and the Nova Bomb is launched using the Combat/Weapons command. Read the instructions carefully before using any X-Equipment devices.
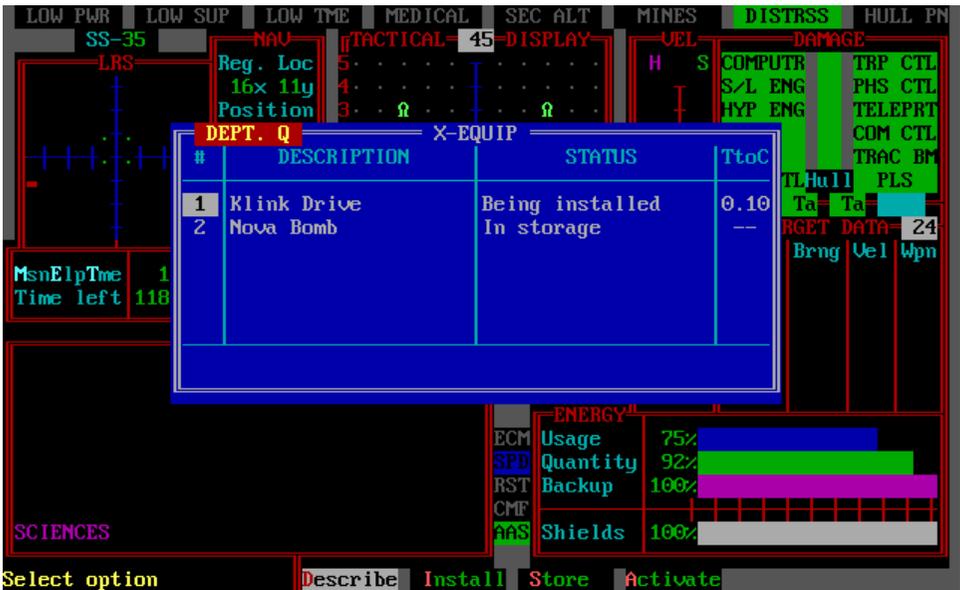
Figure 78. X-Equipment Section of Department Q

1.9 CONTROLS [L]

This command enables you to access the commands and switches of your battlecruiser. There are two command options in the Controls menu as shown in Figure 79:
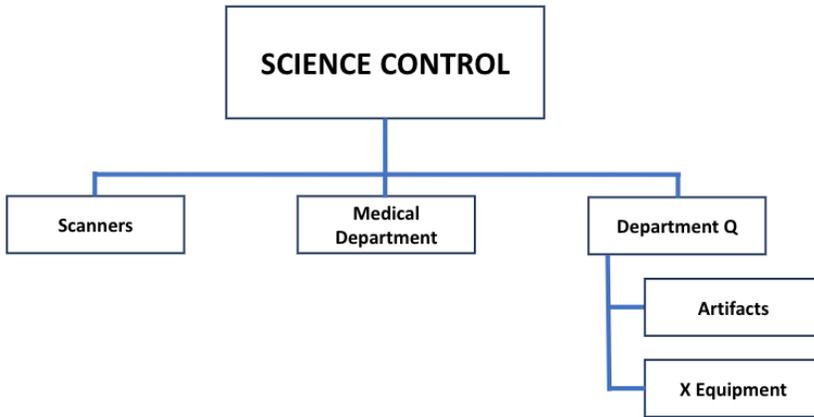
Figure 79. Controls Command Structure

Pressing [L] while in the Main Menu activates the Controls command, which provides an alternate way to execute most of the keyboard commands available to your ship. You can also activate this command at any time, even when the Bridge Display is not on your screen, by pressing [Ctrl][H].

The Controls Window appears on the screen, listing most of the keyboard commands, the keystroke (or combination of keystrokes) needed to execute them, and the current status of the aspects of ship operation that they control. You can use this window for information only (to remind yourself of the available commands), or you can use it to execute one or more of the listed commands.

There are two command options in the Controls menu:

1.9.1 Hot Keys [L] / [H]

These are shortcuts that will take you directly to a given sub-menu or screen (Fig. 80a). There are 2 pages to the hot keys. Pressing [PGDN] will cycle through the hotkey pages.

Figure 80a Hot Key shortcuts – page 1

There are three columns in the window:

KEYS: This shows the key or key combination that activates the control directly from the keyboard. If you wish to toggle the switch or activate the control while this window is up, press just the key shown in red.

CONTROL: Describes the function of the control or switch. The currently selected control is shown by a highlight bar. Use the up and down cursor keys to move the highlight bar.

STATUS: Shows the current setting of the control switch. The controls that perform a function and are not switches will show a "-" in this column. To change the setting of the currently selected switch, press the left or right cursor key.

```
┌─KEYS────────────CONTROL────────────STATUS┐
│ [Alt][X] Combat Control Center          -  │
│ [Alt][Y] Regional Strategic Command     -  │
│ [Alt][Z] Escorts Shortcut               -  │
│ [Ctrl][B] Boss key                      -  │
│ [Ctrl][D] SPD Switch Toggle           Off  │
│ [Ctrl][E] Engine Sound Control          -  │
│ [Ctrl][F] Freeze Simulation Toggle     On  │
│ [Ctrl][H] Control Hot Keys (this menu)  -  │
│ [Ctrl][I] Information (Reference)        -  │
│ [Ctrl][K] Function Key Definitions       -  │
│ [Ctrl][L] Personal Log                   -  │
│ [Ctrl][N] Notepad                        -  │
│ [Ctrl][O] Display Mission Orders         -  │
│ [Ctrl][Q] Quick Save                     -  │
│ [Ctrl][T] Commands Menu Tree             -  │
│ [Ctrl][V] Full Save Procedure            -  │
│ [Ctrl][X] Exit to DOS                    -  │
│                                            │
│                                            │
└────────[Page Up] for other keys ══════════┘
```

Figure 80b Hot Key shortcuts – page2

Some switch settings are not allowed in certain circumstances, so if you attempt one, you will receive a message box explaining why you cannot make that switch setting.

The switch settings are not actually made until you leave the controls window. You do this either by pressing [Enter] or selecting one of the direct function controls (e .g. [S] to call up the System Map). If you decide you do not want the new switch settings, then press [Esc]. The window will disappear and your switch settings will be unchanged.

1.9.2 Command Tree [L] / [T]

This will take you to the top level of the Command Hierarchy (Figure 81) called the *Command Tree* because it consists of a number of limbs and branches that weave through the total command structure. Using the Command Tree, you can view the major commands available to you and even select one as a shortcut to go directly to that command without having to go back through the Main Menu and sub-levels.
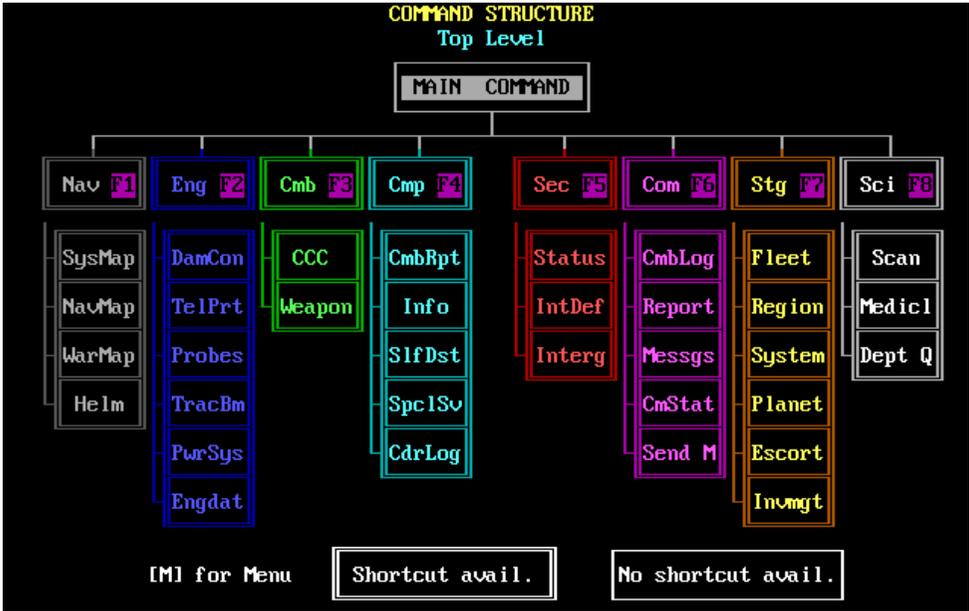
Figure 81. Top Level of Command Tree Structure

In order to navigate the command tree, you can use the arrow keys or press the respective function key for each command branch [F1] – [F8]. Each command branch has been color coded for convenience of navigation. In addition, the specific sub-menu within each branch will reflect if there is an existing hot key shortcut available based on the # of lines surrounding the sub-menu box.

Pressing [M] brings up the menu for the Command Tree (Fig. 82).
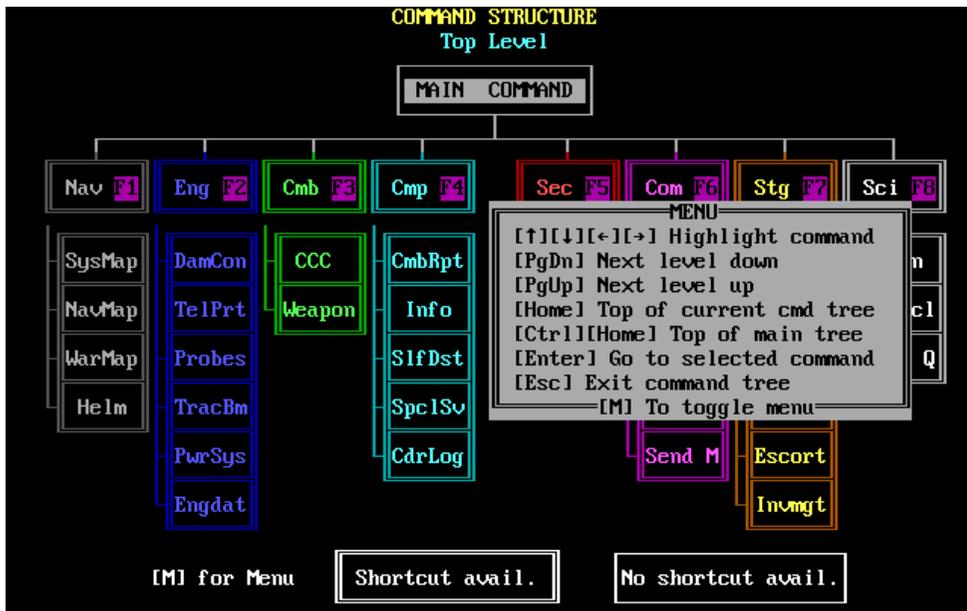
Figure 82. Command Tree Menu
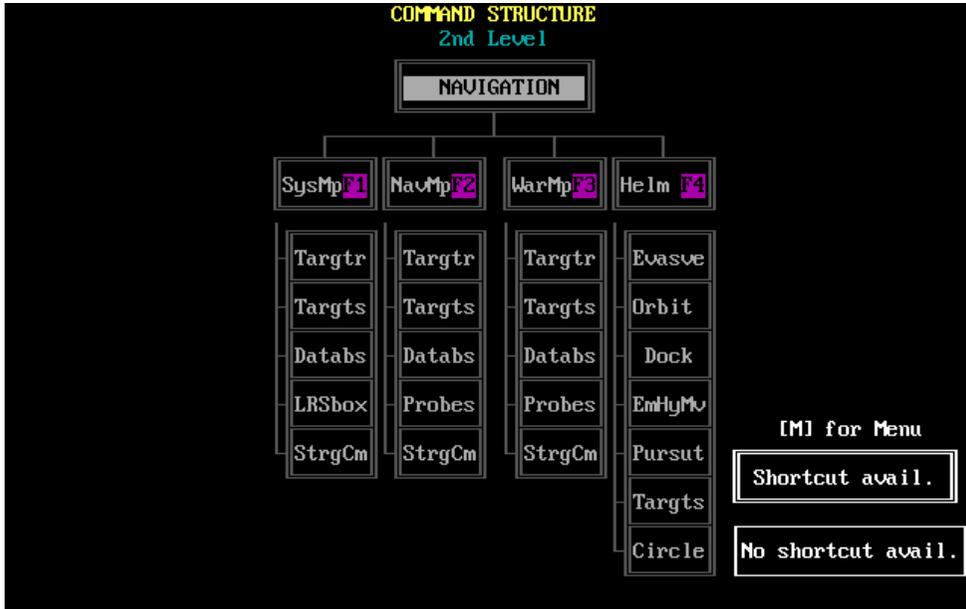
Figure 83. Navigation Sub-Branch Command Tree

There are eight Command Tree Branches, each with their own sub-menu branches:

Navigation [F1] (Fig. 83)**:** This brings up the Navigation sub-branch command tree. There are 4 sub-branches to select: **System Map (SysMp) [F1]**, **Navigation Map (NavMp) [F2]**, **War Map (WarMp) [F3]**, and **Helm [F4]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use the function keys [F1] – [F4].

Engineering [F2] (Fig. 84)**:** This brings up the Engineering sub-branch command tree. There are 6 sub-branches to select: **Damage Control (DamCon) [F1]**, **Teleporters (Telep) [F2]**, **Probe [F3]**, **Tractor Beam (TrcBm) [F4]**, **Power Systems (PwrSy) [F5]**, and **Engineering Data [F6]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F6].
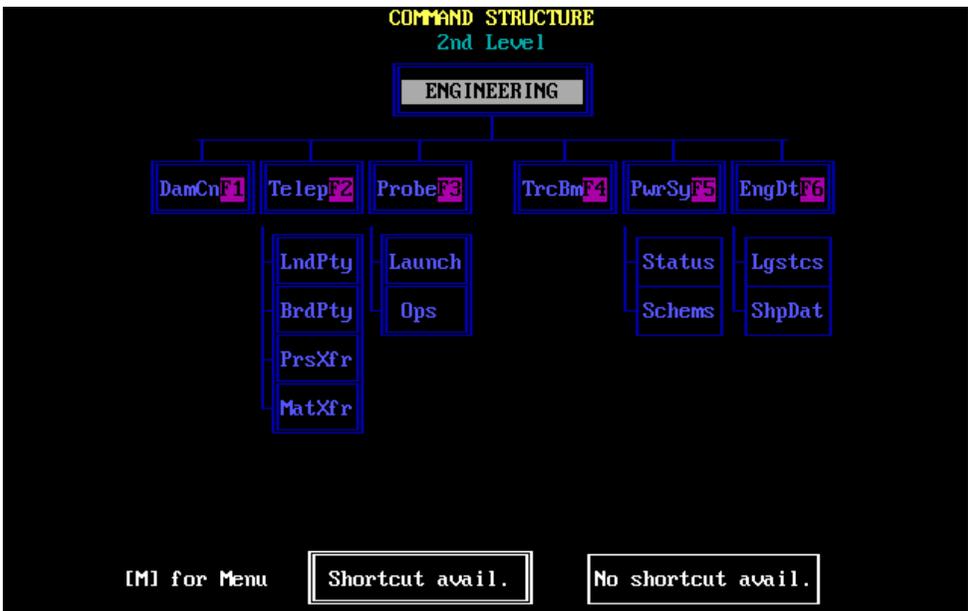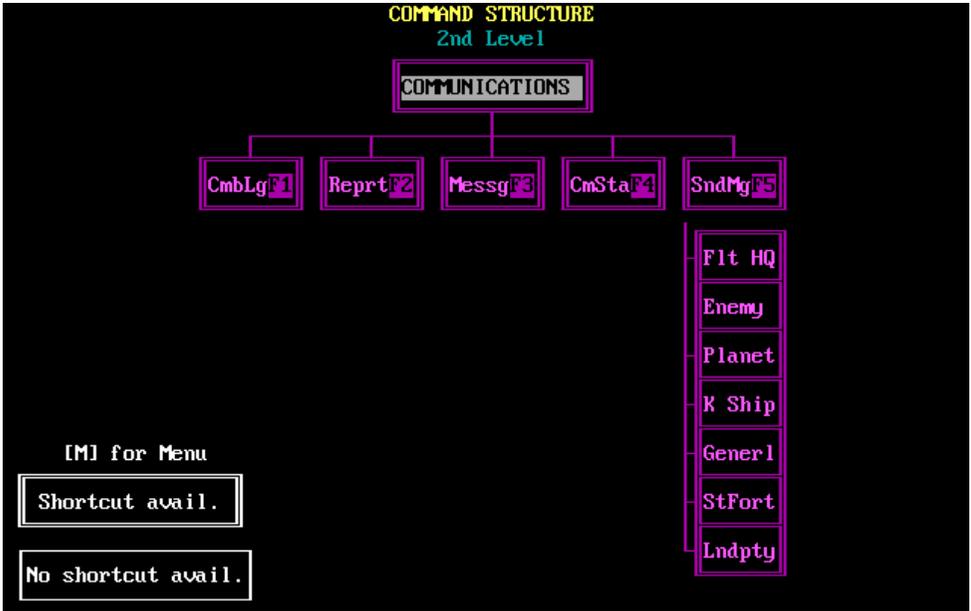

Figure 84. Engineering Sub-Branch Command Tree

Combat [F3] (Fig. 85): This brings up the Combat sub-branch command tree. There are 2 sub-branches to select: **Combat Command and Control (CCC) [F1]**, and **Weapons (Weapn) [F2]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F2].
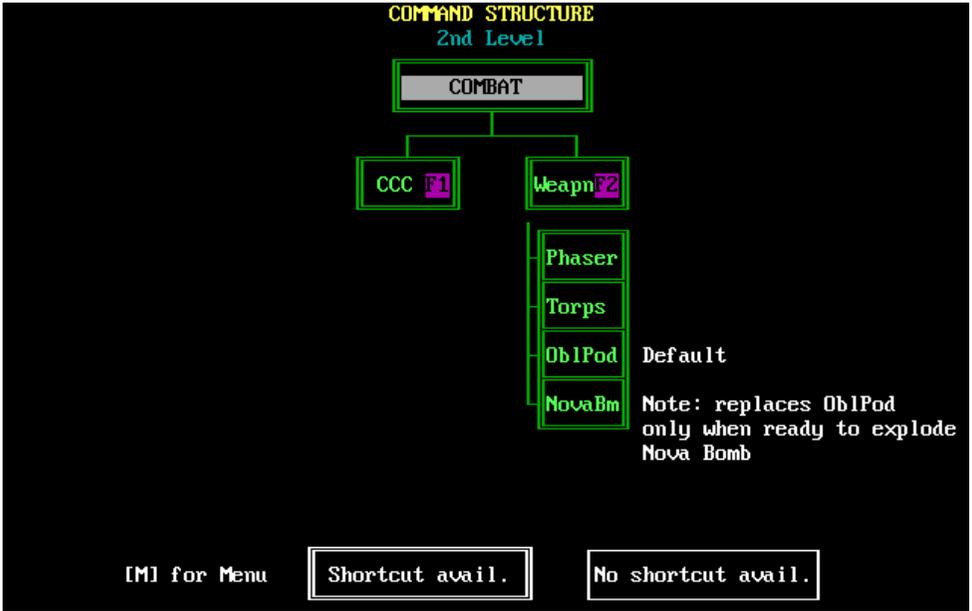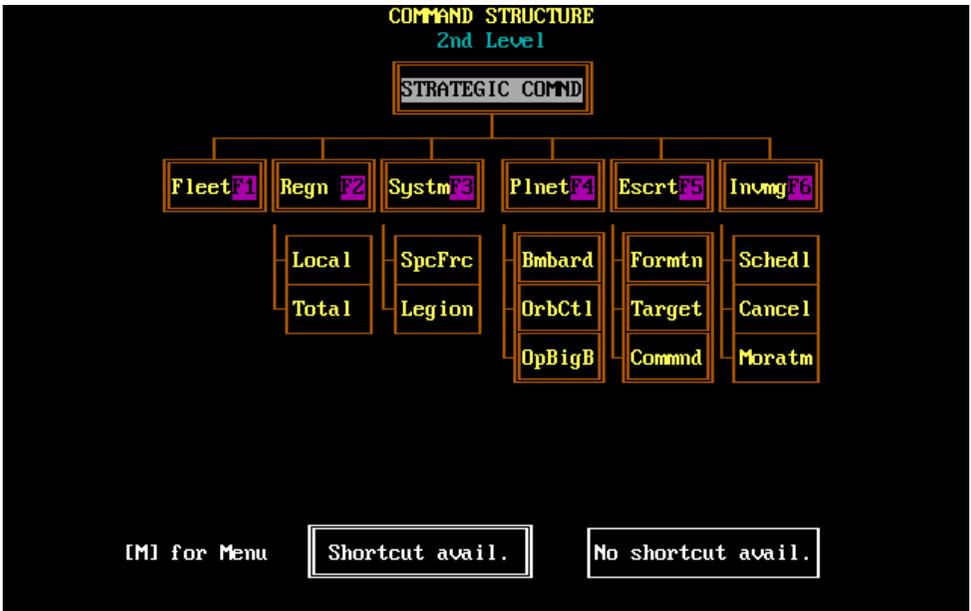
Figure 85. Combat Sub-Branch Command Tree
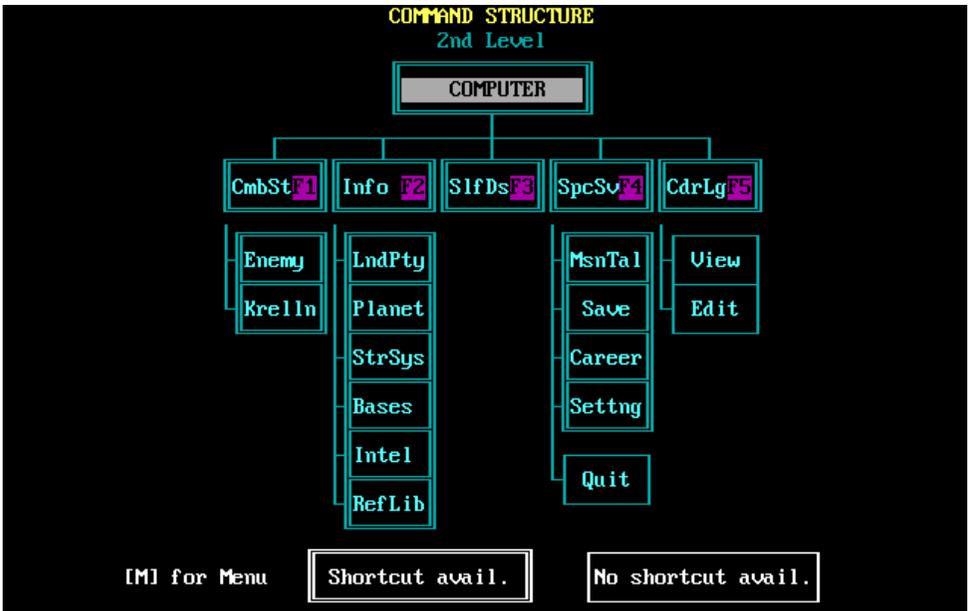
Figure 86. Computer Sub-Branch Command Tree

Computer [F4] (Fig. 86)**:** This brings up the Computer sub-branch command tree. There are 5 sub-branches to select: **Combat Status (CmbSt) [F1]**, **Info [F2]**, **Self-Destruct (SlfDs) [F3]**, **Special Services (SpcSv) [F4]**, and **Commanders Log (CdrLg) [F5]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1]– [F5].
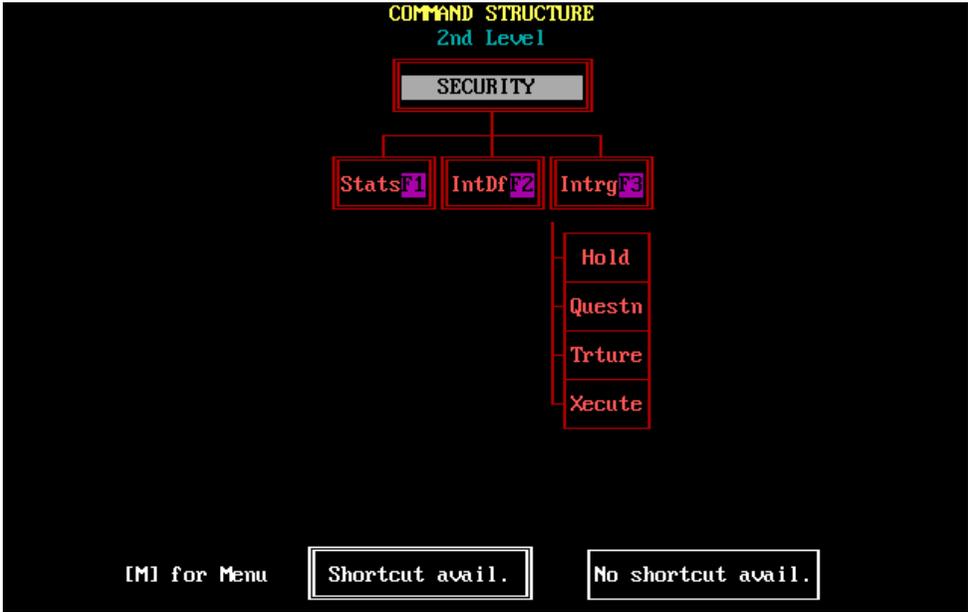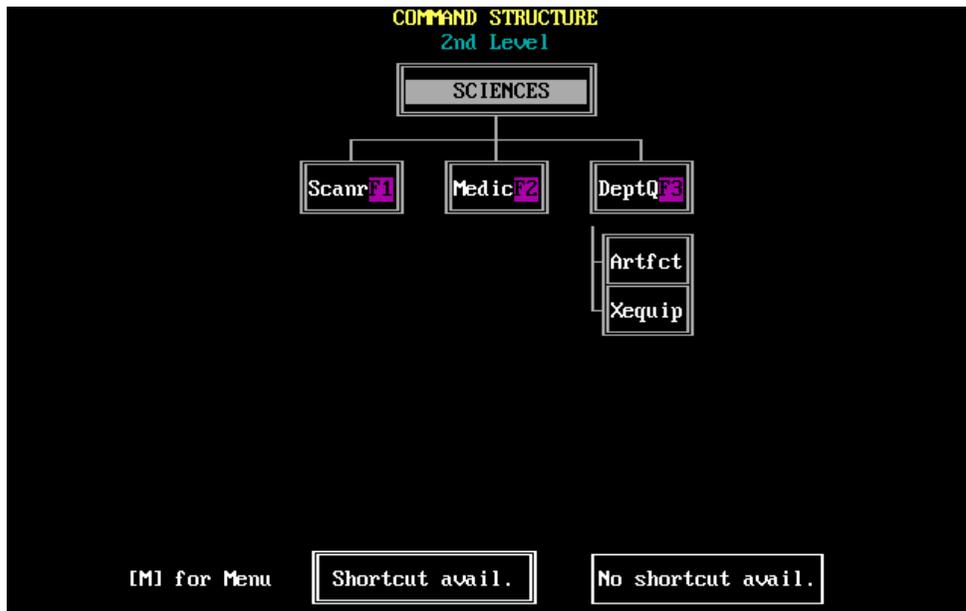

Figure 87. Security Sub-Branch Command Tree

Security [F5] (Fig. 87)**:** This brings up the Security sub-branch command tree. There are 3 sub-branches to select: **Status (Stats) [F1]**, **Internal Defence (IntDf) [F2]**, and **Interrogation (Intrg) [F3]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F3].

Communications [F6] (Fig. 88)**:** This brings up the Communications sub-branch command tree. There are 5 sub-branches to select: **Combat Log (CmbLg) [F1]**, **Reports (Reprt) [F2]**, **Messages (Messg) [F3]**, **Combat Status (CmSta) [F4]**, and **Send Message (SndMg) [F5]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F5].

Strategic Command [F7] (Fig. 89j)**:** This brings up the Strategic Command sub-branch command tree. There are 6 sub-branches to select: **Fleet [F1]**, **Region (Regn) [F2]**, **System (Systm) [F3]**, **Planet (Plnet) [F4]**, **Escort (Escrt) [F5]**, and **Invasion (Invsn)**

[F6]. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F6].

Figure 88. Communications Sub-Branch Command Tree

Figure 89. Strategic Command Sub-Branch Command Tree

Sciences [F8] (Fig. 90)**:** This brings up the Science sub-branch command tree. There are 3 sub-branches to select: **Scanners (Scanr) [F1]**, **Medic [F2]**, and **Department Q (DeptQ) [F3]**. When selected, each branch will take you directly to their respective screens. You can select any of the commands via the arrow keys or use of the function keys [F1] – [F3].

Figure 90. Sciences Sub-Branch Command Tree

To learn about each specific sub-branch/menu selection, please visit its respective topic within the Operations Manual.

PART II
PLANETARY INVASIONS

2.0 INVASION CONTROL COMMANDS

The commands and options described in this section are related to conducting an invasion of a planet. Although this part of the command hierarchy is technically a part of the Strategic Command Menu, the substructure is complex enough to be considered a menu in itself.

To access the Invasion Control commands from the Main Display, press [G] to enter the Strategic Command Menu, [P] for the Planetary command, and [O] for Orbital Control. You are now at the top level of the part of the invasion control command hierarchy, illustrated in Figure 91.
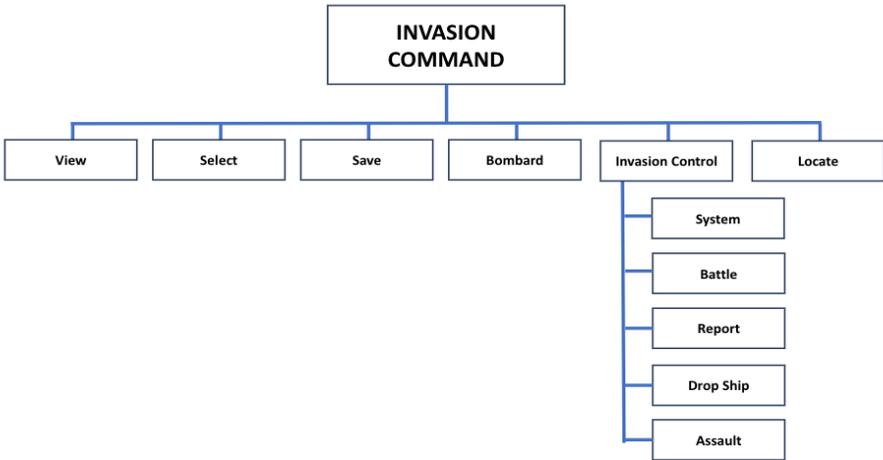
Figure 91. Invasion Command

2.1 GENERAL INFORMATION

If your rank is Subadmiral or higher, you have the authority to schedule an invasion yourself, subject to the approval of Imperial Krellan Fleet HQ. At lower ranks, you can request a planetary invasion from Fleet HQ and – based on your rank – you may be asked or ordered to lead invasions as part of your mission requirements. You have at your disposal an array of planetary bombardment weapons, legions of crack Shock Troops, and heavily-armored Krellan Warriors. You can attempt to blast the entire planet into space dust, or you can just soften up areas with a little bombardment, followed by a massive invasion to

capture the planet. You must decide on the best strategy based on the planet's technology level, class, and expected level of planetary and UGA resistance. REMEMBER! The Krellan Empire is in dire need of conquered productive planets. You will be heavily penalized for wanton destruction of valuable territory and resources needed for future expansion.

Before you can initiate an invasion, these conditions must be met: 1) your ship must be orbiting the planet; 2) one or more legions must be on board troop transports orbiting the planet; 3) there must be no enemy ships orbiting the planet; and 4) the planetary shields, if any, must be eliminated by bombardment. Your mission elapsed time will be updated at the end of each invasion. Rapid conquest of a planet will yield the best rewards.

2.2 ORBITAL CONTROL

Once you begin an invasion, you must remain in Orbital Control until it is completed or cancelled. If you exit from Orbital Control prematurely, the invasion is terminated and will probably cause a large number of casualties among the Krellan troops on the planet surface.

Executing the Orbital Control command, after the conditions for an invasion have been met, brings up the Orbital Control Display (Figure 92). This display is similar to the Planetary Map Display (Figure 1o), but with these major differences:

l) **Altitude indicator**, showing your ship's altitude in kilometers above the planet surface, plus a letter defining your orbit as High, Medium, or Low.

2) **Weapons control data**, showing your total energy reserves (ENERGY); the number of torpedoes remaining (TORPS); and the weapon(s) currently selected for bombardment (BOMBARD), "Phasers", "Torpedoes", or "Both".

3) **Command line** displays the six options and commands available from Orbital Control.

4) **Ship Position Indicator**, showing your ship's position in its orbital path over the planet's surface.

5) **Scan view** changes to show the part of the planet that can be seen from your current orbital position.

The prime military targets on the planet, which are usually major cities and industrial complexes - hereafter all called "cities" - are identified during the initial scan and are indicated by "X" symbols on the projection map of the planet. These are the only locations that you will be able to view, bombard, or send troops to invade.

To specify a city as a target, move the Target Designator Box in the planetary map over the desired location using the direction keys ([Shift] with direction keys causes larger
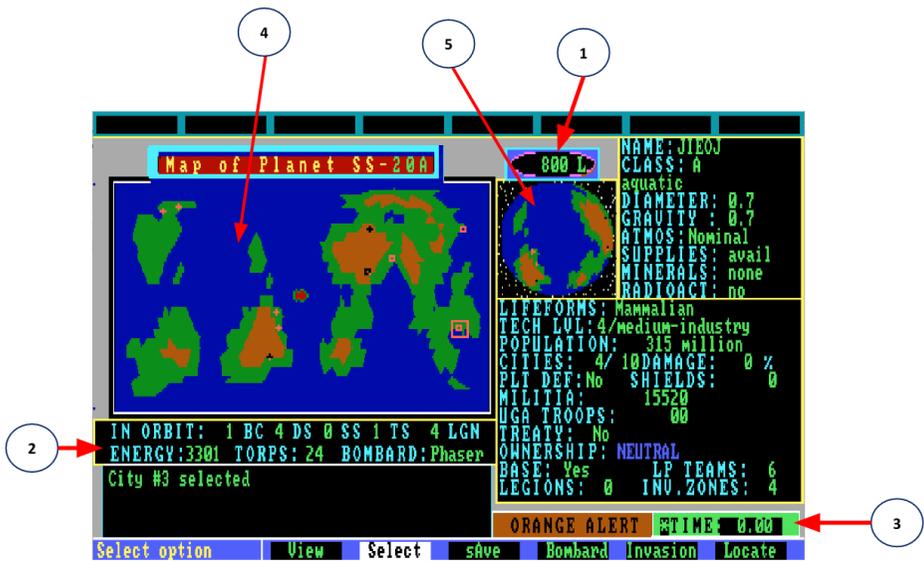
Figure 92. Orbital Control Display

moves). Once a city has been selected for invasion, it is referred to as an invasion zone, or simply a zone.

 NOTE: The keystroke commands in the following sections are executed from Orbital Control, not the Main Menu. The following commands are available:

2.2.1 View [V]

Selecting this option from *Orbital Control* will bring up a detailed map of the city and the immediate surrounding area (see Figure 36).

2.2.2 Select [S]

Selecting this option from Orbital Control will designate the city as an invasion zone. The "X" symbol will change to "□" and you will thereafter be able to initiate an invasion of that city. This option works as a toggle, so that you can de-select a zone (the symbol will change back to "X"). If you do this after troops have been sent down, you will not be able to de-select the zone.

2.2.3 Save [A]

This option allows you to save the invasion and mission in progress.

2.2.4 Bombard [B]

This option allows you to conduct pinpoint bombardment of a single city, whether or not it has been selected as an invasion zone. The city must be inside the TDB. To specify which type of weapon is used, press [Alt][W] to toggle between phasers (default) and torpedoes. Press [Enter] to bombard the city. Everything in the city zone not covered by the city shields will be destroyed, and the shields will be weakened. Subsequent hits will eventually knock out the shields and destroy the area underneath. If the city suffers enough damage, it will be destroyed and the city icon will change to "+". If you want to do continuous or salvo bombardment, then you must exit Orbital Control and use Bombardment (1.7.5).

2.2.5 Locate [L]

This option allows you to locate specific cities on the planetary map. Press [L] and then enter the city number. The cursor will jump in the Planetary Display to the requested city.
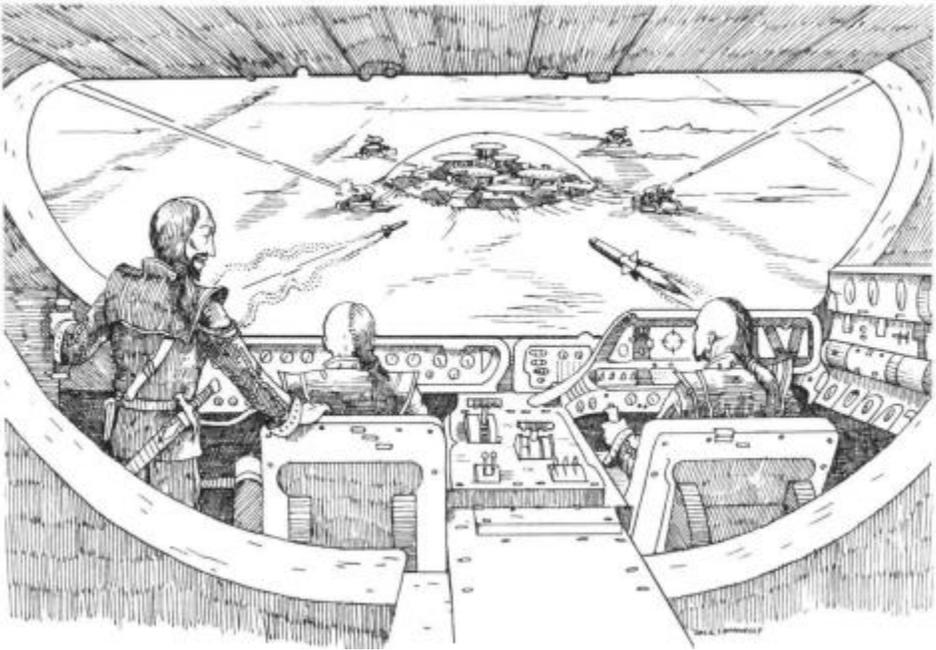
2.3 INVASION CONTROL [I]

NOTE: In order to run an invasion effectively, you will need to be familiar with the commands and options described in the rest of this section and also with the facts about troops, equipment, terrain, and other topics that are covered in Section 2.5.

Invasion transfers you to the substructure of commands and options directly related to conducting an invasion (Fig. 93), and brings up the Invasion Control Display (Fig. 94), which gives you a view of the overall strategic situation.
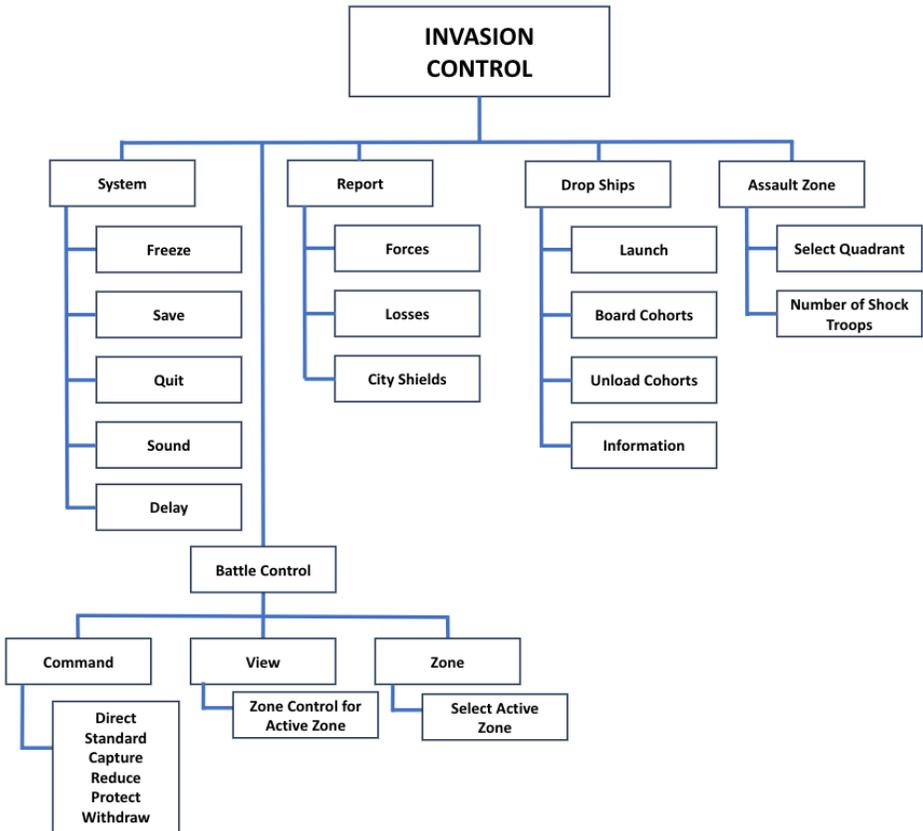
Figure 93. Invasion Control Command Structure
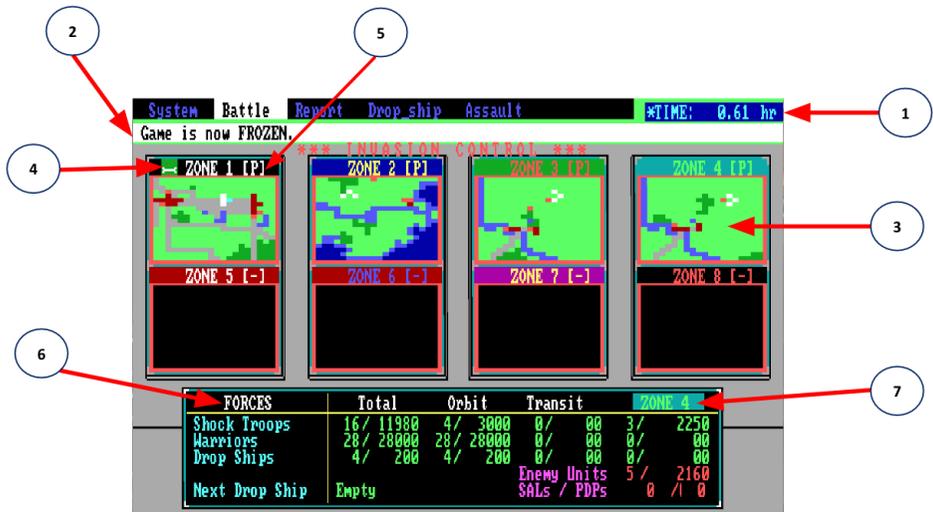
Figure 94. Invasion Control Display

The Invasion Control Display contains the following information:

1) **TIME counter**, showing the mission elapsed time in hundredths of units (one unit equals approximately one hour). When you freeze the game [BACKSPACE], an "*" appears to the left of the time counter.

2) **Message line**, where command acknowledgments, instructions, and other communications will appear.

3) **Zone maps**, small maps of the eight invasion zones. The color of the background frame of each map indicates ownership of the zone: Red for the enemy, White for Krellan. Blocks on the maps representing combat and terrain units are also color-coded (2.5). To see a detailed map of one of the eight invasion zones, you can execute the View command (2.2.1) or press the function key corresponding to the zone number (**[F1]** through **[F8]**).

4) **Landing pad indicator**, to the left of each map's zone title. If a landing pad has been established in the zone, one of three symbols will appear:

🔲 Pad is Empty   🔳 Drop Ship is in transit between orbit and pad   🔲 Drop Ship is on Pad

5) **Orders indicator** for each zone, to the right of each map's zone title. In this space will be "-" if no Krellan forces are in the zone, or one of six letters referring to the current zone orders 2.3.2.1.

6) **Summary of forces (FORCES)**, the number of your cohorts/troops in Orbit, the number in Transit to or from an invasion zone, and the Total forces. The bottom line of this area shows the latest estimate of the total number of Enemy Units on the planet, and any Surface to Air Lasers (SAL's) or Planetary Defence Phasers (PDP's)

7) **Current invasion zone** and (Krellan and enemy) currently located there. To change the selected zone, use left or right arrow keys, or execute the Zone option under the Battle command (2.3.2.3).

Each of the *Invasion* commands are described in the following sections.

2.3.1 SYSTEM [S]

Executing this command allows you to control the following basic functions of the game:

2.3.1.1 Freeze [S] / [F]
You can toggle the passage of time off and on by selecting this option. While the game is frozen, you can view each invasion zone, load drop ships, give orders to individual combat units, or execute other invasion commands. You can also use the [BACKSPACE] key.

2.3.1.2 Save [S] / [S]

This option allows you to save the invasion and mission in progress.

2.3.1.3 Quit [S] / [Q]

This option exits you from the game and returns you to your computer's operating system.

2.3.1.4 Sound [S] / [D]
This option toggles sound on and off.

2.3.2 Battle [B]

This command brings up the battle menu, which you can use to set strategic orders for individual zones. The available options are Command [C], View [V], and Zone [Z]

2.3.2.1 Command [B] / [C]
To issue the same order to every combat unit within a zone, execute this command. Six choices, known as zone orders, will appear on the command line of the screen display. When you select one of these choices, the orders indicator will display the first letter of the command you specified, and every combat unit in the zone will follow this order, although units executing *Direct* orders will first complete their current orders. Regardless of what you have ordered, individual zone commanders may still act on their own initiative in some circumstances, based on their current situation. The zone orders are:

Direct [D]: Units will maintain current positions and wait for direct orders from you. This cancels any other zone order that may have been in effect and allows you to control each unit individually.

Standard [S]: Units will execute a Standard offensive, a combination of Capture and Reduce (see below).

Capture [C]: Units' priority is capturing cities; eliminating enemy forces is secondary.

Reduce [R]: Units' priority is eliminating enemy combat units.

Protect [P]: Units assume defensive mode, remaining at or close to their current positions and attacking any enemy units that come near. This is particularly useful for defending landing pads.

Withdraw [W]: Warriors will move toward the landing pad and board a drop ship when it arrives; when all units are on board or the ship is full, it will launch automatically and dock with a troop transport. Shock troops will move to a clear (unshielded and uncontested) area and upon arrival automatically teleport back to an orbiting transport.

2.3.2.2 View [B] / [V]
Executing this command from the battle menu displays the map of the currently selected zone and places you in Zone Control (described in detail in 2.4).

2.3.2.3 Zone [B] / [Z]
This option allows you to select an invasion zone (LZ1 through LZ8) from the Invasion Control Display. You can also accomplish this using the Invasion Control keyboard commands (Table II in 2.4).

2.3.3 Report [R]

This command allows you to view information about your invasion forces and obtain a status report for each invasion zone.

2.3.3.1 Forces [R] / [F]
Displays a summary of Krellan invasion forces, identical to that provided (by default) as part of the Invasion Control Display.

2.3.3.2 Losses [R] / [L]
Displays a report of losses to date among both Krellan and enemy forces, in the same area of the Invasion Control Display where the summary of forces appears.

2.3.3.3 Shields [R] / [S]
Tells you, via the message area, if there are any active shield generators within the selected zone. The small zone map on the Invasion Control Display will also change to show the portion of the zone covered by shields.

2.3.4 Drop Ship [D]

The options under this command allow you to control your drop ships.

2.3.4.1 Launch [D] / [L]
Sends the designated drop ship (empty or loaded) to the selected invasion zone . This option will not function if you try to send a ship to a zone that does not have a landing pad, or if you try to send a second ship to a zone where a ship has already been assigned.

2.3.4.2 Board [D] / [B]
Orders your troops (warriors or shock troops) to board a drop ship. As many as six cohorts can be aboard one ship.

2.3.4.3 Unload [D] / [U]
Orders the units aboard the selected drop ship to disembark while still in the troop transport. Units unload automatically when their drop ship lands on the planet.

2.3.4.4 Info [D] / [I]
Displays the current status of a selected drop ship.

2.3.5 Assault [A]

This is where the invasion really begins. After gathering information and making decisions on where and how to invade, select Assault to launch an invasion within a selected zone by teleporting shock troops down to that location.

You will be prompted for a quadrant in which you want the assault to take place: NW (quadrant 1, upper left), NE (quadrant 2, upper right), SW (quadrant 3, lower left), or SE (quadrant 4, lower right). Press the number associated with the desired quadrant, or move the highlight box over the quadrant and press [Enter].

After choosing the quadrant, you will be asked to specify the number of shock troop cohorts you want to send down; as many as eight cohorts can be teleported to one quadrant at one time. If you specify more cohorts than you have available, then all of your shock troops will be teleported. You will then be asked to confirm your selections of zone, quadrant, and number of troops before the assault begins. You do not have to wait for the assaulting troops to land before ordering more to assault.

2.4 ZONE CONTROL [V] / [Zone #] or [Fl - F8]

The following commands are available from Zone Control: *Systems* [S], *Orders* [O], *Info* [I], and *General* [G]. These commands comprise the Zone Control Menu, illustrated in Figure 95.
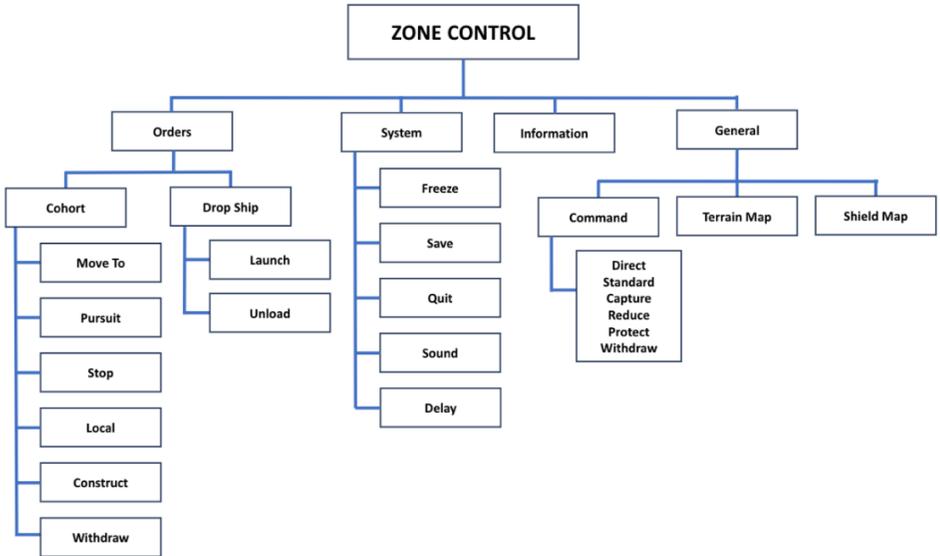

Figure 95. Zone Control Command Structure

When you execute the zone control command, an Invasion Zone Map similar to that shown in Figure 96 will appear.

In addition to some of the features in the Invasion Control Display, the Zone Map contains the following information:

1) Invasion zone number (IZ), number 1 through 8 of the invasion zone.

2) Orders indicator, similar to that shown in Figure 2.4b, except that the indicator is blank when no Krellan forces are in the zone.

3) Zone map, showing all terrain features and positions of all combat units.

4) Row-column coordinate scales alongside the map for determining any location within the zone.
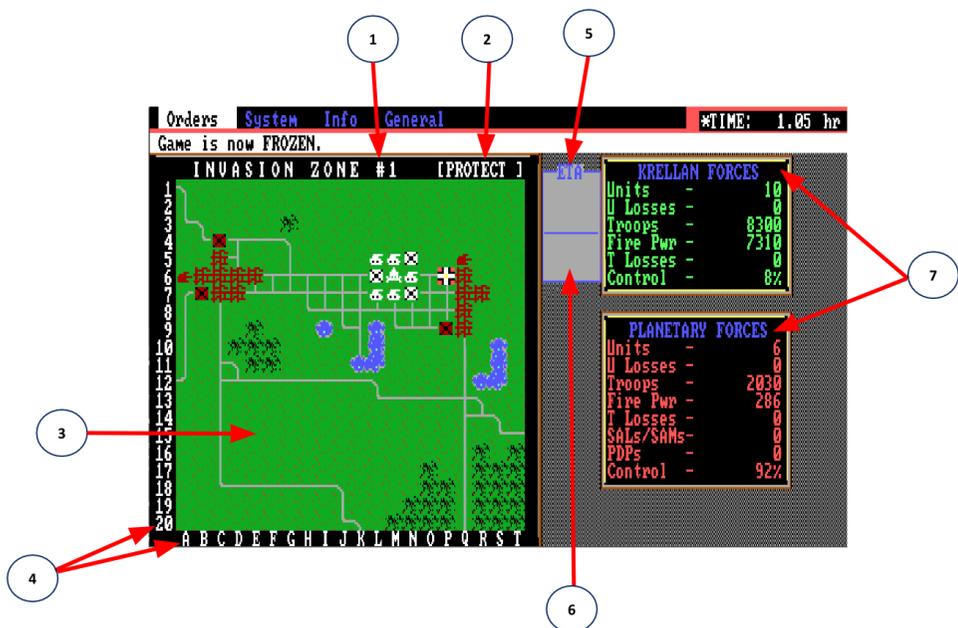
Figure 96. Invasion Control Display

5) Assault indicator, consisting of a shock troop unit symbol and a , plus an estimated time of arrival. This indicator will be displayed if any shock troops are scheduled to assault the zone.

6) Drop ship arrival indicator, consisting of the "drop ship in transit" symbol and an estimated time of arrival. This indicator will be displayed if a drop ship is on its way to the zone.

7) Summaries of forces within the zone, one area for Krellan troops and one for planetary and UGA forces. Each area shows total combat units active, total units destroyed, total number of troops (individual soldiers) present, current total firepower of the forces, the number of troops killed or captured, and the percentage of the zone controlled by the forces in question.

2.4.1 System [S]

The options available after executing this command - *Freeze* **[F]**, *Save* **[S]**, *Quit* **[Q]**, *Sound* **[D]** - are identical to those described in 2.3.1.

2.4.2 Orders [O]

This command brings up a list of new choices on the command line: unit orders, which you can issue to particular combat units within the zone. Before selecting a unit order, move the blinking cursor on the zone map over the unit you want to command. The unit orders are:

2.4.2.1 Move To [M]
After pressing **[M]**, move the cursor to the map location you want the ordered unit to travel to; then press **[Enter]**.

2.4.2.2 Pursuit [P]
After pressing **[P]**, move the cursor to the enemy unit you want this unit to pursue; then press **[Enter]**.

2.4.2.3 Stop [S]
The unit will stop and hold its position.

2.4.2.4 Local [L]
The unit is under local command; it will operate under whatever zone order you have given (2.3.2.1).

2.4.2.5 Construct [C]
The unit will construct a landing pad at its current location. Landing pads require approximately 0.4 hours to construct in clear terrain and 0.1 hours on a captured space port. You will receive a message when the pad is completed.

2.4.2.6 Launch [L] (drop ship only)
Orders the drop ship to launch.

2.4.2.7 Unload [U] (drop ship only)
Orders the drop ship to unload its units.

2.4.4.8 Withdraw [W]
Identical to the *Withdraw* command in the Battle Menu (13.3.2.1).

2.4.3 Info [I]

This option brings up a window containing general information about the combat unit (enemy or Krellan), object, or terrain located under the cursor position. The game is frozen while the window is displayed; press any key to resume the invasion. The characteristics displayed for h selected unit are:

Unit Identification, for Krellan units, in the form "Legion number/ Cohort number".

Manpower (Strength), the number of troops in the unit.

Combat effectiveness, a measure of the mental and physical condition of the unit's personnel, based on fatigue, morale, and other factors. Shock troops suffer a drop in combat effectiveness just after teleporting, but recover with the passage of time.

Orders (Krellan units only) that the unit is acting under, followed by the current zone order in [ ].

2.4.4 General [G]

This command has three options:

2.4.4.1 Command [G] / [C]
Used for assigning or changing zone orders; identical to the commands and choices described in 2.3.2.1.

2.4.4.2 Terrain Map [T]
Displays a terrain map of the selected zone, containing terrain features, cities, and landing pads, but not combat units. The game is frozen while the terrain map is displayed; press any key to resume the invasion.

2.4.4.3 Shield Map [S]
Displays a map showing the area(s) covered by any shield generators. The game is frozen while the shield map is displayed; press any key to resume the invasion.

A number of keyboard commands and function key commands are provided to supplement the choices on the command line of the Invasion Control Display; these commands are summarized in Table II.

TABLE II: INVASION CONTROL KEY COMMANDS

KEYS	DESCRIPTION
[F1] - [F8]	View invasion zone 1-8
[F9]	Return to Invasion Control
[F10]	Toggle between Invasion Control and current invasion zone
[Esc]	Back out of current menu, or return to Orbital Control
[<] and [>]	Change selected menu item (wraparound)
[ENTER]	Implement selected menu item
Direction Arrows	Move cursor one space in Invasion Zone Display, or change selected zone while in Invasion Control Display
[Shift] + Arrows	Move cursor five spaces in Invasion Zone Display
[Ctrl] + Arrows	Review messages in message buffer
[Alt][F]	Freeze simulation toggle
[Alt][W]	Bombardment weapons toggle

2.5 PLANETARY INVASION

A successful invasion depends on many factors. In addition to knowing how to operate your ship and issue commands to the various parts of your invasion force, you must know what your forces are capable of and what they will have to contend with when they arrive on the planet surface. This section contains information and instructions that will help you better understand some of the commands and displays described in Section 2.1 through 2.4.

2.5.1 Krellan Combat Units

The basic organizational unit of the Krellan army is the *assault legion*. One or more legions must be available in troop transport(s) orbiting the planet before an invasion can begin. Legions are transported as a whole aboard a troop transport, but are split up into units called *cohorts* when they take part in an invasion. Each cohort (which can contain as many as 1000 troops) is referred to as a *combat unit*. Each combat unit has a unique unit designation, which is displayed when you select *Info* from the Battle menu (2.4.3).

At full strength, each legion contains 10,000 soldiers, made up of seven cohorts of warriors (7,000 total) and four cohorts of shock troops (3,000 total). Each cohort's performance contributes to its parent legion's battle rating and battle honors. Battle honors are awarded by Krellan Fleet HQ at the end of a successful invasion and vary from unit to unit, based on the technology level of the conquered planet and the amount of fighting the unit did. Table III summarizes all Krellan forces, followed by descriptions of each unit type.

The *firepower* of a unit is a cumulative measure of its strength, combat effectiveness, and *strike effectiveness*. Strike effectiveness is a measure of the quality of the unit, based on all relevant facts (sophistication of weapons and equipment, degree of training, experience, and, for Krellan units, the parent legion's battle rating). The strike effectiveness of planetary troops (militia) and planetary forts is a function of the planet's technology level.

TABLE III: KRELLAN FORCES

UNIT NAME	SYMBOL*	DESCRIPTION	MAX FIRE POWER	MAX STRENGTH (MANPOWER)
Shock Troop Cohort		Initial assault unit	60,000	3,000
Warrior Cohort		Primary invasion attack force	100,000	7,000
Drop Ship (on pad)		Ship-to-surface transport vessel	5,000	50

*Colors are: White (EGA - K & A planets), Green (EGA - D & P planets), Magenta/Red (CGA), Grey (monochrome)

Shock Troops: A full-strength cohort of shock troops consists of 750 lightly armed elite troops, equipped with armored battle suits and hand-held or light weapons. They use their powered suits or small, armored hovercars for transportation. When you call for an assault (2.3.7), shock troops will teleport to the planet surface to begin softening up the opposition, and prepare the way for the drop ship and warriors.

Warriors: A full-strength cohort of warriors consists of 1000 heavily armed and armored warriors. They are fully equipped with hovertanks, mobile artillery, armored personnel carriers, and fighter/bomber support craft. Warriors cannot be teleported, but must be transported to and from the planet by drop ships; a drop ship cannot land in an invasion zone until some of the troops already there have constructed a landing pad for it.

Drop Ships: Each troop transport carries four of these vessels, which are used to transport combat units to and from the planet surface. Each drop ship can carry up to six cohorts (a maximum of 6,000 'soldiers, if all are warriors). The ships are only lightly armed, but have heavy armor that enables them to withstand a great amount of enemy fire. Drop ships are controlled by the options described in 2.3.6.

2.5.2 Enemy Combat Units

Most of the invasions you conduct will meet with resistance from two types of combat units: United Galactic Alliance regular forces and planetary troops (militia). Table IV summarizes all UGA and planetary forces, followed by more complete descriptions of each unit type.

TABLE IV: UGA AND PLANETARY FORCES

UNIT NAME	SYMBOL *	DESCRIPTION	MAX FIRE POWER	MAX STRENGTH (MANPOWER)
UGA Regular Forces		Standard UGA combat unit	80,000	1,000
Planetary Troops: Tech Level 1 2 3 4 5 6 7		Local militia	1,000 2,000 5,000 10,000 20,000 40,000 60,000	1,000

*Colors are: Red (EGA), White(CGA, monochrome)

UGA Regular Forces: Each of these units represents a fully equipped brigade. The brigade consists of 1,000 troops and includes a full range of hovertanks, heavy artillery, transports, and support aircraft. All UGA regular units are initially staffed at about 90% of full strength, but will probably be strengthened by forces in the field or troops called back from leave as the invasion progresses.

Planetary troops: These are brigade-strength forces mustered from the native population. The quality of their equipment and strength of their firepower depends on the planet's technology level. At low levels they may be armed only with primitive weapons, and merely provide target practice for your warriors (although due to equipment malfunction or accidents you may lose a few troops). At high technology levels, this militia can be formidable and should not be taken lightly, although planetary troops are never as powerful as UGA regulars. All planetary troop units are initially staffed at about 50%, but will probably be reinforced as the invasion progresses.

2.5.3 Enemy Defenses

In addition to the troop strength present on a planet, your invasion forces will also have to overcome static defences that are found on almost every planet. The planetary and UGA defences are summarized in Table V, followed by more complete descriptions of each.

TABLE V: PLANETARY AND UGA DEFENSES

UNIT NAME	SYMBOL*	DESCRIPTION	MAX FIRE POWER	MAX STRENGTH (MANPOWER)	FOUND ON TECH LEVEL
Planetary Fort: Tech Level 2 3 4 5 6 7		Special defensive fortification	2,000 5,000 10,000 20,000 40,000 60,000	500	2-7
Shield Generator		Defensive energy shield	100	10	6-7 Any, if UGA forces present
Surface-to-Air Laser		Laser cannon - can destroy dropships	100	10	5-7
Planetary Defense Phaser		Phaser cannon - can destroy transports	100	10	6-7

*Colors are: Red (EGA), White (CGA, monochrome)

Planetary forts: These are fortified outposts that can be difficult to conquer. Each fort has a full strength of 500 and is initially staffed at about 80% (400), but will probably be reinforced as the invasion progresses.

Shield generators: These devices produce a defensive energy shield over a city or part of a city, protecting those areas from assault by teleported shock troops or the landing of a drop ship. The shield is like an umbrella and does not extend to the ground, meaning that your ground troops can attack beneath the shield and possibly knock out the generator. Shield generators will certainly be found on planets with high technology levels, and may also be present on any planet that contains UGA regular forces. These shields are not to be confused with planetary defence shields that encompass the entire planet, which must be knocked out by orbital bombardment before an invasion can be started.

Surface-to-Air Lasers (SAL): These are large laser cannons, particle beam generators or missile batteries, which are capable of destroying a drop ship while it is landing or taking off.

Planetary Defence Phasers (PDP): These are extremely powerful laser or phaser cannons that can damage or destroy orbiting ships, including troop transports and your battlecruiser! However, they cannot hit drop ships in transit or on the planet's surface.

2.5.4 Assault Procedure

An invasion begins when you order an assault by shock troops (2.3.7). It is important to examine the invasion zone before teleporting the troops, because cohorts may be damaged or destroyed if they land within an area that contains a lot of water or is protected by shield generators. You can control the quadrant into which shock troops will teleport, but you cannot pick specific landing spots within that quadrant. Some troops will be lost if a unit teleports into an enemy zone of control (3.5.2), but there may be times when you cannot avoid doing this, or when your reason for doing so offsets the risk of losing troops. Teleporting one assault wave of shock troops takes about 0.2 hours, regardless of the number of cohorts in that wave.

Once your shock troops have landed, you should designate one unit to construct a landing pad. A pad can only be constructed on an area of clear terrain, a road, or the site of a captured space port. Construction takes about 0.1 hours on a spaceport site, about 0.4 hours in other locations. It is a good idea to use some or all of your remaining shock troops to protect the site while a pad is being built.

You can bring down additional waves of shock troops into the same zone at any time, to reinforce troops already on the planet, attack in a different quadrant, or construct a new landing pad. Note, however, that no zone can have more than one landing pad at any time. You may need to build a new one if your original pad is destroyed, or you can choose to

build a new one in a more secure location, in which case the first pad will be dismantled as soon as the new one is completed.

Planetary defence phasers can be a serious threat to an invasion; knocking out these weapons should be a top priority. If an orbiting troop transport is destroyed, some of the troops may escape to another transport, but even in the best case you will suffer serious losses. If all of your orbiting troop transports are destroyed, all legions and drop ships in orbit or on the planet will be destroyed, and so will your chances of victory.

2.5.5 Drop Ships

These vessels are the only means by which legionary warriors can be transported to and from an invasion zone. As soon as a landing pad is built, you should load a drop ship with warriors and send it to that zone. (Caution: if one of your units is located on a landing pad when a drop ship arrives, the unit will be destroyed.)

If the landing pad is destroyed before your drop ship arrives, the ship will attempt to return to orbit. On a planet with a high technology level, there is a chance that surface-to-air lasers will destroy a drop ship in transit (18% for TL 6, 30% for TL 7). Some warriors may survive even if the drop ship takes a direct hit, but the best way to prevent this is to eliminate the planet's surface-to-air weapons as soon as possible.

After a drop ship is unloaded, it should be launched back into orbit immediately, to keep it from being destroyed and to make it available for use again. If threatened by nearby enemy units, the commander of the drop ship may launch without your orders, perhaps even without unloading any troops.

2.5.6 Movement

A combat unit can move into any of the eight squares surrounding its present location, using the same system by which a Target Designator Box is moved. A unit on the edge of an invasion zone cannot move beyond the 20-by-20- square area of that zone.

Movement can be accomplished in two ways: either by issuing the **Move To** order (2.3.4.2), which allows you to designate a specific destination for the unit; or by giving the unit a *Local* order, which will cause it to move in the process of carrying out the prescribed zone order.

2.5.6.1 Movement Rates
The speed with which a unit moves is mainly dependent on the type of terrain being moved into. Movement rates, in squares per hour, are shown in Table VI for each of the four types of units that move on the planet's surface. The numbers on the table refer to the rate for a horizontal or vertical move under ideal conditions. A diagonal move takes 1.5 times longer

than a horizontal or vertical move, and local factors beyond your control may reduce a unit's movement rate to a lower figure than the one given here.

TABLE VI: UNIT MOVEMENT RATES AND TERRAIN

TERRAIN	SYMBOL	SPEED* (squares/hour)			
		Krellan Shock Troops	Krellan Warrior Cohort	UGA Forces	Planetary Troops
Clear		25	20	22.5	22.5
Water		5	4	4.5	4.5
Rough		10	8	9	9
River		12.5	10	11	11
Road		25	20	22.5	22.5
City		16.5	13	15	15
Industry		16.5	13	15	15
Space Port		16.5	13	15	15
Rubble		12.5	10	11	11
Landing Pad		12.5	10	11	11

*These times are approximate. Local factors beyond your control may vary these times.

2.5.6.2 Zones of Control

Every combat unit has a zone of control (ZOC) extending to the eight squares surrounding it (or fewer squares, if the unit is located on the edge of the zone). An opposing unit moves more slowly than normal when it enters a unit's ZOC, and movement from one square to another within the same unit's ZOC is especially time-consuming. Shock troops cannot teleport back to orbit while they are in an enemy unit's ZOC.

2.5.7 Combat

Combat is initiated when one unit attempts to move into the square occupied by an opposing unit. Units engaged in combat fire on one another simultaneously; the unit that started the combat gains no advantage.

The firepower of a unit determines its ability to damage another unit. After a unit engages in combat, it loses 25% of its combat effectiveness if it was the attacker and 20% if it was the defender. (Because of this, it is unwise to send the same unit into combat too frequently.) When a unit's combat effectiveness falls below 50% it will not be able to attack, and it will incur greater losses if forced to defend. A unit regains combat effectiveness gradually with the passage of time.

A shock troop cohort is especially vulnerable to attack just after teleporting to the planet surface; it loses 50% of its combat effectiveness immediately after landing. It also suffers a 25% loss of combat effectiveness immediately after being ordered to withdraw (teleport back into orbit).

The losses a unit takes in combat are measured in strength (number of troops), and are directly related to the unit's combat effectiveness and the opposing unit's firepower. Several units together attacking a single enemy unit will be more effective, since the defending unit's combat effectiveness will decrease more rapidly. When a unit's strength is reduced to 0, the unit is destroyed. If the destroyed unit was defending, then the unit that made the final attack on the defender will move into the vacated square.

2.5.7.1 Terrain Effects on Combat

The type of terrain on which a defending unit is located has an effect on the combat losses the defender will take. The higher the Defence Factor (OF) for a type of terrain (see Table VII), the fewer losses a unit defending that terrain will take. For example, a unit that is attacked while it is in a city (DF 2.0) will suffer half as many losses as a unit in clear terrain (OF 1.0). The terrain currently occupied by the attacking unit has no effect on this determination (it always uses a DF 1.0 in combat).

TABLE VII: TERRAIN EFFECTS ON COMBAT

TERRAIN TYPE	DEFENSE FACTOR	TERRAIN TYPE	DEFENSE FACTOR
Water	0.5	Rough	1.4
Landing Pad	0.9	Industry	1.7
River	0.9	City	2.0
Road	0.9	Space Port	2.0
Clear	1.0	Rubble	2.0

2.5.7.2 Planetary Morale and Replacements

Morale of the defending forces is a factor in any invasion of a planet with a technology level of 4 or higher, or any planet where UGA forces are present. Planetary morale increases as the enemy forces eliminate your combat units and repulse your attempts to conquer invasion zones. Planetary morale drops as you gain control of cities, eliminate enemy troops, and (especially) conquer entire invasion zones. Planetary morale is always an unknown quantity unless it falls to zero, at which point the planet will offer to surrender.

Planetary forces will receive replacement troops during an invasion, at a rate that depends on the morale and the number of reserves left on the planet.

Planets below technology level 4 (with no UGA forces present) do not have communications equipment, and are unable to spread news of battle losses between cities within the timeframe of an invasion. Therefore, these backward planets will never surrender, since they have no way to establish a planet-wide morale level. You must capture every city on these planets.

2.6 VICTORY CONDITIONS

An invasion can succeed in one of two ways: by capturing all of the cities on the planet, or by forcing the planet to surrender. In either case, victory is yours and the planet comes under the ownership of the Krellan Empire!

2.6.1 Capturing an Invasion Zone

An invasion zone is captured when one of these conditions is met:

1) Destroy all enemy units in the zone.

2) Capture (occupy with your units) all cities, industries, and spaceports in the zone. All remaining enemy units in the zone will then surrender.

You will receive a message when a zone is captured, and the frame around that zone's map in the Invasion Control Display (Figure 94) will turn magenta to indicate Krellan ownership. A captured zone cannot be retaken by the enemy, which means that you can pull out your forces and send them to another zone.

2.6.2 Forcing a Planet's Surrender

When planetary morale is a factor in an invasion, it may not be necessary to capture all cities in order to conquer the planet. Achieving several major military victories - destroying industries, capturing cities, eliminating enemy troops - may be sufficient to reduce the planet's morale to zero and bring about a surrender. Capturing the capital city of a planet is a severe blow to the enemy's morale, and is the single most important objective in any invasion. You will not know which is the capital city, but because the capital is usually relatively large and well-defended, you might be able to identify it.

PART III

COMMANDING THE FLEET

Once you become a Prefect you can command other ships in your local system, and at the next rank of Subadmiral, can command any of the Krellan ships in the region. There are two ways you can monitor and command the ships in your fleet. Either through the *Space Forces* command (*Local* or *Total*) option in Strategic Command (xxxxxx) or through *Fleet Command* also in Strategic Command.

3.1 Space Forces Command

Once you have entered Strategic Command from the Main Menu you will see the command options available, which are explained in Section xxxx. Two of the options are for *Regional Forces* and *System Forces*.

3.1.1 Regional Forces [G]/[R]

When you execute this command, a War Map (Fig. 22) will be displayed, from which you can obtain information about all other Krellan forces in the region. In addition, if your rank is Subadmiral or higher, you can send orders to all other Krellan ships in the region, instructing them to move to particular regional locations and perform certain duties.

Executing the Regional command takes you to the part of the menu where you can view a summary of the status of Krellan forces. The options *Local* and *Total* will appear on the command line. To examine the Krellan forces within a particular star system, move the TDB to that regional location and press [L] for Local. To examine the Krellan forces within the entire region, press [T] for Total. After you select Local or Total, the command line will display the options *Space Forces*, *Legions*, and *Losses*. The latter two options are described in the Strategic Command Section (1.7).

3.1.1.1 Space Forces [G] / [R]or[S] / [L]or[R] / [S]
This option calls up a display (Fig. 97) similar to the *Krellan Combat Status Report* (1.4.1.2), except that it shows actual regional location and system positions for each ship and starfort instead of relative position. If you press [O] for *Orders*, a window will appear on the right side of the table showing the current orders and objectives of each ship in the table (Fig. 98). Press any key to remove the orders window.

To issue orders or obtain information, move the highlight box to the ship you are interested in and press [Enter] to bring up the Strategic Command Window for that vessel (Fig. 99). Use either the cursor keys or the single letter key to select and activate the command you want to execute for the displayed ship. If your rank is below Subadmiral, the only command you can give is Data. Any commands not permitted at your rank will be shown in grey. The commands and effects are:

Figure 97. Space Forces Database Table

KRELLAN				SPACE FORCES										
NAME	TP	ID #	R.LOC	SYS LOC	VEL	POWER	SPPLY	S	H	D	P	TRP	CREW	S.TP	STATUS
BLOWPIPE	Ω	E-1	ours	37, 43	0.0	1175	194	↑	↑	0	–	15↑	150	50	NORMAL
CLUB	Ω	E-2	ours	37, 37	0.0	1176	194	↑	↑	0	–	15↑	150	50	NORMAL
WAR ROCKET	Ω	E-3	ours	43, 37	0.0	1176	194	↑	↑	0	–	15↑	150	50	NORMAL
KUKURI	Ω	E-4	ours	43, 43	0.0	1175	194	↑	↑	0	–	15↑	150	50	NORMAL
DEATHKNELL	✦	KS- 0	1,10	in hyps	8.0	3951	989	↑	↑	0	↑	24↑	275	150	NORMAL
DEATH WING	✦	KS- 1	13, 5	in hyps	8.0	3947	989	↑	↑	0	↑	24↑	275	150	NORMAL
GALAXY	♀	KS- 2	19, 0	66, 6	0.0	3000	3200	↑	↑	0	–	90	280	100	DOCKED
ISOCHRONE	♀	KS- 3	24, 0	in hyps	7.0	2960	3190	↑	↑	0	–	90	280	100	NORMAL
STARFIELD	♀	KS- 4	10, 0	in hyps	7.0	2960	3190	↑	↑	0	–	90	280	100	NORMAL
QUASAR	♀	KS- 5	12, 1	in hyps	7.0	2960	3190	↑	↑	0	–	90	280	100	NORMAL
BLIMP	θ	KS- 6	11, 0	in hyps	6.0	4963	2985	↑	↑	0	–	0	400	150	NORMAL
MONSTROUS	θ	KS- 7	33, 1	73, 64	0.0	5000	3000	↑	↑	0	–	0	400	150	DOCKED
OLYMPIAN	θ	KS- 8	0, 0	51, 47	0.0	4999	2985	↑	↑	0	–	0	400	150	ORBIT
MAMMOTH	θ	KS- 9	11, 1	in hyps	6.0	4963	2985	↑	↑	0	–	0	400	150	NORMAL
PARAMOUNT	θ	KS-10	25, 0	in hyps	6.0	4963	2985	↑	↑	0	–	0	400	150	NORMAL

[PgUp]:prev page   [PgDn]:next page   [O]:orders   [Esc]:exit

| ID/class | SS-0 /K | Distance | 0.0 | MET | 0.93 days | Position | S 40x 40y |
| Location | 7x 6y | Bearing | 0° | Velocity | s: 0.0 c: 0.0 | Target | |

Select option

Figure 97. Space Forces Database Table

KRELLAN				SPACE FORCES			
NAME	TP	ID #	R.LOC	SYS LOC	VEL	ORDERS	OBJECTIVE
BLOWPIPE	Ω	E-1	ours	37, 43	0.0	Escort ship	None
CLUB	Ω	E-2	ours	37, 37	0.0	Escort ship	None
WAR ROCKET	Ω	E-3	ours	43, 37	0.0	Escort ship	None
KUKURI	Ω	E-4	ours	43, 43	0.0	Escort ship	None
DEATHKNELL	✦	KS- 0	1,10	in hyps	8.0	Free operation	Reg.Loc 15,8
DEATH WING	✦	KS- 1	13, 5	in hyps	8.0	Free operation	Reg.Loc 17,6
GALAXY	♀	KS- 2	19, 0	66, 6	0.0	Free operation	Starfort 2
ISOCHRONE	♀	KS- 3	24, 0	in hyps	7.0	Free operation	Starfort 2
STARFIELD	♀	KS- 4	10, 0	in hyps	7.0	Free operation	Starfort 1
QUASAR	♀	KS- 5	12, 1	in hyps	7.0	Free operation	Starfort 2
BLIMP	θ	KS- 6	11, 0	in hyps	6.0	Free operation	Starfort 1
MONSTROUS	θ	KS- 7	33, 1	73, 64	0.0	Free operation	Starfort 3
OLYMPIAN	θ	KS- 8	0, 0	51, 47	0.0	Free operation	None
MAMMOTH	θ	KS- 9	11, 1	in hyps	6.0	Free operation	Starfort 2
PARAMOUNT	θ	KS-10	25, 0	in hyps	6.0	Free operation	Starfort 2

[PgUp]:prev page   [PgDn]:next page   [O]:orders   [Esc]:exit

| ID/class | SS-0 /K | Distance | 0.0 | MET | 0.93 days | Position | S 40x 40y |
| Location | 7x 6y | Bearing | 0° | Velocity | s: 0.0 c: 0.0 | Target | |

Select option

Figure 98. Space Forces Table with Orders Window

Figure 99. Strategic Command Window in Space Forces

Data [D] - Calls up the Krellan Ship Data Display (Figure 100) containing all the important information about the ship. Most parameters are self-explanatory, but the following need some explanation:

> **POSITION**, two sets of system coordinates, the first absolute ("**A**") and the second relative ("**R**") to your ship's location. If your ship and the one being viewed are in different star systems, no relative position will be given. If the ship is in hyperspace, then both R and S will show "**InHyp**".

> **SYSTEMS** abbreviations, color-coded according to status (Green for operational, Red for inoperative, Black for systems not present):

CMP: Ship's main computer	**TRP**: Torpedo control
HYD: Hyperdrive engines	**PHS**: Phaser control
S/L: Sublight engines	**TEL**: Teleporters
SRS: Short-range sensors	**COM**: Communications
LRS: Long-range sensors	**TBM**: Tractor beam
SHD: Shield control	**PLS**: Primary life support

> **ESCORT** and **ON-STATION**, "**No**" for any ship that is not an escort. If ESCORT is "**Yes**" and ON-STATION is "**No**", the escort is still moving to its assigned position. "**Yes**" indicates that the escort is in position. If the ID# shows "**KE-**" then it is one of your escorts. If it shows "**KS-**" then it is escorting another Krellan ship.

> **ENEMY DETECTED**, the number of Alliance ships and starbases currently within range of the ship's long range sensors.

LEGIONS, the number of legions aboard the ship, and how many warriors ("**W**") and shock troops ("**S**") are included in that total. Legions can only be carried by troop transports; each transport can hold up to four legions.
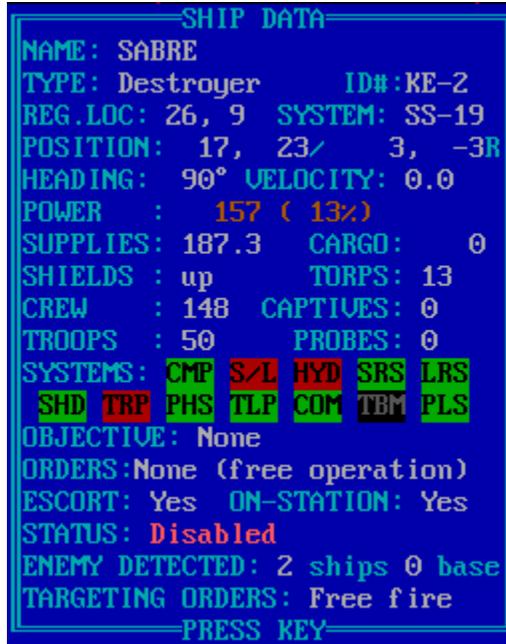
Figure 100. Krellan Ship Data Display

Move to [M] - Assigns a target location to the ship. The smaller displays will disappear, revealing the War Map (Total) or System Map (Local). Move the TDB to the regional location, then the system position, where you want to send the ship,, and confirm your selection to execute the order.

Rendezvous [R]- Orders the ship to move adjacent to your battlecruiser. If you move your ship after issuing this order, the Krellan Ship will follow you until it has reached your ship.

Withdraw [W] - Tells the ship to head for the nearest starfort, where it will dock, replenish supplies and energy, and change to free operation orders.

Hold position [H] - Orders the ship to turn off its engines and await further orders.

Patrol system [P] - The ship will move around its current regional location looking for enemy vessels or starforts. It will continue to do so until ordered otherwise, or it runs low on energy or supplies, in which case it will automatically return to the nearest starfort..

Invade [I] - Calls up the Planets Database Display (Fig. 44). Move the highlight box and select the planet you want to be invaded. Troop transports will perform the actual invasion; other ships will support an invasion if ordered to do so.

Escort ship [E] - Orders the ship to escort or accompany another ship. A list of all ships in the region (Total) or star system (Local) will be displayed; use the highlight box to select the ship to be escorted.

Attack [A] - Orders the ship to attack a specified target, which you select by moving the TDB within the War Map (Total) or System Map (Local). If you want to specify a target within range of your Tactical Display, select your current ship position when prompted for a target. The Tactical Display will then be superimposed on the screen, and you can move the TDB to the exact target desired and press [Enter].

Free operation [F] - The ship is under no specific orders and is free to act on its own, or as ordered by Imperial Krellan Fleet Headquarters.

3.2 Fleet Command

Fleet Command groups ships by their current assignments, easily locate where they are in the region in relation to your ship, and allows you to easily change assignments, form or dissolve fleets, check on their status and current orders, etc. There are four different displays in the Fleet Command. You switch between the displays using the [Page Up] and [Page Down] keys. The displays will be described in turn.

3.2.1   Display 1 – Fleets Display

When you select this command this is the first display shown (Fig. 101). This shows your *Battle Fleets* (battlecruisers with escorts), *Supply Fleets* (supply ships with escorts), and *Legion Fleets* (troopships with escorts). For reference, your current region location (**RL:**) is shown in the upper left-hand corner of each display. The screen is divided into zones, with each Battle Fleet occupying a zone. There can be two Supply Fleets in a zone and three Legion Fleets. In the display, each ship shows the following information:

- **Fleet Number (cyan)**– used only for your convenience.
- **Ship Symbol** – the symbol for this Krellan ship in green. If it is part of your Battle Fleet, then it is in bright green.
- **Ship ID #** - this is the KS number of the ship. The only exception is in your Battle Fleet, where your ship doesn't have a number, and your escorts are E-# and not KS-#.
- **Ship's Status** – this is color-coded to show the status of the ship. Blue = docked, green = normal, orange = weakened, red = in trouble, very weak. If the ship is in orbit the status symbol is a colored "o", otherwise it is a colored block ("■"). You normally would only assign new duties to a ship that has a blue or green condition, and if you see one with yellow or red, it would be advisable to order it to withdraw to the nearest starfort if 101 can.
- **Ship's Name** - if the ship is a principal ship (i.e., battlecruiser, supply ship, or troop ship) then the name will be in bright white. If it is a destroyer escort, the name will be in white (grey). This also applies to the ship names in the Invasion Fleets display. Unassigned (i.e., independent) destroyers are in green.

The current selected ship is shown by the white bar with black lettering that highlights the ship's name. You move this ship selection cursor using the arrow keys.

The Battle Fleets have space for one battlecruiser and four escorts. Your Battle Fleet is always Battle Fleet #1. The Supply Fleets and Legion Fleets normally have one Krellan destroyer escort assigned to them. However, you can assign more escorts to a fleet than their nominal values. This is the case for the Supply Fleet under the supply ship KS-4 COSMOS in Figure 102. Instead of the usual one escort, it has two, so the escort ship position is replaced by "**+2 escorts**". If you select this position and press [Enter], you will see a box that lists the data for this fleet including all escorts (the box expands to be able to show all the ships). Your selector cursor will start on the fleet parent ship, but you can select any of the ships shown in the box for commanding.

The troopships listed in the *Legion Fleets* of FLEET COMMAND DISPLAY 1 show their readiness to participate in an invasion by the color of their ship symbol (Fig. 101). Green means their legions complement is at full strength (four legions, with a total of 28,000 warriors and 12,000 shock troops) and the condition of the ship is suitable for participation in an invasion. If the troopship is not ready, its symbol is brown.

```
RL:6,7    Press [M] for menu   FLEET COMMAND DISPLAY 1
BATTLE FLEETS
1  ♣       oZEUS          2♠KS-0 ■DEVASTATOR  3♣KS-1 ■RED DEATH  4
   ΩE-1  oWAR HAMMER      ΩKS-19■STAR KNIFE   ΩKS-23■WAR ROCKET
   ΩE-2  oATLATL          ΩKS-21■BATTLE CRY   ΩKS-24■RAPIER
   ΩE-3  oFLAIL           ΩKS-39■STAR SABRE   ΩKS-25■STAR LANCE
   ΩE-4  oSICKLE          ΩKS-40■GRENADE      ΩKS-26■BLOWPIPE

SUPPLY FLEETS
1 ♀KS-2 oNEBULA      2♀KS-3 oNEUTRINO   3♀KS-4 ■ASTEROID   4♀KS-5 ■METEOR
  +2 escorts          ΩKS-35oWAR CLUB    ΩKS-29■MORTAR      ΩKS-42■BLUDGEON

5 ♀KS-6 ■MOON        6                  7                  8
  ΩKS-44■MACUAHUITL

LEGION FLEETS
1 ⊙KS-7 ■BEHEMOTH    2⊙KS-8 ■BUFFALO    3⊙KS-9 oWALRUS     4⊙KS-10oSPACE ARK
  ΩKS-20■KNIFE        ΩKS-32■STILETTO    ΩKS-38oDIRK        ΩKS-31oMISSILE

5 ⊙KS-11oELEPHANT    6⊙KS-12■PELICAN    7⊙KS-13■RHINO      8⊙KS-14■DINOSAUR
  ΩKS-34oKATANA       ΩKS-33■REVOLVER    ΩKS-45■MUSKET      ΩKS-30oSCIMITAR

9 ⊙KS-15oTITAN      10⊙KS-16oCAMEL    11⊙KS-17■MASTADON  12⊙KS-18■ORCA
  ΩKS-36■LASER GUN    ΩKS-41oSPEAR       ΩKS-27■STARDAGGER  ΩKS-43■GATLINGGUN
```

Figure 101. Fleet Command Main Display – Display 1

BATTLE FLEETS
1 ✿   BLOOD STAR 2✿KS-0 ■DEMOLISHER 3✿KS-1 ■ ♀KS-4 ■COSMOS
  ΩE-1 ■SHURIKEN   ΩKS-24■CARBINE   ΩKS-23■ ΩKS-22■SCIMITAR
  ΩE-2 ■SWORD   ΩKS-27■WAKIZASHI   ΩKS-35■ ΩKS-30■WAR HAMMER
  ΩE-3 ■STARHAMMER   ΩKS-28■ARQUEBUS   ΩKS-36■
  ΩE-4 ■TANTO   ΩKS-34■STARDAGGER   ΩKS-40■REVOLVER

SUPPLY FLEETS
1 ♀KS-2 ■CLUSTER   2♀KS-3 ■SUPER NOVA 3♀KS-4 ■COSMOS   4♀KS-5 ■CELESTIAN
  ΩKS-19■GUN   ΩKS-25■HOWITZER   +2 escorts

5   6   7   8

LEGION FLEETS
1 θKS-6 ■CAMEL   2θKS-7 ■CONDOR   3θKS-8 ■ZEPPELIN   4θKS-9 ■DROMEDARY

5 θKS-10■WALRUS   6θKS-11■ELEPHANT 7θKS-12■MANATEE   8θKS-13■COLOSSAS
                    ΩKS-37■PISTOL

9 θKS-14■HIPPO   10θKS-15■TITAN   11θKS-16■ATLAS   12θKS-17■SPACE ARK

Figure 102. Fleets Display with Window Showing Expanded Fleet

INDEPENDENT DESTROYERS
  ΩKS-15■PISTOL   ΩKS-16■GUN   ΩKS-17■SCYTHE   ΩKS-18■WAKIZASHI
  ΩKS-19■STARHAMMER   ΩKS-20■ARROW   ΩKS-21■PANZER   ΩKS-22■ONAGER
  ΩKS-23■MACHETE   ΩKS-24■SABOT   ΩKS-25■TREBUCHET   ΩKS-26■GLAIVE
  ΩKS-27■CLUB   ΩKS-28■TANK   ΩKS-29■SHOTGUN   ΩKS-30■BOMB
  ΩKS-31■KUKURI   ΩKS-32■BATTLE CRY ΩKS-33■CROSSBOW   ΩKS-34oBLOWPIPE
  ΩKS-35■PIKE   ΩKS-36■MISSILE   ΩKS-37■STILETTO   ΩKS-38■DIRK
  ΩKS-39■RAPIER   ΩKS-40■KNIFE   ΩKS-41oCARBINE   ΩKS-42■MACUAHUITL
  ΩKS-43oGUANDAO   ΩKS-44■MORTAR   ΩKS-45oTANTO

Figure 103. Fleet Command Display 2 – Independent Destroyers

3.2.2 Display 2 – Independent Destroyers Display

This display shows the destroyers that have not been assigned to any fleets (Fig. 103). This then provides the pool of destroyers available to assign to any of the fleets on the Fleets Display. There are no zones on this display and the symbology is the same as on the Fleets Display. Note that it is possible to assign a destroyer to escort another destroyer, it doesn't have to be in one of the formal fleets.

3.2.3. Display 3 – Invasion Fleets Display

This display (Fig. 104) is similar to the Invasions Management Display in Strategic Command (Fig. 75) except that it shows you the ships involved with or committed to the invasions and their status, but not information about the troops involved. The computer can only handle four simultaneous invasions, and this display can also handle four. For each invasion, the planet is identified by its **SS** number and name. Below that is the Technology Level (**TL**) of the planet and an indicator of the presence of UGA forces. The status of the invasion is shown below that, *Scheduled*, *Underway*, or *Conquered*. Below that is a list of the ships that are assigned to that invasion. All the ships shown in the display appear on one of the previous two displays – this is just a special grouping for convenience to help you quickly see which ships have been assigned to invasions.

Figure 104. Fleet Command Display 3 – Invasion Fleets

3.2.4. Display 4 - Starforts and Captured UGAS Display

This display (Fig. 105), which shows the status of your three starforts. It also includes the status of a captured starbase (if any) and up to four captured UGA ships before their delivery to starfort.

Figure 105. Fleet Command Display 4 – Starforts and Captured UGAS

Starforts
Any parameters that are not nominal (e.g., alerts) will be shown in a color for easy recognition. For the starforts, the Legions Based in SF refers to the legions that are actually in the starfort, and not the legions in any troopships that are docked in starfort. The number shown are the legion numbers (if you look at the *Legions Display* in Strategic command, these legions will show their location as the starfort, and not a ship docked in starfort). These starfort-based legions are available as replacements for legions missing or damaged on docked troopships. Damaged legions that are replaced, will be transferred to Reserve for replenishment.

Captured UGAS
Up to four captured UGAS that have not been delivered to a starfort will be displayed. If any of the parameters that are critical to its safe delivery are not within specification, they will be shown in red. These are: Power (**Powr**), Prize Crew (**KCw**), Shock Troops (**STp**) and the engines: Auxiliary (**AUX**) and Hyperdrive (**HYP**). To successfully take the UGAS to starfort requires both engines operational (they can be repaired by a full-strength prize

crew), power should be over 250 units, there must be at least 20 crew and 10 shock troops (more crew can repair engines faster). The number of captives on board (**Cptv**) is shown, and whether the ship was captured (**Cptr**) by you (**Us**) or another Krellan battlecruiser (**KS**) is shown.

Captured Starbase
If a starbase has been captured, its information is indicated here.

3.2.5. Fleet Command Menu and Commands

On either of the first two displays (*Fleets* and *Independent Destroyers*) you can display the menu of available options by pressing [M]. This is not needed on the *Invasion Fleets* or *Starforts Displays* because you cannot command any of the ships from these displays – they are for information purposes only (with one exception that does not require the menu). The Menu Box will appear in the right side of the display (Fig. 106), and any key pressed will remove it. The commands in the Menu apply either to the ship that is currently selected (highlighted) or to all the ships in the display (depending on the command). Following is a description of all the commands available in Fleet Command.
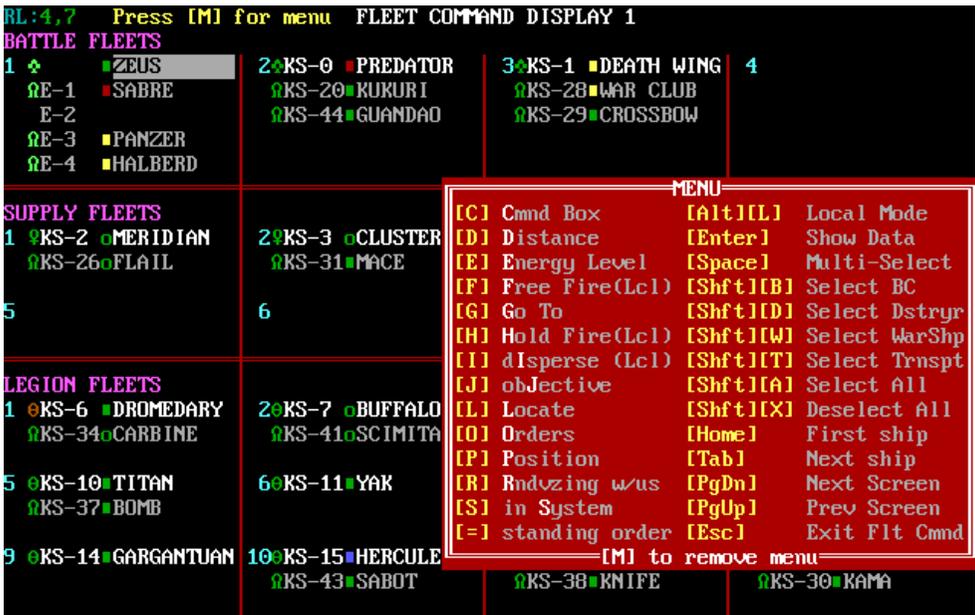
Figure 106. Menu for Fleet Command

3.2.5.1 Command Box [C]
This displays the Strategic Command Window described in Section 3.1.1.1 and operates the same way, with one exception – the *Escort Ship* order. To use this command, you must

first highlight the ship being ordered to escort another ship, then select the *Escort Ship* command. You will then be prompted to select the ship you wish your highlighted ship to escort (known as its "ward'). Although the escorting ship is usually a destroyer, it does not have to be. It can be any ship (except one in your Battle Fleet), and the ship being escorted can be any type of ship, even another destroyer. You can even order other ships to escort your ship, although they will not be official escorts of your Battle Fleet. Once you have been prompted to select the ship being escorted, the Strategic Command window will disappear so that you can see all the ships in the fleet. Move the highlight cursor to the "ward" to be escorted (it may or may not be a parent ship of a fleet). If the escorted ship is not on your current display, you can change the display using [Page Up] or [Page Down]. Note these will just toggle between Display 1 and Display 2 of Fleet Command – you cannot assign ships in the Invasion Fleets Display (Display 3) or Starforts and Captured UGAS Display (Display 4). When you have highlighted the ship to be escorted, press [Enter] and the Strategic Command window will reappear and you will receive a message from the escorting ship acknowledging the orders to escort the selected ward ship.

3.2.5.2 Distance [D]
The Distance command shows you the regional distance (in light years) from your ship of all the ships on the screen (Fig. 107). It replaces the name of the ship with a box that shows the distance. The color of the box aids in quick identification of the distances. Green is for close (<= 5 ly), cyan is mid-range (5-10 ly), and magenta is for far range (>10 ly). Press any key (except [Esc]) to remove the distances and restore the ship names. Note: pressing [Esc] will return you to the Main Bridge.

Figure 107. Distance Indicators

3.2.5.3 Energy Level [E]

This option shows the Energy level in of all the ships in the display (Fig. 108). The bar indicators are color-coded: 0 % energy, 1-24% energy, 25-49% energy, 50-74% energy, 75-100% energy. Press any key to remove the indicators.
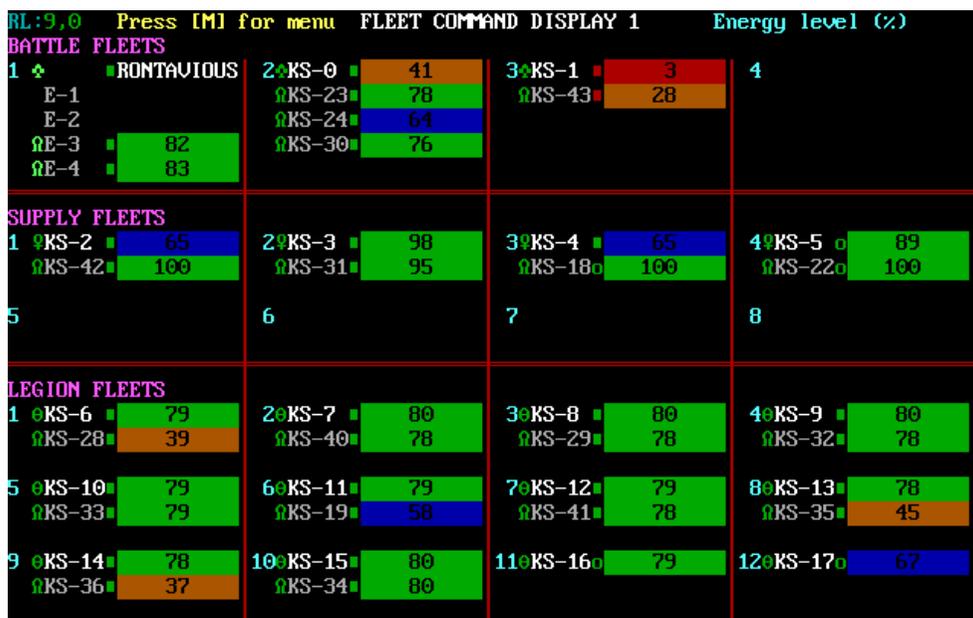
Figure 108. Ship Energy Indicators

3.2.5.4 Free Fire (Lcl) [F]

This command orders all selected ships in your current system (regional location) to go to *Free Fire Mode*, i.e., they determine their own targeting and weapon firing. You would typically use this if you had previously ordered them to hold fire. This command works only in *Local Mode* for the ship(s) you have highlighted or selected.

3.2.5.5 Go To [G]

Upon confirmation, this command will automatically navigate your ship to the selected ship (Krellan or captured UGA) or starfort. This command will not work if you are in *Multi-ship Mode* – only one ship can be selected. If you are using this to travel to one of the Krellan ships, then you must press [G] to activate the *Go To* command (with the menu showing or not). If you are in the Starforts Display (Fleet Command Display 4), then pressing either [G] or [Enter] will activate this command.

3.2.5.6 Hold Fire (Lcl) [H]

You can order your local ships to hold their fire using the *Hold Fire* command, and release the Hold Fire command by ordering them to resume *Free Fire*. This can be done for individual ships, or the ships selected by Multi-select. It only works for *Local Mode*. The

Hold Fire in the Space Forces Table differs from the one in Fleet Command because it causes all forces, including starforts, in your local system to Hold (or Free) Fire, while Fleet Command only affects ships.

3.2.5.7 Disperse (Lcl) [I]

You can order your local ships to disperse from your ship (Fig. 109) by pressing [I] from Display 1 or 2 (Fig. 110). This will work only in *Local Mode*, and is an area command that ignores multi-ship selections. It will order all ships (except your escorts) within your Tactical Display range to "get the hell away". All the Krellan ships will move (if they can)
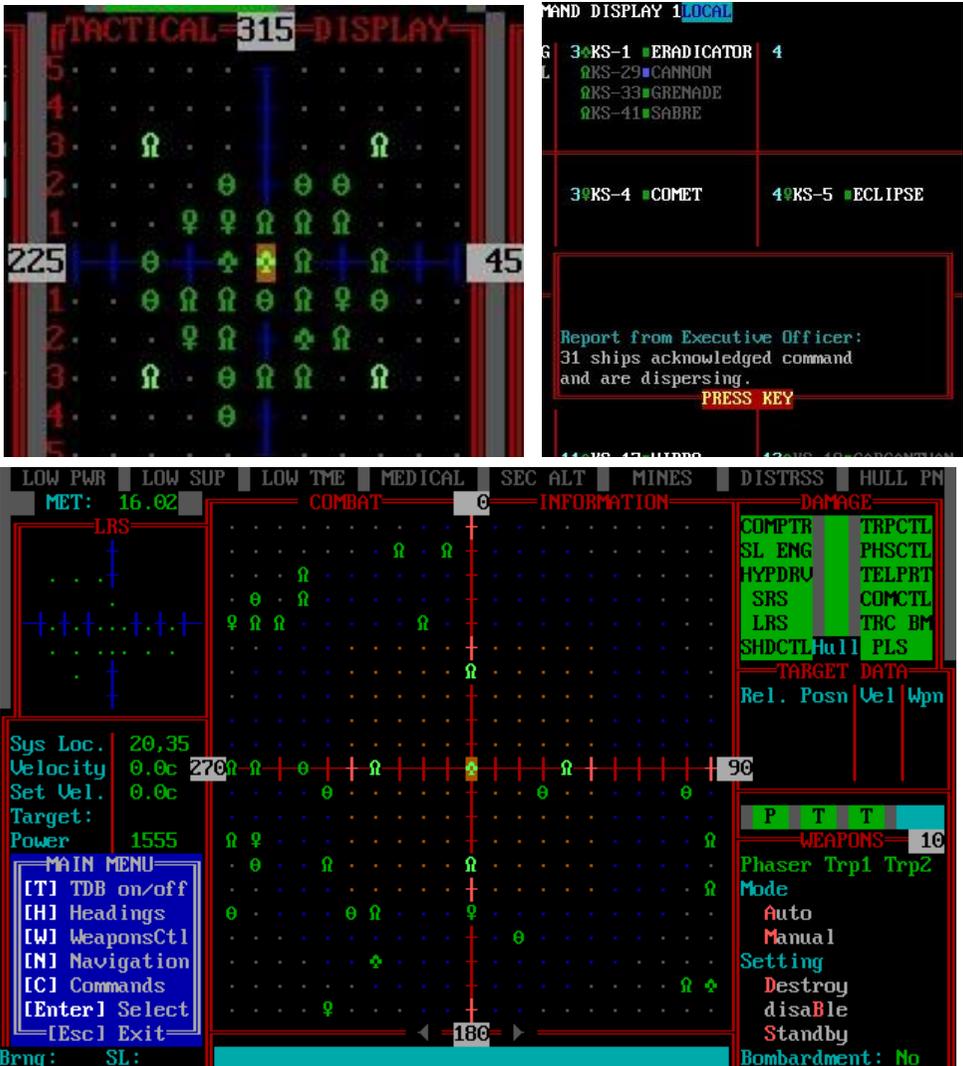
Figure 111. Post-Dispersal as seen in the Combat Information Display

to a nearby spot between 5 and 10 points away from your ship, i.e., still within range of the CID in your CCC (Fig. 111). You can then selectively order ships to rendezvous back next to you, e.g., a supply ship that previously couldn't reach you because of the traffic jam. This will also give some dispersion to your assembled fleet before you order them to attack an object.

Figure 112. Objectives Command Display

3.2.5.8 Objective [J]
The Objectives command shows you the current objective of all the ships on the screen (Fig. 112). It replaces the name of the ship with a box that shows the objective. Press any key (except [Esc]) to remove the objectives and restore the ship names.

3.2.5.9 Locate [L] This shows you the location of the highlighted ship in the region with respect to yours. One problem with both Space Forces and Fleet Command is that it is hard to determine where other ships are in location to yours. You have to note the regional location of the other ship, then go to a star map and using the x and y coordinates, locate that ship. This option in Fleet Command allows you to accomplish locating the other ship in relation to yours in the region with a single keystroke. When you press [L] a small map of the region appears in the upper right of the display (Fig. 113). This map has a green band at the bottom, which is Krellan space, where the starforts and initial Krellan planets are located. The black area is Alliance space. Your ship's location is indicated by a flashing bright white cross ("+"), while the location of your selected ship is shown by its green ship's symbol ("Ω"), in this case, a destroyer. The location of the target of the Krellan ship
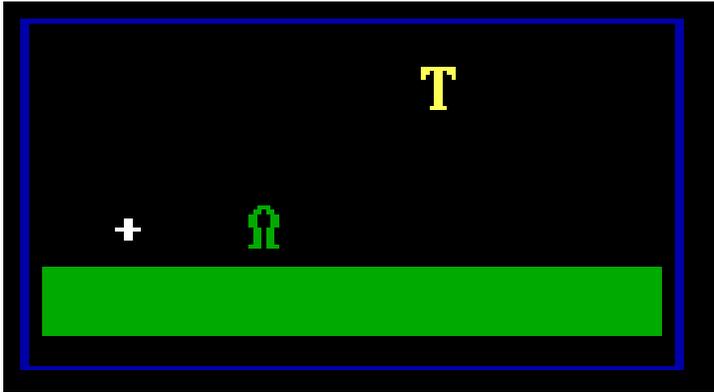
Figure 113. Locater Map Display

is designated by a yellow ("**T**"). If any of these objects happens to be in the same sector of the region as another (but doesn't have to be in exactly the same regional x, y location), the symbols will alternate every second. Press any key to remove the Locater Map Display.

3.2.5.10 Orders [O]

The Orders command shows you the current orders of all the ships on the screen (Fig. 114). It replaces the name of the ship with a box that shows the orders. Like the Distance command, the Orders command is also color-coded to aid in finding the right ships. When a player is viewing the orders, it is usually to find ones that don't have any (Free Ops) so

Figure 114 Orders Command Display

that they can be easily given orders that don't interfere with other ongoing missions. For this reason, all ships with Free Ops orders have a green indicator, while all other orders have a magenta indicator. Press any key (except [Esc]) to remove the orders and restore the ship names.

3.2.5.11 Position [P]
This command shows you the current position of all the ships on the screen (Display 1 and 2 only). See Figure 115. When you press [P] the names of the ships will be replaced with their regional location (R:) with a blue background, or the system location (S:) with a cyan background if they are in your local system. If the Krellan ship is in hyperspace, then their current regional location will blink. Press any key (except [Esc]) to remove the Positions and return to normal display.

Figure 115 Position Display

3.2.5.12 Rendezvous with Us [R]
This option shows which ships in the current display have orders to rendezvous with you. This prevents the necessity of selecting each ship in turn to look at its orders. When this option is selected, the phrase "Rendezvous w/us orders" flashes on the top line at the right, and every ship in the display with these orders has its name flash (blink) until you press any key (except [Esc]), which reverts back to normal mode. This option only works on Display 1 and 2, and not the other two displays, where it is not needed. If you want to look at the rendezvousing ships on the other ships display, you need to go to that display and press [R] again.

3.2.5.13 In System [S]

This option shows the ships in your current local system (region location). When this option is selected, the phrase "Ship in local system" flashes on the top line at the right, and every ship in normal space in your system has its name flash (blink) until you press any key (except [Esc]), which reverts back to normal mode. Your ship's name does not flash because by definition, wherever you are, is "local." This option will not work while you are in hyperspace, nor on the Invasions or Starforts Display (Displays 3 and 4), where it is not needed. If you want to look at the local ships on the other ships display, you need to go to that display and press [S] again.

3.2.5.14 Standing Order [=]

Automatic Standing Orders are in effect for the Krellan HQ AI for Level 7 (Admiral) missions. If a *warship* has no orders (i.e., Free Orders) or objective (e.g., just after being resupplied, or as a replacement ship just entering the region), the AI will check your ship's location and see if there are ships there attacking a planet or attacking UGA Fleet HQ, and if so, they will be ordered by KHQ to join the battle. This will feed reinforcements into your intense battle when you can't afford to micromanage your fleet. The Standing Order cannot be changed. This option just lets you know whether it is in effect or not.

3.2.5.15 Local Mode [Alt][L]

Local Mode, when in effect, shows which ships are in your current system (region location) as long as your ship is not in hyperspace. It only is effective in the ship displays (Fleet Displays 1 and 2). Local Mode is implemented using [Alt][L]. This is a toggle switch, so

Figure 116 Local Mode in Display 1

pressing that again will deactivate the Local Mode. When active, you can only interact with local ships. The ships that are local with which you can interact are shown in their normal colors (Fig. 116). All other ships are "ghosted." Their ID number and name are in gray, and your selection cursor will skip over them. In some cases, this means that your selection cursor cannot reach a valid ship using your arrow keys, but you can reach any of the valid local ships by using the [Tab] key. This will skip to the next valid ship in the display starting with the upper left and working towards the lower right. Pressing [Home] will take your selection cursor to the first valid ship in the display. While Local Mode is active, the "LOCAL" indicator will be displayed in the top line to the right of the display title. The mode is active for both Display 1 and 2 simultaneously.

3.2.5.16 Show Data [Enter]
Pressing [Enter] on a highlighted ship shows the Ship Data Display for that ship. See Section 3.1.1.1 for the explanation of this display.

3.2.6 Ship Selection

This section describes how to select an individual or a group of ships for commanding.

3.2.6.1 Individual Ship Selection
You select a single ship by moving the cursor, which highlights the name, to the desired ship using either the arrow keys or the [Tab] key (see 3.2.5.15). Once the ship is highlighted it is selected for commanding. You do not have to press [Enter], which will bring up the Ship Data Display for that ship.

3.2.6.2 Multi-Ship Mode
This mode enables you to select multiple ships for a single command without having to command them individually. There is no command to go into *Multi-Ship Mode*. You do that automatically be selecting more than one ship. If you want to select more than one ship for commanding at a time, just press [Spacebar] when your ship selector is on the first ship. The name will be highlighted in a brown bar and the "MULTI" indicator will appear on the top line showing you are now in Multi-Ship Mode (Fig. 117). Move the cursor to the next ship to be in the group (on either Fleet Command Display 1 or 2) and press [Spacebar] again, and it too will be highlighted in brown. All the ships so selected are tied together in the *Multi-Group*. If you want to deselect any of the ships in the group, just highlight that ship and press [Spacebar] again. If the last ship in the group is deselected, then Multi-Ship Mode will be canceled and the indicator will disappear. Note that none of the ships in your Battle Fleet can be included in a Multi-Group. They have their own commanding system. If you give one of the information commands (*Position*, *Orders*, *Distance*, *Energy*, etc.) it will apply to all the valid ships on the display, not just the Multi-Group ships.

Figure 117 Multi-Ship Mode with Commands Summary in Display 1

3.2.6.3 Ship Selections by Type or Group

You can select multiple ships to command automatically without having to command them individually by selecting or deselecting the ships in the Multi-Group, or you can use a shortcut to select/deselect all ships of a particular type. Any ships that are part of the multi-ship selection group are highlighted in brown (Fig. 117). If you have Local Mode active, only the valid ships (i.e., those in your local system) can be selected/deselected. While Multi-Ship Mode is active while in Local Mode, the "MULTI" indicator will be displayed in the top line to the right of the display title next to the "LOCAL" indicator.

To command all the ships in the Multi-Group, press [C]ommand and the Strategic Command Window will appear for the first ship in your Multi-Group. Select and give the command you want (it may involve going to another display to select a target), and then the command will be sent to that first ship and all the ships in the Multi-Group. The response for each ship is received but not displayed unless it cannot comply for some reason (e.g., no communication link to that ship, not in a condition to comply, or has already fulfilled the command). Once the order has been sent to all ships, your Communications Console will give you a summary report on how many ships acknowledged the command and how many can comply (Fig. 117). Note that if the first ship, which is the one you command directly, cannot comply, then you will receive a

message to that effect and be asked to select another ship in the group as the initial command.

If you have a number of ships to add to your Multi-Group, it can be tedious to select them individually. There are some shortcuts available to allow you to select many ships at one time. The shortcuts are shown on the Fleet Command Menu (Fig. 106).

[Shift][A] **All Ships** – This will select all the valid ships in Display 1 (Fleets Display) and Display 2 (Independent Destroyers Display). Only invalid ships are your Battle Fleet and non-local ships if you are in *Local Mode*.

[Shift][X] **Deselect All Ships** – This will deselect all the ships that have been selected in Multi Mode.

[Shift][W] **All Warships** – This will select all the valid battlecruisers and destroyers.

[Shift][B] **All Battlecruisers** – This will select all the valid battlecruisers.

[Shift][D] **All Destroyers** – This will select all the valid destroyers.

[Shift][T] **All Transports** – This will select all the valid transports (supply ships and troopships).

The selection commands are only for selecting and not deselecting ships (except for [Shift][X] which deselects all the selected multi-group ships). However, the selection shortcuts are cumulative. For instance, if you select all the destroyers, then select all the battlecruisers using [Shift][B], then the battlecruisers will be added to the destroyers already selected (in this case, it would be equivalent to selecting all warships using [Shift][W]).

KLAGAR-CLASS BATTLECRUISER OPS MANUAL

3.3 Krellan Fleet Command Philosophy

You should not have to continually give orders to each Krellan ship. Their commanders are reasonably intelligent and will perform the missions suitable for their ships, as assigned by Imperial Fleet Headquarters. Here are their standard mission assignments:

Battlecruisers: Attack enemy ships and starbases; explore planets and establish bases; direct planetary invasions and provide bombardment when required; assist other ships as required.

Destroyers: Explore and map regions, looking for desirable planets and the disposition of enemy forces; escort other ships; help battlecruisers with planetary bombardment and space battles; attack unarmed enemy ships.

Supply Ships: Rendezvous with and resupply Krellan ships; establish bases on planets and keep them stocked with materials; support invasions of planets if more than one troop ship is involved. Supply ships can resupply themselves if needed.

Troop Ships: Conduct invasions of planets; ferry legions as required. When empty they can also be used to help attack hard targets like starbases or the Alliance Fleet Headquarters because they are armed and have very strong shields.

If a Krellan ship runs low on power or supplies, it will normally return to the closest starfort, supply ship, or Krellan planetary base. If unable to do so because of engine damage or enemy activity, it will try to rendezvous with a supply ship or send a call for help.

When a Krellan ship docks with a starfort, it will replenish its supplies, repair systems, and load new legions on troop ships, if possible. Replacement legions are brought in from reserve outside the region as needed and are billeted in starforts until picked up by troop ships.

If a Krellan ship encounters superior enemy forces, it will attempt to escape, except for an escorting destroyer, which will do whatever is necessary to cover the escape of the ship it is escorting.

When an invasion is scheduled, the assigned ships will travel to the planet independently, but transports and their escorts only enter orbit once a battlecruiser arrives and the planetary shields (if any) have been neutralized. If the target planet is in a system with heavy enemy activity, you may wish to order ships of the invasion fleet to rendezvous in a neighbouring regional location, then move en mass to the planet (by having them all escort the lead ship). Once they have reached the planet, change their orders to invade it.

When a Krellan ship scans a planet for the first time, it transmits the planetary map and scan data to Imperial Fleet Headquarters, which in turn transmits it to all ships in the fleet. The scan data takes several seconds to transmit, and while your ship is receiving the data, you will receive a message stating that the transmission is underway, and the simulation will be frozen.

PART IV
STRATEGY AND TACTICS

This section contains information that is not essential, but will help you succeed in your missions, especially the more complex and challenging ones you will be given when you reach higher ranks. If you want to learn about strategy and tactics by operating your ship and trying various combinations of commands, then do not read this section all at once.

Section 4.1 contains instructions and suggestions on how to accomplish the general objective of every mission you undertake: conquering a region. Section 4.2 contains information on combat tactics that will be helpful when you encounter the various types of Alliance ships and technology. Used in conjunction with the data on the enemy fleet in 4.2.1, these facts will enhance your prospects of taking on an enemy vessel and living to tell about it. Section 4.1.4 contains information and strategy suggestions that may help you personally conduct planetary invasions, especially of high technology or UGA planets.

4.1 CONQUERING A REGION

Regardless of the specific objectives you may be given in your mission orders, the general goal of every mission is for Krellan forces - those under your control as well as all others present - to gain control of an entire region. This goal is best accomplished in a step-by-step fashion, taking all of the following advice into account as it becomes relevant.

4.1.1 The Shakedown Cruise (Getting Started)

Before you go off trying to conquer the Alliance, it is important for you to become familiar with your ship. You will have plenty of time for this, since your first missions as an Altern will not involve handling escorts or participating in planetary invasions; you will be conducting reconnaissance and pulling off small-scale raids that will test your abilities, but not tax them unreasonably. You will also be given plenty of time to complete your mission objectives.

To familiarize yourself with your ship on your first mission, take some time to move around your starting star system, trying manual navigation as well as the Navigation Targeter, to move to an object such as a planet. Try calling up various displays and executing commands. Do not be concerned about spending a fair amount of time getting used to your ship and what it (and you) can do; the knowledge you gain now will be very valuable when you actually need it later.

When you earn the rank of Centurion, you will receive your first group of escorts - your first opportunity to use the Escorts command (1.7.5). Be sure to assign the destroyers to a formation before moving away from the starfort. Then move around the system, assigning various formations to your escorts, and watch the results. Also practice giving them simple orders, such as Rendezvous. It is better to get used to doing this now, in the safety of your own system, than in the heat of battle when you cannot afford to make mistakes.

4.1.2 Reconnaissance

On most, if not all, of your missions, your first task will be to learn as much about the region as possible. One of the primary responsibilities of independent Krellan destroyers

is to explore the region, and the reports and data you receive from them as your mission progresses will be very valuable. However, you should not rely entirely on outside sources. If you see any interesting star systems in the region, travel to one and look at it yourself, or send probes. It is usually a good idea to move to a centrally located star system and then send probes to surrounding systems. It's also a good idea to find a place near a cluster of systems and park your Battlecruiser outside the systems when you send probes. That way you're less likely to be jumped by an enemy ship while inside a system. Once you're out of probes, or all the probes you've launched are on route, you can then move to scouting systems yourself. While you are manually checking out the system you've chosen, you will receive reports from the probes, and with the Database command can look at maps of the systems they have reached.

When you leave one star system to move to another, your ship will move to an edge of the current system before your hyperdrive engines will be engaged. Therefore, to save time when you are moving to an unmapped star system, it is usually best to target the very edge. That way, if you find nothing of interest, you can quickly leave the system and jump to another location. The two most important things to look for in a new system are starbases and habitable planets. When you enter the system, an analysis is performed automatically to tell you the classifications of any planets in the system. You do not need to visit class G or B planets if you are only looking for supplies or civilizations (although class B planets could have Alliance forces on them, or artifacts), but enemy ships can be in orbit around any type of planet, and you will not know about their presence unless you (or other Krellan ships) go into orbit around the same planet.

The presence of a starbase in a system will not be revealed until it comes within sensor range of a Krellan ship. You may have to do a sweep of the entire system to determine if a starbase is present, if you wish to do it yourself. This tedious process is greatly simplified if you have four escorts, which can be moved into System Search formation (1.7.5.1.1) much more quickly than your ship can move to each of those locations in succession. In the later game, upgraded probes, using explore or search modes, can also help. You can also under other ships to seek out the enemy once you reach the rank of Subadmiral.

To aid in your hunt for enemy ships, set up a manned base, if possible, on at least one planet in every star system you visit. After you have left the system, the base personnel will be able to report on the arrival and departure of enemy ships within the system. If there is already a Krellan planet or base (established by another ship) in the system, it is probably not necessary to set up a base, unless you are expecting a strong enemy attack.

Bases are keenly important in this regard, as they'll not only inform you of the presence of enemy ships, but which direction in which they left the system. This helps you pinpoint where an enemy planet or starbase that you've not yet found might be hiding.

Another way to lure out enemy warships is to find some freighters or starliners and disable them, but don't capture them. Using hit and run tactics, you'll keep them in place while they send off a distress signal. This methos takes patience, but can pay off in dividends.

4.1.3 Attack Procedures

Enemy ships: Based on what you know about the various types of Alliance ships (4.2), you will have to decide whether the forces under your immediate command are capable of defeating a UGA ship or group of ships you have detected. If you think you are overmatched, your first thought should be to call for reinforcements; it is better to share the rewards and the glory than to risk being destroyed. However, one of your personal objectives is to rise through the ranks, and defeating a superior force is definitely a way to impress Imperial Krellan Fleet HQ - but you should probably only attempt this when you are an experienced commander at higher ranks.

Starbases: Destroying one of these Alliance outposts should be a top priority for any Krellan force that locates it, because without support from their base, enemy ships in the vicinity will be much more vulnerable. However, it is not wise to attack a starbase single-handedly. Even with the support of your escorts, subduing a starbase is very risky and requires great skill. A starbase's weapons have more power and longer range than yours, and a base often has the assistance of enemy warships docked there. Fellow Battlecruiser commanders will usually seek out starbases to attack, so feel free to help them out. You can also enlist their aid directly once you reach the rank of Subadmiral.

Regional 5th Fleet Headquarters: Overpowering this awesome fortress will be the ultimate test of your ability both as a ship commander and as a leader of other forces. When you locate this outpost, expect it to be surrounded by minefields and supported by a sizable number of warships - plus whatever vessels will be called into the fray once an assault begins. The only way you can hope to succeed in a battle against this behemoth is to organize and coordinate an attack by all the forces at your disposal. You should also thin out the enemy's forces first if you can.

4.1.4 Acquiring Planets

Conquering or otherwise acquiring planets is a fundamental step in gaining control of a star system, which leads to control of the entire region. Even before you are given the responsibility of participating in planetary invasions (at the rank of Subcommander), you can contribute to this effort by trying to negotiate a treaty or by initiating Operation Big Brother.

You should send down a landing party to every planet you encounter (except class G) and have some of the personnel conduct a survey; they may discover something that you missed with your scan from orbit. If the planet is a valuable source of supplies or rich in minerals, consider establishing a base if it is uninhabited or has a low technology level. If the planet has a relatively advanced civilization, you might not be able to establish a base without first dealing with the inhabitants.

4.1.4.1 Negotiation

Establishing a treaty with the government of a planet is the quickest and sometimes least costly method of controlling a planet that has a unified planetary government. You can negotiate a treaty two ways:

Bombard the planet to the point where the planetary government is forced to surrender. Then send down a landing party team to negotiate. A treaty will be finalized, which essentially makes the planet a part of the Krellan Empire. The drawback to this method is that you usually have to destroy a large portion of the planet, which decreases its value to the Empire.

Negotiate a treaty without using force, either by communicating with the planet or by sending a negotiating team to the planet prior to any offensive action. (This option is not possible if the planet is aligned to the Alliance or is hostile). If a treaty is made by this method, the planet will become an ally of the Krellan Empire rather than a subject. Although this is the less costly method of achieving the objective, an allied planet can not be exploited as much as a subject planet and thus is not as worthwhile.

4.1.4.2 Operation Big Brother

This is a non-costly method of conquering a planet, but it will only be possible on a limited number of planets - those of technology levels 3-5 with no unified planetary government and no Alliance forces are present - and it is time-consuming. If you encounter a suitable planet and you are not too close to the end of your allotted mission time, try using Operation Big Brother before you engage in bombardment or an invasion. If the operation succeeds, you will have gained a subject planet with all of its resources intact, which makes it very valuable to the Empire.

4.1.4.3 Planetary Invasion

Compared to the other two ways of conquering a planet, an invasion is the most costly method, but it is often necessary. As a general rule, if the planet has a technology level of 6 or 7, refuses to negotiate, or has UGA forces present, then invasion may be your best or only recourse. Whenever you start an invasion, you should be prepared to follow it through to its conclusion; if it fails or is canceled, your advancement through the ranks will be slowed. A successful invasion that captures a planet relatively intact will greatly enhance your standing with Imperial Fleet HQ. When you get the authority to schedule invasions yourself, you should start with low-technology planets, to gain experience for yourself and your legions.

4.1.4.4 Attacking Colonies

Colonies are a special type of enemy planet, and only show up once you're an Admiral. They have disgusting human names, and are rumored to be protected by massive orbital fortresses. However, the presence of these forts, their specifications, and their number are still unknown. To effectively deal with these forts, the Krellan High Command has determined that you will probably need to amass your fleet away from the forts themselves, such as in open space next to the system they reside in. Once your attack fleet is assembled, you give your ships the order to move to the planet. DO NOT give the attack order. This will order your ships to begin attacking the planet itself. The Move To command will order your ships into orbit and begin attacking anything they find in orbit, including any orbital forts. Once the forts are destroyed, you can then begin to work on the colony itself as in the planetary invasion section described below.

4.2 SPACE COMBAT TACTICS

The vessels of the UGA Fleet are a varied group, each type (including starbases) having its own strengths and weaknesses. At great expense to themselves and their ships, other Krellan commanders have learned the following facts about your adversaries:

4.2.1 Heavy Cruiser

The *Invincible*-class heavy cruiser is, unfortunately, a fine vessel, and in firepower is unmatched even by our new *Klagar*-class battlecruisers. Their five torpedo tubes and six main phasers put up a deadly curtain of destructive energy. The combined firepower of your battlecruiser and four escorts, if well handled, should be able to wear down and eventually overpower this formidable ship. If you can stay on the edge of its torpedo range (10 points) and make full use of evasive maneuvering and ECM, you might get the cruiser to waste its torpedoes with minimal damage to your battle fleet. After its torpedoes are gone, you can sit outside of the cruiser's phaser range and blast it with your torpedoes. When the ship is weakened, move in for the kill but still be careful. Bringing maximum firepower to bear simultaneously ensures the best chance of success. Approach the cruiser at maximum speed, using a "V" formation or something similar to concentrate your fleet's weapon fire. If you are heading away from the cruiser, use the wedge "Λ" formation. If your outer escorts suffer too much damage, then select a formation to bring them back in line with or behind your ship.

Keep in mind that the heavy cruiser has many of the defensive measures found on your own battlecruiser. The ship has a full suite of electronic countermeasures (ECM) to help avoid your incoming torpedoes, and can also pull an emergency hyperspace maneuver if its captain feels the situation is dire enough.

4.2.2 Light Cruiser

Because the *Patton*-class light cruiser is so similar to a Krellan battlecruiser in firepower and capabilities, the only significant factor in combat is likely to be the ability of the opposing commanders. In a one-on-one battle, a skilled commander should be able to defeat a light cruiser. The presence of your escorts should give you the edge.

4.2.3 Destroyers, Frigates, and Scouts

These smaller warships are generally not a threat when alone, but in groups, they can be dangerous. Frigates are the most common type of ship used for escort duty, and aggressive behavior can be expected from them while they are defending their wards. They will try to engage you in combat, even if the odds are hopeless, as a distraction while the escorted ship tries to escape. Do not be distracted by such tactics; it is more important to capture a prize like a freighter or star liner than to vaporize a measly frigate or two. Scouts are very elusive; expect them to run as soon as they detect you. They often even stay just outside the boundaries of the star system. Scouts are usually only found in the outer regions of your invasion sector, so you probably will not see any after gaining Level 5.

4.2.4 Freighters and Starliners

These ships are choice targets for capture. Your ship is faster than they are, so you should be able to chase them down. Try to position yourself for an interception while out of their sensor range (which is 10 points, half as long as the range of your own sensors); however, be aware that any escorts accompanying one of these ships will have the same sensor range as your ship. A freighter or starliner will make a run for the nearest starbase, Alliance planet, or system edge when it detects you. If you intend to capture a freighter or starliner, use torpedoes sparingly, if at all, because it is easy to misjudge their effect and destroy your target. Make sure that any weapons you use are set to disable and are manually targeted on the freighter or starliner. You'll be asked if you want to set your weapons to Disable Mode, which will be useful if you want to capture ships rather than destroy them. Be sure to set your weapons back to Destroy as the situation merits. For the case where there are enemy warships accompanying the freighter or starliner, you can select *Conditional Mode*, which sets your weapons targeting the warships to Destroy while setting your weapons targeting the freighters and starliners to Disable.

4.2.5 Starbases

By itself, a starbase is almost indescribably strong, with weapons that outrange yours, and shields nearly four times stronger than those of a battlecruiser. A star base is almost never by itself; it can house several UGA warships that can be launched in a counterattack.

There are two basic ways to attack a starbase. The first is to have such an overwhelming superiority in firepower that you can simply blast it and any ships in the area until they are helpless or destroyed. Of course, you need several battle fleets at your disposal for such an assault, and you will not often be in such a position. The second method takes advantage of a starbase's major weakness: it cannot move. Once you discover its location, you can use hit-and-run tactics. Target your hyperspace jumps so that you emerge into normal space within 10 points of the starbase. Let off a salvo of torpedoes (and phasers, if you are close enough) as soon as you emerge. The base will not have time to get off more
than a couple of return shots. Then, depending on the condition of your ship (and escorts), you can make one or two more attacks or head immediately for the edge of the system and jump to safety. If you decide to make an attacking pass at a starbase, target your ship to get no closer than three or four points away. Under no circumstances should you move directly toward a starbase; its phasers are deadly at close range. Assign your
escorts to a slant or column formation to bring maximum firepower to bear as you make your pass.

4.2.6 UGA 5th Fleet Regional Headquarters

This super fortress is similar to a starbase, but much more powerful. You will only be able to defeat it with the combined firepower of almost your entire fleet.

4.2.7 Minefields

These dangerous threats can be found in a variety of places, such as around a colony or a starbase. Great care must be taken not to slam into each and every mine you encounter, or you'll quickly find yourself without escorts in a damaged ship. The first thing to do is SLOW DOWN, which your crew will assist you with. You can then try to maneuver around the mines, or use manual weapons targeting to take them out individually. You should also change your formation to keep your escorts out of harm's way…if you care about such things, that is.

4.3 PLANETARY INVASION STRATEGY

When you become eligible to participate in invasions (and later to schedule them yourself, you will quickly discover that the commands under invasion control, in combination with the resources available to you, allow for a number of different strategies. You must try to select the best methodology for any given situation, but always keep in mind one universal fact: the Krellan Empire is in dire need of conquered productive planets. You will be heavily penalized for wanton destruction of valuable territory and resources needed for the Empire's future expansion.

Know the difference between initiating an invasion and scheduling one. When you reach the rank of Subcommander, you can initiate an invasion by traveling to a planet that Fleet HQ has scheduled to be invaded. But if you do not have the forces you need to get the invasion under way, you will have to summon them, either by sending a message via the Communications Menu or by issuing direct orders through the Strategic Command Menu. If you are using more than one troop transport, then you should also summon a supply ship for support. Conquering the planet is, of course, your vital objective – but it is also important to achieve the victory as quickly as possible. Rapid conquest of a planet will yield the best overall enhancement of your service record.

The standard procedure for mounting an invasion is summarized below. If you neglect anyone of these points without good reason, be prepared to accept some unpleasant consequences.

1. Find an area in the zone close to the city that is not protected by shields or covered by water. Troops that are teleported into shields or water will be instantly destroyed.
2. Teleport down a contingent of shock troops. Have them scout the area and begin building a landing pad. Sometimes a feint can be effective; send down shock troops and leave them in place long enough to attract the enemy's attention; when opposing forces are concentrated in the zone(s) you have assaulted, teleport your troops back into orbit and immediately send them back down into a zone that is not as well defended.
3. Look for any planetary defense phasers or surface-to-air lasers in a zone. These defensive outposts are fairly easy to destroy with a single cohort of shock troops, and can be well worth the effort in troops and equipment saved.
4. When the landing pad is complete, load a drop ship with warriors and launch them to the zone.
5. When the warriors arrive, recall the drop ship for reloading, and withdraw any remaining shock troops; let the warriors do the rest of the dirty work. Shock troops are relatively vulnerable in combat and need to be conserved for initial assaults into new territory. They are your most valuable resource - do not waste them! Warriors cannot be retrained as shock troops except at starforts or legionary bases on Krellan planets.
6. When you have captured the zone, pull out the warriors by sending down a drop ship and issuing a Withdraw command.

This is just a rough guideline. Each commander has his own favorite strategies. In the interest of time, most usually attack multiple zones simultaneously. But do not spread your troops too thinly. It is preferable to overwhelm the enemy. Some commanders teleport down shock troops only to beam them back up quickly in a feint maneuver that may cause the enemy to concentrate forces in the wrong area. Some like to soften zones up with a little bombardment before sending down shock troops. The cities protected by shields will withstand quite a pounding before collapsing. But be careful - the unprotected regions will be nothing but rubble or rough terrain, on which you cannot build a drop ship landing pad. Your shock troops will have to go in and take out the shield generator before you can use a landing pad. Your shock troops are valuable and this is a high-risk mission.

Another tradeoff you will have to make concerns the low combat effectiveness of your shock troops just after teleporting. Should you wait and let their combat effectiveness increase, or should you order them to strike quickly at objectives such as lasers and shield generators before the enemy has time to counterattack? These are some of the decisions you, as supreme commander, will have to make. There are countless other strategies, but the main points to remember are hit fast, hit hard, show no mercy, and above all, have fun!
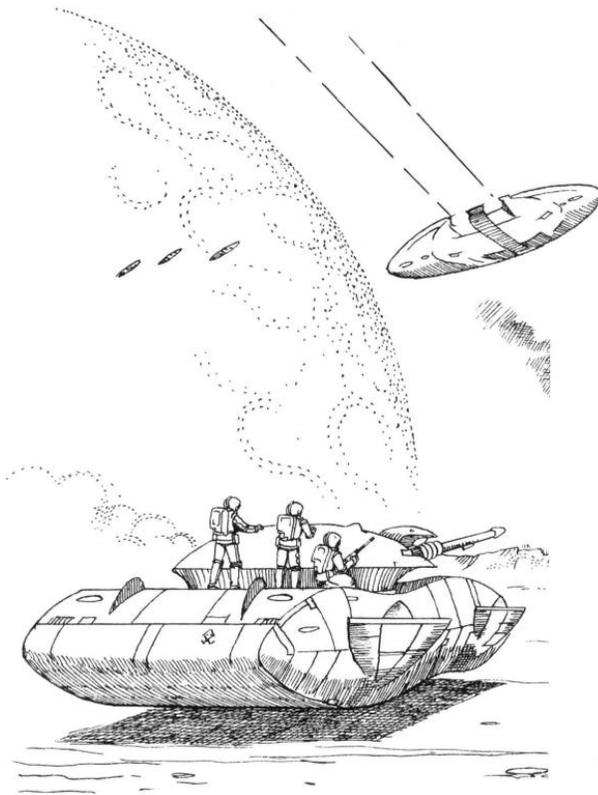
APPENDICES

APPENDIX A
GENERAL INFORMATION

A.1 YOUR MISSIONS

To complete your training as a Krellan Commander, you must successfully complete 35 missions assigned to you in seven levels, each level containing five missions. Each level has a training objective, which you must master before being promoted to the next higher level (Table I).The missions correspond to regions of space being invaded by the Krellan Empire, which will be described in the next section.

Table A-I. Ranks, Mission Levels, and Training Objectives

RANK	MISSION LEVEL	YOUR COMMAND	TRAINING OBJECTIVES
Admiral	7	Unrestricted command	Advanced strategic command
Subadmiral	6	Unrestricted command	Strategic command
Prefect	5	Ship, escorts, invasions	Advanced planetary invasions
Commander	4	Ship, escorts, invasion	Planetary invasions
Subcommander	3	Ship, escorts, invasion	Advanced space combat
Centurion	2	Ship, escorts	Ship-to-ship combat
Altern	1	Ship only	Exploration, landing parties

Your first mission will be performed in Mission Level 1 at the rank of Altern, which is the lowest officer rank in the Krellan Imperial Space Forces. The missions as an Altern will not be as demanding as those at higher ranks. After you successfully complete the five missions at this level, you will be promoted to Level 2 (Centurion).

There are five missions (A – E) at each of the seven mission levels for a total of 35 missions, each of which is in a unique area of space. The higher your rank, the more difficult the missions are to complete, and the more difficult it becomes to get promoted, although this should be offset by the improvement in your command skills. Your level of command also increases with your rank. At Level 1, you command a single battlecruiser performing reconnaissance and raids only – there will be no planetary invasions, and no enemy warships to oppose you – just unarmed freighters and starliners, ripe for the picking to earn wealth (Krels) and slaves. At Mission Level 2, you take command of a Battle Fleet, with four destroyers to escort your battlecruiser.

The number of Alliance starbases in a region increases with each mission level, from one at Level 1 to five at Level 7. Your final objective, which is in Mission 7-E, is the elimination of all Alliance forces in the region, including their massive UGA 5th Fleet Headquarters. Once you have successfully completed Mission 7-E, you will be promoted to the court rank of Imperial Tribune, and can to choose to replay any of the 35 missions (with new layouts) as Practice Missions (i.e., do not count towards your career).

A.2 THE GALACTIC REGION

The section of space covered by your missions is 175 light years wide by 105 light years deep. This is divided into seven levels, with Level 1 starting on the edge of Krellan space, and each level going deeper into UGA space. Each level consists of five regions, for each of which you will have to accomplish the assigned mission until moving on to the next region. Once all five regional mission have been accomplished, you will be promoted and move on to the next level. To complete Star Fleet II, you must successfully complete the missions in all 35 regions.

Each region is 35 light years wide by 15 light years deep (Figure A-1). In this simulation the regions are two-dimensional, and use an orthogonal coordinate system, with the columns being the x-axis, and the rows the y-axis, with the origin at the lower left corner (0, 0). In the example in the figure, the star system is located at regional coordinates x=29 (column) and y=10 (row).

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 0   x→    5         10        15        20        25         30        35
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15│                                                              ↑      │
14│                    ┌─────────────────────────┐              ·      │
13│                    │      System  Map         │              ·      │
12│                    │                          │              ·      │
11│                    │        Size is           │              ·      │
10│                    │        80 x 80           │    ──────→* · · · · ·─→
 9│                    │        points            │      (29,10)        │
 8│                    │                          │                     │
 7│                    │   Regional Location      │                     │
 6│                    │        x = 29            │                     │
 5│                    │        y = 10            │                     │
 4│                    └─────────────────────────┘                     │
 3│                                                                     │
↑2│                                                                     │
y1│                                                                     │
 0│   Distance units are light years                                    │
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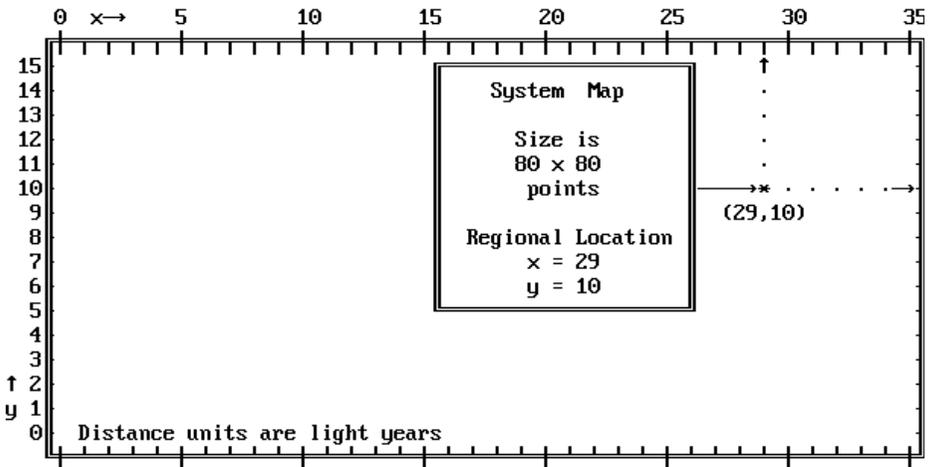
Figure A-1. Region Definition

Each regional location is also known as a system (so called because some of them contain star systems). Locations within a system are defined by a grid measured in *points*; each system is 80 points wide and 80 points deep. Every point in a System Map is identified by a system coordinate, which is determined using the same method as for a regional coordinate – the columns are the x-axis and the rows are the y-axis. The upper left corner of a system is point 0x, 80y, and the lower right corner is point 80x, 0y (Figure A-2). In this figure, the Sun (star) is located at the center of the system, at x = 40, y = 40.
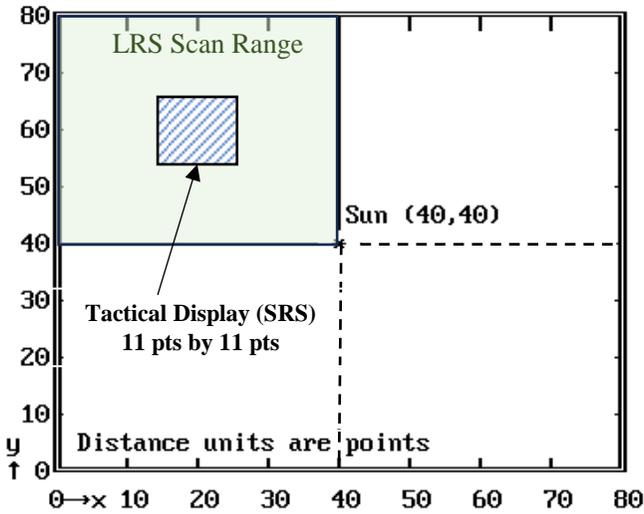
Figure A-2. System Definition

Your ship moves from one regional location (system) to another by using its hyperdrive engines to travel in hyperspace - at the speed of light or faster. When moving from point to point within a system, your ship uses sublight engines to travel in normal space - at sublight speeds. In either case, speed is expressed in c-Factors, where "c" is the speed of light. [*Technical Note: "Speed" is a scalar measurement of the rate of movement, while "velocity" is a vector product of speed and direction. For simplicity, the term "velocity" may be used in this simulation, even when it would be technically correct to use the term "speed".*] Even if you move beyond the very edge of a system, you cannot move into the adjacent system under the power of your sublight engines. Although two systems appear next to each other on the map of a region, they are actually separated by vast distances and do not "touch". In order to get from one system to another, you must use your ship's hyperdrive.

When you are in orbit around a planet or star, your position is denoted as an orbit coordinate. The first number is the orbit altitude type (0 = high, 1 = medium, 2 = low); the second number is your position in the orbit.

A.3 BRIDGE DISPLAY

The screen you see most often while commanding your battlecruiser is the Bridge (Main) Display (Figure A-3). The information shown provides an overview of the current state of your ship. The labeled definitions follow.
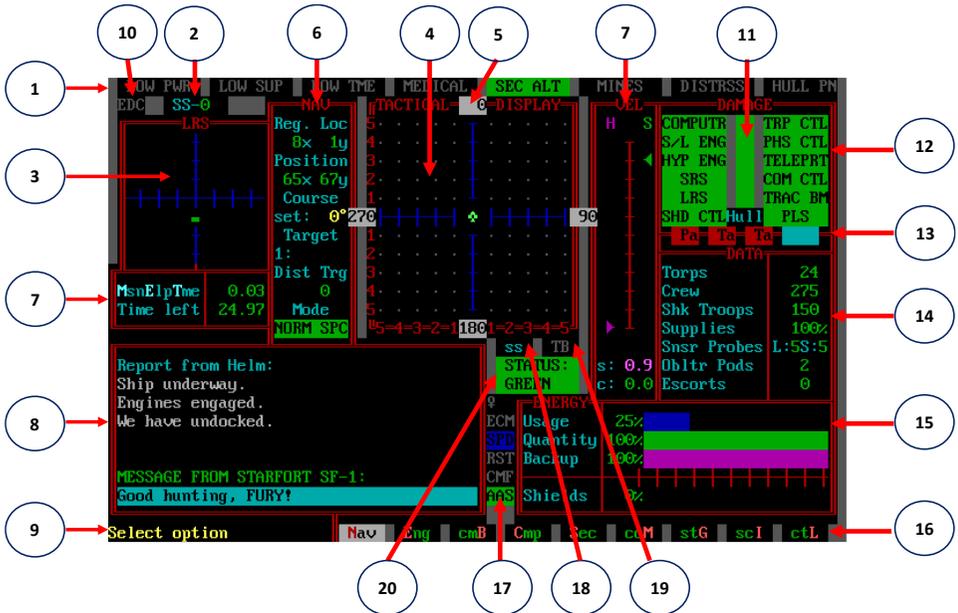
Figure A-3. Bridge Display

1) **Caution & Warning Panel** – Eight warning indicators across the top of the display will alert you if major problems arise. Your ship's computer continually cycles through the indicators, lighting each one as it is checked. When a critical situation occurs, the pertinent indicator will be lit and remain highlighted in RED until the problem is corrected. You also get a message from one of your officers, and an alarm sounds. You won't be able to say you weren't warned! I don't want to spoil the fun of figuring out what to do, but you should at least know what condition activates the warning. You know the old adage, "An ounce of brain is worth a pound of muscle" (or something like that . . .)

LOWPWR Less than 25% of available power remaining
LOW SUP Less than 25% of ship's supplies remaining
LOWTME   Less than 10% of your allotted mission time remains
MEDICAL A medical emergency (crew exhaustion, disease, or low morale) exists
SECALT   An internal security alert has been issued
MINES   Enemy mines detected in the vicinity
DISTRSS A distress message from other Krellan forces has been received

HULLPN Time to get out of here when >50% of the hull's been destroyed!

2) **Star System Identification Number** – This will help you if you are lost and don't know which system you're in (you should fire your Nav Officer if this is the case). There are 50 star systems in each region and they are numbered from 0 to 49. The identification of the star system in which you are located is expressed as SS-##. In Figure A-3 it shows that you are located in Star System number 0 (SS-0). If you are in hyperspace, this display will show "SS-XX".

3) **Long Range Scan Display (LRS)** – Your ship's position is at the center of the LRS grid. The view is of your ship from the top, with the nose along the vertical line and your wings on the horizontal line. The scale is one fourth of a System Map, or 40 x 40 points marked off in increments of 5. Since you are at the center, you can scan_20 units in all directions. Objects are displayed in the LRS as variously colored dots or blocks, not by symbols used on the Tactical display. The Tactical Display box is 11 x 11 system units. Hence, an enemy ship that moves off the top of your Tactical display will appear as a red dot about two grid marks above the center line of your LRS display. Once it moves off your LRS display, depending which part of the system you are in, you may still see it on the System Map (which is always centered on the star). Krellan ships are green dots. UGA ships are red dots. Planets (always cyan), starforts (green), and starbases (red unless captured) are large dots or bars, depending on your monitor. Stars are always yellow blocks. Since your scanners are attached to your ship, when you move, so does the LRS view. For example, if you decide to pursue an object off your right (starboard) side, your ship's bow will turn to it. On the LRS, you'd see the object move from the horizontal axis to the vertical axis, then slide down the axis to you as you approach it. Whenever a UGA ship or starbase comes into scanner range, the Weapons Officer notifies you. When the LRS not operational, it is filled with a black and white pattern showing your scanners are inoperative, which could be due to damage, your Electronic Counter Measures (ECM) are active, or you are in an ion storm.

4) **Tactical Display** - The Tactical Display is a closeup of the 11 x 11 system unit Target Box seen on the System Map. (the LRS is 40 x 40, and the System Map is 80 x 80 units.) At the start of a new mission, a green starfort symbol (æ) appears in the middle of the Tactical Display indicating the starfort at which you are docked. When you start your engines to undock, your ship symbol (♣) appears and moves in the direction of your heading (number at the top of the vertical axis). In Figure A-3 your ship is in the center and its heading is 0 degrees. The red numbers across the bottom and up the left side of the display border are the distance scales, measured in points (system units). These are provided as an aid in determining weapon or rendezvous range. [Alt][G] can be used to toggle grid markers on and off (defaulted on). Ship symbols used on the Tactical Display are shown Section 1.4. Watch out for little red dots - they are torpedoes or mines! When you enter orbit around a planet, the Tactical Display is replaced with the similar **Orbital Display**, showing the planet in the center (Figure A-4). The color of the planet matches the color of the planet type (see figure legend). Bearing is reset so that zero is in the vertical "north" direction. (This is the same as

your LRS display and the System Map.) Ship symbols are the same. If the planet has been surveyed, its name appears in the color of its ownership (green for Krellan, red for UGA, blue for neutral), otherwise it will says, "UNKNOWN" in white. When travelling in hyperspace, the Tactical Display shows multi-colored streaks passing your ship symbol, which stays in the center.

Figure A-4. Orbital Display and Legend
Shld Planetary shields status: ↑up, ↓down, - none
PD Planetary Defense: Y active, N inactive or none
Sp Supplies on planet: Y yes, N no
Cls Planet class: **A**, **B**, **D**, **G**, **I**, **K**, **P**
LP Landing Party: Y present, N none, B battle
BS Planetary Base: Y present, N none, N (blinking) under construction
T Treaty with planet: Y yes, N no
TchL Technology Level of natives: 0 to 7

5) **Heading Angles** – These four angles show the current bearings from your ship to the front (bow), which is also known as your *heading*; left (port); right (starboard); and bottom (aft). The angles are always 90 degrees apart and they change as your ship turns. Your ship is always pointed up, so that top angle is your current heading. In the Orbit Display, the heading angle will be zero.

6) **Navigation Data** - This display shows selected data from your navigation computer:

    a. **Reg. Loc** – your ship's regional location in x, y coordinates.

    b. **Position** – when in normal space, shows your ship's system location in the system x, y coordinates, If you're in orbit, it shows which orbit (0=low, 1=medium, 2=high) and position in the orbit, where 0 is at the bottom and the positions are numbered clockwise from 0 (toggle the grid switch [Alt][G] if you cannot see the orbit positions). If you are in hyperspace, no position numbers are shown.

    c. **Course** – this shows your ship's current set course, not your current heading, which is indicated at the top of the Tactical Display. If you have set a new course, it will be shown here, and your ship's heading will change and it slews to the set course. When it arrives, the Course and Heading values will match.

    d. **Target** – This is the identification of the first target you have set in your Nav Targets (1.1.7.2.1), which is the target that is loaded into your navigation computer, and your ship will head there when commanded. If there is no target set, it will be blank.

e. **Dist Trg** – This shows the current distance from your ship to the first navigation target when you are traveling to it. If you are in normal space, the units will be in points. If you are in hyperspace, the units will be light years.

f. **Mode** – This shows your current Navigation Mode, which can be one of the following:

    i. **DOCKED** – your ship is docked with a starfort or captured starbase.

    ii. **NORM SPC** – your ship is in normal (system) space.

    iii. **HYPRSPCE** – your ship is traveling in hyperspace.

    iv. **EMG STOP** – Emergency Stop procedure has been activated manually or automatically and is in process of stopping your ship.

    v. **PURSUIT** – this is when you have commanded the pursuit of a ship (either UGA or Krellan) and the identity of the ship being pursued will be shown in the Target display described in part d).

    vi. **IN TOW** – indicates that your ship is currently being towed by another Krellan ship.

    vii. **SYS SRCH** – your ship is currently searching your system, moving between the points (20,20) (20,60) (60,60) (60,20) according to your specified search parameters.

    viii. **PATROL** – your ship is circling a specified centrum according to your specified parameters.

7) **Velocity Indicator (VEL)** - These two vertical bar meters show your ship's current speed: "H" for hyperspace speed (from 0 to 10) and "S" for sublight speed (from 0.0 to 1.0). Arrows alongside the meters indicate your set speed. Your set (s:) and current (c:) speeds are also shown below the velocity meter. As your ship accelerates, the bars on these scales will move up, starting with the sublight bar. If you have specified a hyperspace target and speed, then when the sublight bar reaches 0.6c in a part of the system where you can do a jump into hyperspace, your sublight engines shut off (bar goes to zero) and the hyperspace speed bar increases to the set value. Upon emerging from hyperspace, your hyperdrive engines shut down (H bar drops to zero) and the sublight bar goes to maximum sublight speed, 0.9c. In Figure A-3, the arrows indicate a set sublight speed of 0.9 (s: 0.9), but because the ship is stationary (c: 0.0), the bar indicators are not visible on the scale.

8) **Message Display** – Nearly all internal reports, external messages, command acknowledgments, and some displays will appear here. Some special reports and displays will appear in pop-up message windows. New lines will appear at the bottom of the messages display and the previous lines will be scrolled up. Once the line is scrolled off the display you cannot retrieve it. However, most of the lines are stored in one or more of the logs (1.4.5).

9) **Instruction Area** – Brief instructions or command prompts will be displayed here.

10) **Enemy Distress Call Indicator (EDC)** – If this is lit in red, then it means that your communications section has detected one or more enemy distress calls. You can get more information about the reason for it being lit by accessing the Status option in Communications [M] [S].

11) **Hull Damage Indicator** – This vertical bar shows the level of damage that has been sustained by your ship's hull. Undamaged is indicated by green, while damaged is indicated by yellow. The label "Hull" will be in *cyan* if there is no damage, and in *orange* if there is any damage. The increments are in 20%, to the nearest 20%. Thus if your ship's hull damage is <= 10%, then it will show as green, but between 10% and 25% damage, the first 20% increment will show in yellow, and so on. If your hull damage exceeds 50%, then you will receive a <mark style="background-color: red; color: yellow;">HULLPN</mark> alert and the warning light in the C&W panel will be lit. Note that if you reach this point, it is easier for your ship's systems to sustain damage, so you need to get to the nearest starfort immediately.

12) **Systems Status** - The background color of each status light in this display indicates the condition of that system: <mark style="background-color: green;">Green</mark> for fully operational, <mark style="background-color: yellow;">Yellow</mark> for partially operational (damaged), or <mark style="background-color: red;">Red</mark> for inoperative (severely damaged) or <mark style="background-color: black; color: white;">black</mark> (destroyed). If a system is destroyed, it cannot be repaired during your sortie, and can only be repaired or replaced at starfort. The systems monitored here are:

COMPUTR	Main computer	TRP CTL	Torpedo control
S/L ENG	Sublight engines	PHS CTL	Phaser control
HYP ENG	Hyperdrive engines	TELEPRT	Teleporters
SRS	Short Range Sensors	COM CTL	Communications control
LRS	Long Range Sensors	TRAC BM	Tractor beam
SHD CTL	Shield control	PLS	Primary Life Support

13) **Weapons Status** - If your phaser bank ("P") and two torpedo tubes ("T T") are ready to fire, these indicators are Green. Any of these that are operational, but not ready to fire (or have been put on Standby mode) are shown in Red. If a weapon is inoperative because of damage, its indicator will be Black. Next to the letter designating the weapon will be a "a" if it is set to *automatic* targeting mode, or "m" is it is set to *manual* targeting mode. To the right of the weapons status indicators is a cyan weapons mode indicator which shows a blinking "cont" if continuous fire has been selected (i.e., weapons will fire as soon as they are ready) for both battles in normal space and bombardments. For bombardments only, "salvo" will be shown if salvo mode has been selected. If this indicator is blank for non-bombardments, then it means the weapons need to be fired manually.

14) **Ship's Data Display (DATA)** – The current quantity of seven important resources - torpedoes, crew members, shock troops, supplies, sensor probes, obliterator pods, and escorts, is shown here. See Section A.6 for the normal maximum capacities of these parameters. A couple of these require some further explanation:

    a. **Snsr Probes** - This is in the form L:#S::# where **L** shows the number of probes currently loaded into the probe *launchers* (for standard probes, this also shows the number of active probes being assigned to the launchers); and **S** shows the number of probes currently in *storage* (supply) that are available to be loaded into the launchers whenever any become available.

b. **Escorts** – This shows the number of destroyer escorts that have been assigned to your Battle Fleet (maximum is 4). If you are docked, then parentheses appear behind this number. In the parentheses it shows the number of escorts that are currently docked with you with a blinking number. If the number is orange, with a down arrow ↓, that means that there is at least one escort still being resupplied and not ready to depart. Once their resupply is complete, this flashing number will turn to green with an up arrow ↑. This means your escorts are all ready to depart. However, you may have to wait until your ship is ready as well.

14a) **Target Data Display (TARGET DATA) -** When a *Red Alert* is issued, the Ship's Data Display is replaced by the Target Data Display (figure A-5). You can also toggle between the Data and Target displays by pressing [Alt][D]. The number across from the title is the number of torpedoes you have available. The other parameters in the display are:

a. **R.Pos** - This is the relative position of the target in system units. Plus numbers are to the right of the Tactical Display center line, negative numbers to the left. Likewise, for y, positive numbers are above the horizontal line, negative numbers below it.

b. **Brng** – This is the bearing or angle from your ship to the target. If it is in orbit with you, then this number is always 0.

c. **Vel** – The velocity is the speed the target in normal space (if it is in orbit, then this is zero). Next to the velocity value is the symbol of the ship, which aids in recognition. It also shows if the target's shields are up (designated by a colored background on the symbol).

Figure A-5. TARGET DATA Display

d. **Wpn** - Weapons show which of your weapons are locked on which target. **P** for phasers, **T** for torpedoes (Torp #1 is in the middle position, Torp #2 is on the right). The color of the letter indicates the weapon's setting: *red* for destroy, *yellow* for disable, *blue* for standby (torpedoes only). The background is *white* for Manual (has to be fired manually), and *black* for Auto. You can change these settings by selecting the Weapons option in the Combat Command in the main menu [B][W] or using the Weapons menu in the Combat Control Center (CCC) accessed by [Alt][X], and the appropriate weapon. It's a good idea to freeze the simulation first.

15) **Energy Status (ENERGY)** – This panel shows the status of your energy and power in the form of indicator bars that indicate from 0 to 100%. To obtain the actual values of the energy parameters, access the power status through the Engineering Command [E][R][S]. The definition of the bars follows:

a. **Usage** - shows what percent of your 4000 units of energy are being used. Minimum energy usage in normal space is 5% and 1% when docked. Energy usage is increased by using either sublight or hyperdrive engines, having shields up, using tractor beam, teleporters, and other systems that use energy.

b. **Quantity** – shows what percentage of your maximum energy capacity (4000 units for standard battlecruisers, 5000 units for upgraded battlecruisers) is remaining. Once this goes below 25%, you will receive a <mark>LOW POW</mark> alert on your C&W panel.

c. **Backup** – This shows what percentage of your emergency energy reserve is remaining. 100% is equal to 100 units, which will not last long. You must lower shields, stop your ship (if possible) and arrange a rendezvous with a nearby escort or ship to transfer some power (energy) using teleporters.

d. **Shields** – Shows the current level of your shields as a percentage of maximum level. The shield generate uses power from your energy reserves (quantity), so the usage increases proportional to the level of the shields. When a hit is received, the shields absorb the hit, but the power of the hit is subtracted from your energy reserves. If your shields are less than 100%, then they will not be able to absorb all the power of the hit, and some may pass through to damage your ship's hull or systems. The lower the shields, the greater the chance of damage.

16) **Command Menu Line** – On this line are listed the available commands or options. The example display in Figure A-3 shows the options at the top level of the command hierarchy - *Navigation, Engineering, Combat, Computer, Security, Communications, Strategic Commands, Sciences*, and *Controls*. You can select any of these commands using the menu arrow [<][>] ([,][.]) followed by [Enter] or by pressing the letter highlighted in red.

17) **Indicator Lights** – In this area are several indicator lights that are important to keep you aware of the state of your ship and various switches. They are from top down:

a. **Supply Ship Rendezvous** – Indicates if a supply ship is headed for a rendezvous with your ship. If not, then you will just see the supply ship symbol (⚨) in *gray* by itself in this indicator. If there is a supply ship on the way, the symbol will be lit in *green* and the distance in light years from your ship will be shown next to the symbol. The distance is color-coded. If the distance is 10+ light years, the color is *magenta*; if the distance is between 5 and 10 light years, the color is *cyan*; if the distance is within 5 light years the color is *green*, and if it is about to arrive or is in your system, it is *blinking green*.

b. **Electronic Counter Measures (ECM)** – The ECM indicator is lit in *magenta* when electronic counter measures are in force. See Appendix B for the operation of the ECM.

c. **Ship Performance Data (SPD)** – Your ship can collect and archive data about the performance of your ship and crew. This collection of data is called the *Ship Performance Data* (SPD). You can turn the collection of SPD on

and off through the Settings (Sign-On Options or Computer/ SpecialServices/Settings [C][S][T]), the ship Controls box ([Ctrl][H] or the ctL menu option), or the SPD toggle switch ([Ctrl][D]). If the SPD is enabled when the switch is on as indicated by the SPD indicator lit in *blue*. When the computer is writing the SPD data to a disk file, the indicator light momentarily turns *green*. SPD is accessed for viewing through the Engineering/Engineering Data/Ship Data command [E][E][D].

   d.   **Rest Mode (RST)** – This light indicates if Rest Mode is active. When Rest Mode is active the RST indicator light will be *white*. While in Rest Mode, your crew's rest level will also increase. Rest Mode is toggled on and off using the [Alt][R] command (see Ship Controls section).

   e.   **Combat Message Filter (CMF)** – This light indicates if the Combat Message Filter is active. When the CMF is active the indicator light will be *orange*, otherwise the indicator light is off. This CMF is toggled on and off by pressing [Alt][C] (see Ship Controls section).

   f.   **Auto Alert Switch (AAS)** – The AAS when on (the indicator light will be *green*) the ship will automatically go to RED ALERT and raise the shields when enemy (including mines) is detected or lower the shields when the threat no longer exists. If you change it to MANUAL mode, the AAS indicator will change to *magenta* and the label to "man". The AAS indicator appears in the Bridge Display, System MAP, Navigational Map, and War Map. See Appendix B for more information about this switch and how to use it.

18) **Sideslip Indicator** - Sideslip is a special feature of your ship's navigation system that allows you to change your ship's direction of travel without altering the set heading. When sideslip is activated by pressing [Tab] for right sideslip or [Shift][Tab] for left sideslip while in manual navigation, your ship will move in a direction that is 45º to the left of right of your set course respectively. If activated with a designated navigation target, you will approach the target in a curve. The sideslip indicator "ss" will have a *green* right arrowhead "►" for right sideslip, and a *green* left arrowhead "◄" for left sideslip next to it. This indicator also shows if you have selected *evasive maneuvering* [Alt][V] by having both arrowheads showing at the same time ("◄SS►"). Evasive maneuvering will randomly alter your course between 45º port and 45º starboard of your set course continuously. Sideslips and evasive maneuvering can also be toggled on and off from the CCC.

19) **Tractor Beam Indicator** – This is lit in *magenta* if your tractor beam is on.

20) **Time Display** - This display shows your Mission Elapsed Time (MET), which is how many days have elapsed since your mission began, and how many days you have left to complete your assigned mission ("Time left"). The MET value will flash in bright white when you freeze the simulation.

21) **Alert Status** - This indicates the current alert condition of your ship. The alert conditions are:

DOCKED	Docked with starfort or captured starbase
GREEN	In hyperspace or in Krellan-controlled space with no enemy present. Low crew readiness state.
ORANGE	In Alliance-controlled space, but no enemy ship or starbase is in detection range. Shields and weapons are powered down, but crew is in high readiness state.
RED	Your long range scanners have detected an Alliance starbase or hostile vessel(s), or you are in orbit around an Alliance planet. Shields are raised and weapons are ready to fire. Energy usage is high. Crew is at battlestations.

A.4 DISPLAY SYMBOLS

Figure A-6 shows the symbols used in the displays of your battlecruiser. This figure is from the Reference Library of your Ship Information System (SIS).

Figure A-6. Definition of Symbols used in Displays

A.5 NAVIGATION TERMS AND DEFINITIONS

Krellan starships use the conventional definitions for navigational directions. Refer to Figure A-7 for the angle definitions.
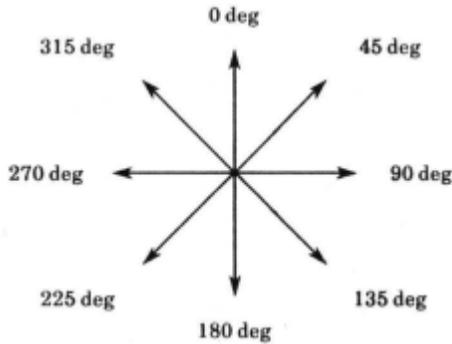
Figure A-7. Navigational Headings

Course indicates the navigational direction you are travelling. Heading is the direction your ship is currently pointing. Bearing is the direction to a particular object or location with respect to your ship. The bearing can be either absolute, based on the system x and y axes; or relative, based on the heading of your ship. For example, if your ship is heading 120^0 with an object 35^0 to your right, then the absolute bearing to the object is 155^0, and its relative bearing is 35^0. If the object is 35^0 to your left, then its absolute bearing is 85^0 and its relative bearing is -35^0.

A.6 THE KRELLAN FLEET

The Krellan Empire uses four types of space vessels: battlecruisers, destroyers, supply transports, and troop transports. In addition, there are starforts dispersed throughout Krellan-occupied space that are used for supply and repair of these ships. Important information about each type is summarized on the following pages.

Battlecruiser   Klagar Class
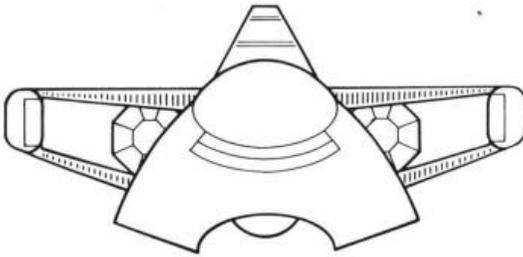
Maximum Safe Cruising Speed	C-Factor 8
Emergency Speed	C-Factor 10
Maximum Sublight Speed	0.9
Torpedoes	24
Torpedo Tubes	2
Phaser Banks	1
Maximum Total Power (units) .	4000 (main)
	100 (emg.cells)
Maximum Supplies (units)	1000
Defensive Shields	1
Critical Systems	12
Tractor Beams	1
LRS Sensor Range	20
Officers	35
Ratings	240
Shock Troops	150
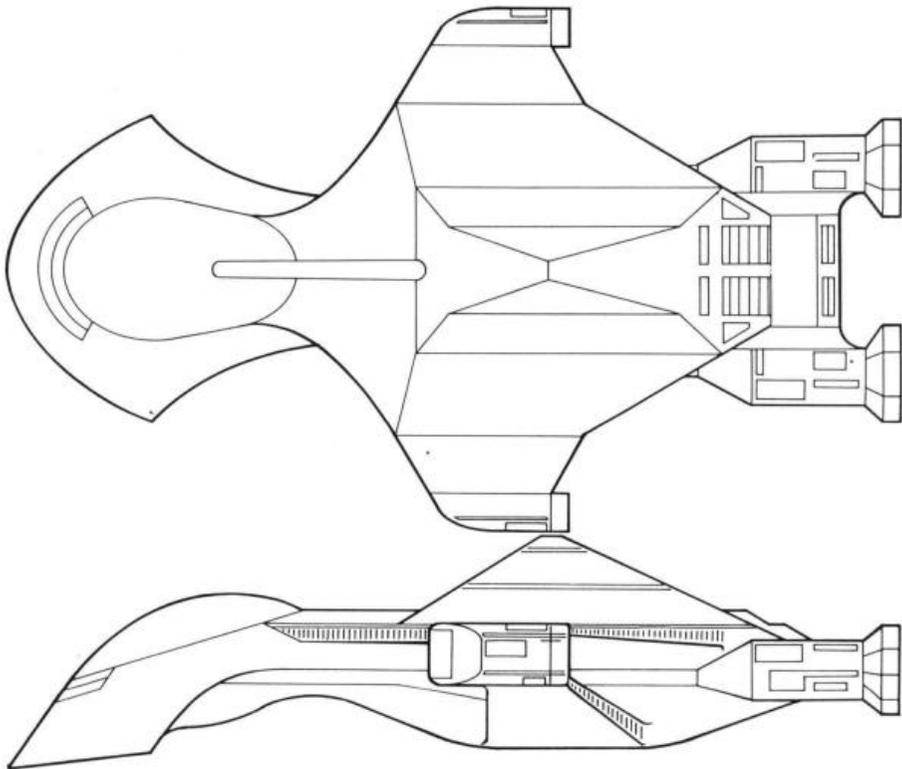
The battlecruiser - the type of ship you will command on your missions - is the most powerful starship in the Krellan fleet. A detachment of four destroyers is assigned as escorts to every battlecruiser commander with the rank of Centurion or higher. A battlecruiser and its escorts are collectively known as a battle fleet.

Battlecruiser Deck Profile
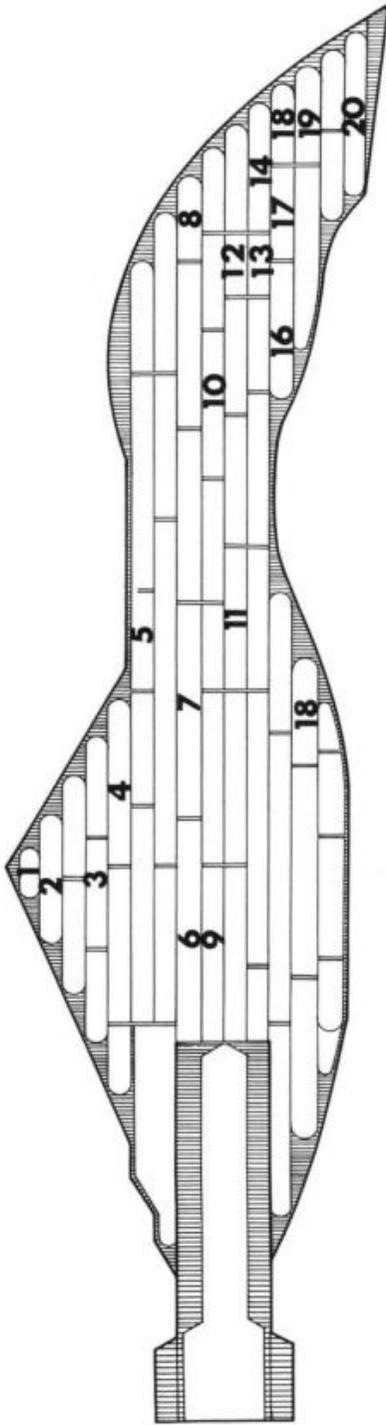
Critical Systems

1. Shield Generators
2. Shield Controls
3. Auxiliary Battle Bridge
4. Auxiliary Navigation Bridge
5. Teleporters
6. Auxiliary Power Reactors
7. Main Computers
8. Communications
9. Engine Controls
10. Battle Bridge
11. Main Life Support System
12. Auxiliary Teleporters
13. Auxiliary Life Support
14. Navigation Bridge
15. Auxiliary Computer
16. Bridge Computer
17. Long Range Sensors
18. Torpedo Control
19. Phaser Control
20. Short Range Sensors

A.6.1 Crew Requirements

A battlecruiser requires a minimum of 20 regular crew (not shock troops) to operate essential ship systems, including engines and weapons. If your crew is reduced to less than 20, you are restricted to calling up displays and operating shields, teleporters, and communications.

A.6.2 Power and Supplies Management

The following notes explain how your ship's energy capacity and supplies are used, and how to conserve those resources when necessary. The percentages given for power usage are not raw figures, but express a relative rate of use. For example, using your tractor beam to draw in an object does not take 20% of your remaining power; the usage rate of 20% means that the energy needed to perform this task is four times greater than the amount of power needed to hold the object in tow.

In these notes, "*" and "/" stand for multiplication and division, respectively.
- Power usage and quantity level indicators are updated every 0.05 days.
- Minimum power usage is 5% at idle (all systems on except engines, weapons, shields, tractor beam, and teleporters) when your ship is not docked at a starfort, and 1% when it is docked.
- When your shields are on, power usage is increased and energy quantity is decreased by (power level/4 + shield level/8).
- Energy quantity is reduced by (l0*C-Factor)/4 units when your hyperdrive engines are on.
- Hyperdrive engines increase power usage above the normal 5% rate by (5 + C-Factor)%. For example, moving at C-Factor 8 increases power usage by 13%, up to 18%.
- Sublight engines increase power usage by (10*C-Factor)%. Thus, sublight travel at C-Factor 0.9 increases power usage by 9%, up to 14%.
- The tractor beam increases power usage by 20% while drawing an object or another ship toward your ship. Once the object is in tow, a power usage of 5% is needed to hold the object while your ship is moving.
- If your main energy supply is depleted, the emergency power cells will be automatically switched on. Emergency power cells can only be recharged from your ship's main energy supply, which is automatically replenished when you dock at a starfort. Emergency cells are recharged at the rate of 2% of full capacity every 0.05 days; while they are being recharged, the power usage of your main energy supply will be increased by 10%.
- Supplies are not used from your ship's stores while you are docked, or while being resupplied by material transport from a landing party.
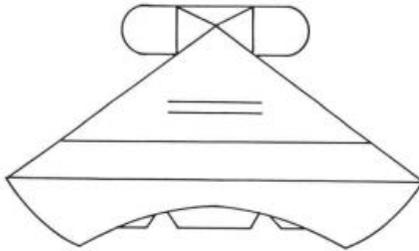
Destroyer

Sword Class
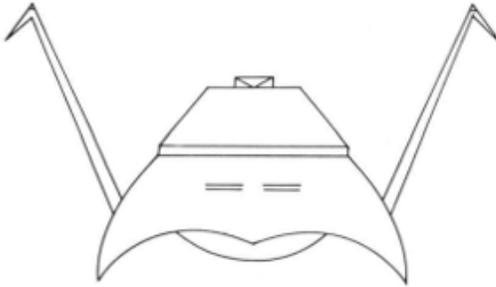
Maximum Safe Cruising Speed ...	C-Factor 8
Emergency Speed	C-Factor 10
Maximum Sublight Speed	0.9c
Torpedoes	15
Torpedo Tubes	1
Phaser Banks	1
Maximum Total Power (units)	1200 (main)
	100 (emerg-cells)
Maximum Supplies (units)	200
Defensive Shields	1
Critical Systems	10
Tractor Beams	0
LRS Sensor Range (points)	20
Officers	22
Ratings	128
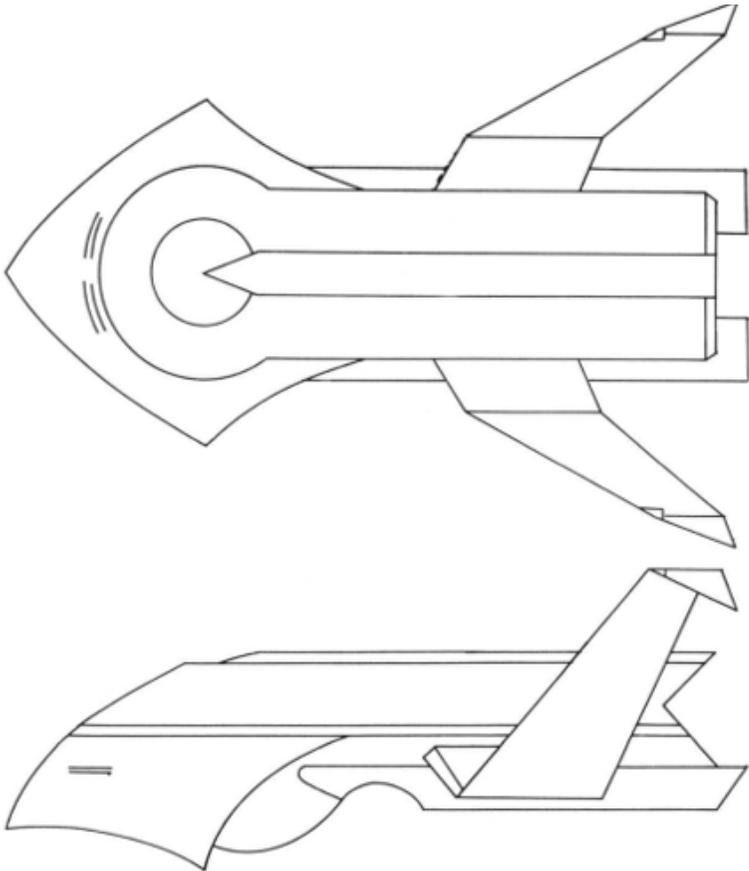
The destroyer is a small and highly maneuverable starship. ideal for fast attacks. Individually, these ships are no match for Alliance destroyers. but when combined in small attack forces they can be deadly. Destroyers are often used as escorts for battlecruisers and transports.

Supply Ship (Type A Transport)

Nebula Class

Maximum Safe Cruising Speed	C-Factor 6
Emergency Speed	C-Factor 8
Maximum Sublight Speed	0.7c
Torpedoes (cargo)	64
Torpedo Tubes	0
Phaser Banks	0
Maximum Total Power (units)	3000 (main)
	0 (emerg-cells)
Maximum Supplies (units)	3200
Defensive Shields	1
Critical Systems	10
Tractor Beams	1
LRS Sensor Range (points)	10
Officers	45
Ratings	235
Shock Troops	100
Probes (cargo)	25
Obliterator Pods (cargo)	4
Cargo Power (units)	5000
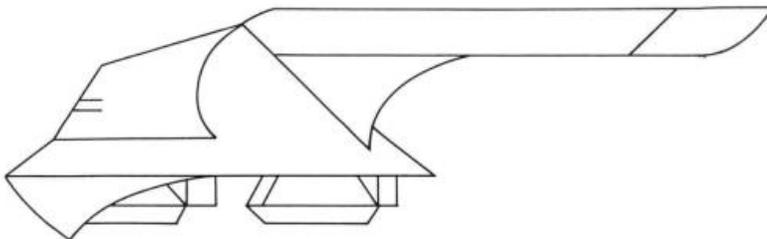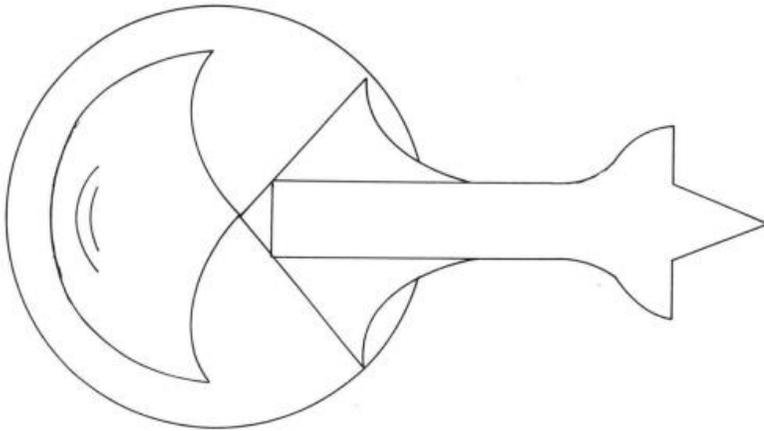
Supply ships carry materials - standard supplies, energy, torpedoes, and heavy equipment used in invasions - to replenish and service other Krellan vessels and troops in the region. Capable of carrying up to 3000 supply units within a single detachable pod, this is the second largest starship in the Krellan fleet.

Troop Ship (Type B Transport)   Mammoth Class
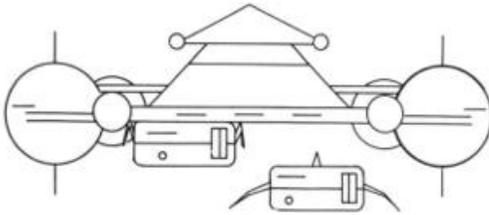
Maximum Safe Cruising Speed	C-Factor 6
Emergency Speed	C-Factor 8
Maximum Sublight Speed	0.7c
Torpedoes	0
Torpedo Tubes	0
Phaser Banks	1
Maximum Total Power (units)	4000 (main)
	100 (emerg-cells)
Maximum Supplies (units)	3000
Defensive Shields	1
Critical Systems	9
Tractor Beams	1
LRS Sensor Range (points)	10
Officers	56
Ratings	344
Shock Troops	150
Legions	4
Troops	40000
Emergency Load (troops)	60000
Drop Ships	4
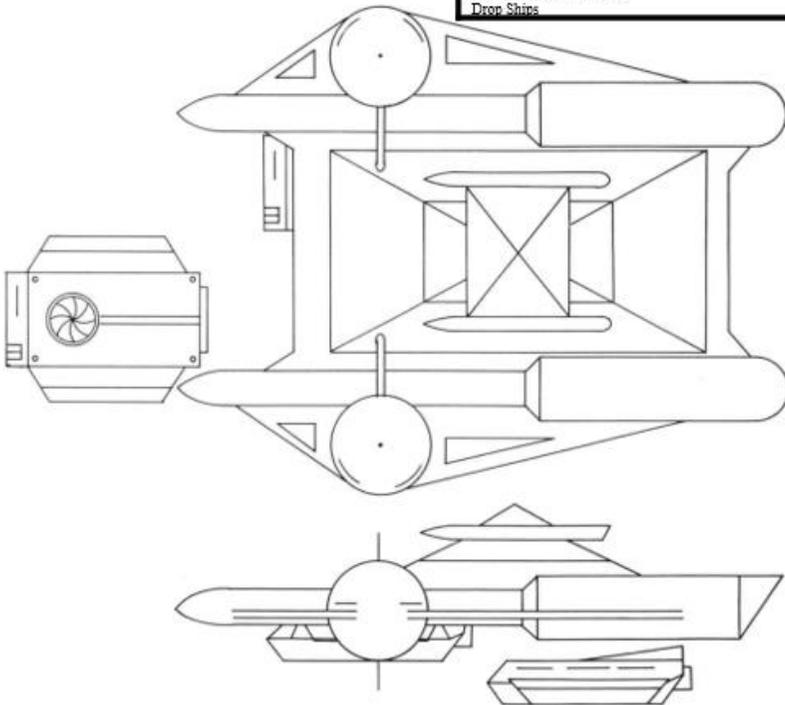
The largest starship in the Krellan fleet, a troop transport can hold as many as four legions (40,000 soldiers) in addition to equipment and supplies. If equipment and supplies are used up, a troop ship can take 60,000 soldiers on board in an emergency. Troops and supplies are normally carried in the main superstructure and are transported to the surface of a planet by means of four detachable pods called drop ships. Released while the transport is in orbit, the drop ships can make several trips from the mother ship to the planet during an invasion.

Starfort

Protector Class

Torpedoes	unlimited
Torpedo Tubes	2
Phaser Banks	2
Maximum Total Power (units)	12000
Maximum Supplies (units)	unlimited
Defensive Shields	1
Critical Systems	10
Tractor Beams	1
LRS Sensor Range	20
Officers	435
Ratings	3065
Shock Troops	1000
Replacement Crew	1500
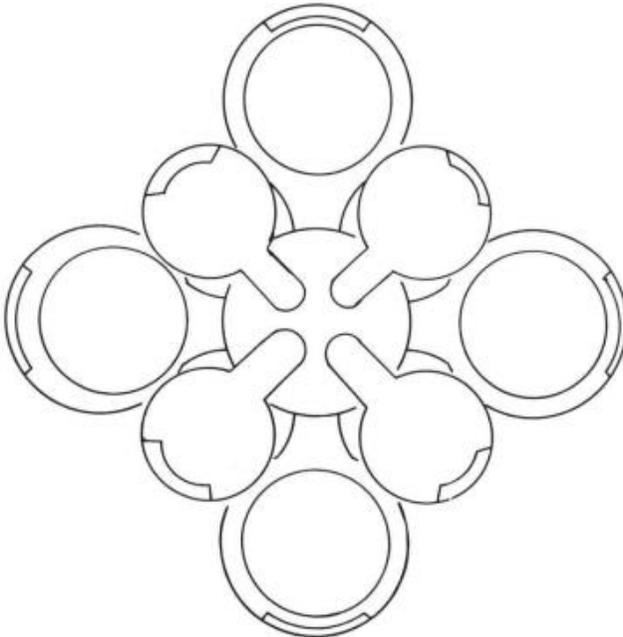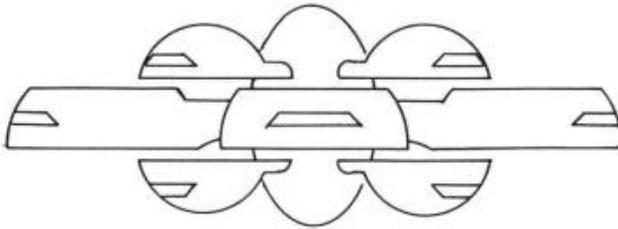
Starforts are a constant and dependable source of supplies, crew replacements, and repair facilities. Located throughout Krellan-owned and occupied space, each region contains at least three starforts. The location of each starfort is known at the start of your mission. There are no starforts within Alliance-occupied space.

A.7 THE KRELLAN MILITARY ORGANIZATION

Imperial Krellan Fleet Headquarters controls the Krellan fleet and ground forces. The Fleet and ground forces have different internal structure and rules, but work closely together.

The Imperial Fleet officers corps consists of seven active ranks (Altern, Centurion, Subcommander, Commander, Prefect, Subadmiral, and Admiral) and one honorary court rank (Imperial Tribune).

The Krellan ground forces are composed of warrior troops, and are normally organized as follows:

Team	=	10 warriors	
Century	=	10 teams	(100 warriors)
Cohort	=	10 centuries	(1,000 warriors)
Legion*	=	10 cohorts	(10,000 warriors)
Corps	=	10 legions	(100,000 warriors)
Army	=	10 corps	(1,000,000 warriors)

For the express purpose of invading planets from orbit, a special legion was formed called an *Assault Legion* (indicated by the asterisk above). Each assault legion contains seven cohorts of warriors (7,000 total) and four cohorts of specially trained and lightly armed elite shock troops to lead the assaults. These cohorts are smaller with only 750 shock troops each.

The ground forces are all-purpose, self-contained fighting units, but from the cohort level on down, the units are specialized. The legion is the largest permanent unit; corps and armies change their composition as required.

At the start of our conquest of the Alliance, the Krellan ground forces consisted of 8,512 Legions (78 Armies plus training and reserve Legions).

A.8 KRELLAN DECORATIONS AND AWARDS

To give you incentive not only to complete missions but to perform as well as possible, Krellan Fleet HQ has established a number of decorations and special awards to recognize outstanding achievement. All awards are presented at the end of a mission and become a part of your permanent service record.

A.8.1 Mission Awards

These decorations are awarded based on the numbers of Krels earned and slaves delivered during your missions but are only given for missions undertaken at the maximum difficulty level possible for your current rank. The awards will only be bestowed for successful missions.

Level*	Decoration
I (500)	1. Henri Zae Ribbon for Loyalty 2. Krellan Award for Gallantry 3. Empire Defense Shield
II (1000)	1. Nebula Defense Cluster 2. Bronze Serpent 3. Silver Flame of Torack 4. Nebula Defense Cluster with Palms
III (1500)	1. Medallion of Death 2. Silver Serpent 3. Crossed Sabres of Kree with Silver Star 4. Medallion of Death with Emeralds
IV (2000)	1. Gold Serpent 2. Order of the Black Knights 3. Crossed Sabres of Kree with Gold Star 4. Gold Serpent with Rubies
V (2500)	1. Hero of the Empire Gold Skull 2. Hero of the Empire Gold Skull with Sabres 3. Hero of the Empire Gold Skull with Sabres and Rubies

Table A-2: Krellan Mission Awards

* Number in ( ) is the total number of Kreis earned in a mission required for this award.

Awards are presented in numerical order within each level. If you have received the highest-numbered award available, the sequence starts over. You can earn the same decoration more than once.

A.8.2 Special Awards

You can also win nine special awards for certain significant achievements:

Space Combat Medal: For being in ship-to-ship combat with an enemy warship or starbase. Awarded only once.

Space Assault Medal: For personally conducting a boarding assault by Krellan shock troops on an enemy ship or starbase. Awarded only once.

Planetary Assault Medal: For initiating a planetary assault against a planet with hostile forces often technology level 2 or higher. Awarded only once.
The following awards are bestowed only if the mission was successful:

Medal of Conquest (with Bronze Talons): For personally leading an invasion and conquest of a planet of technology level 2-4. Bronze Talons are awarded for each successive achievement beyond the first.

Matci Medal of Conquest (with Silver Talons): For personally leading an invasion and conquest of a planet of technology level 5 or 6. Silver Talons are awarded for each successive achievement beyond the first.

Zagar's Dagger of Conquest (with Gold Talons): For personally leading an invasion and conquest of a planet of technology level 7, or a planet that is under Alliance ownership. Gold Talons are awarded for each successive achievement beyond the first.

Zae Medal of Honor: For outstanding feats of brutality, which for Krellans are signs of strength and honor. Examples include obtaining information by torturing captives, destroying inhabited planets, or killing all prisoners.

Silver Talon of Treachery: For outstanding feats of treachery such as accepting a surrender and then killing all the captives, pretending to surrender and then destroying the enemy when they have lowered their guard (or shields), or attacking a planet with which you have established a treaty.

Honorary Rank of Imperial Tribune: Awarded to officers who successfully complete their last Level 7 mission.
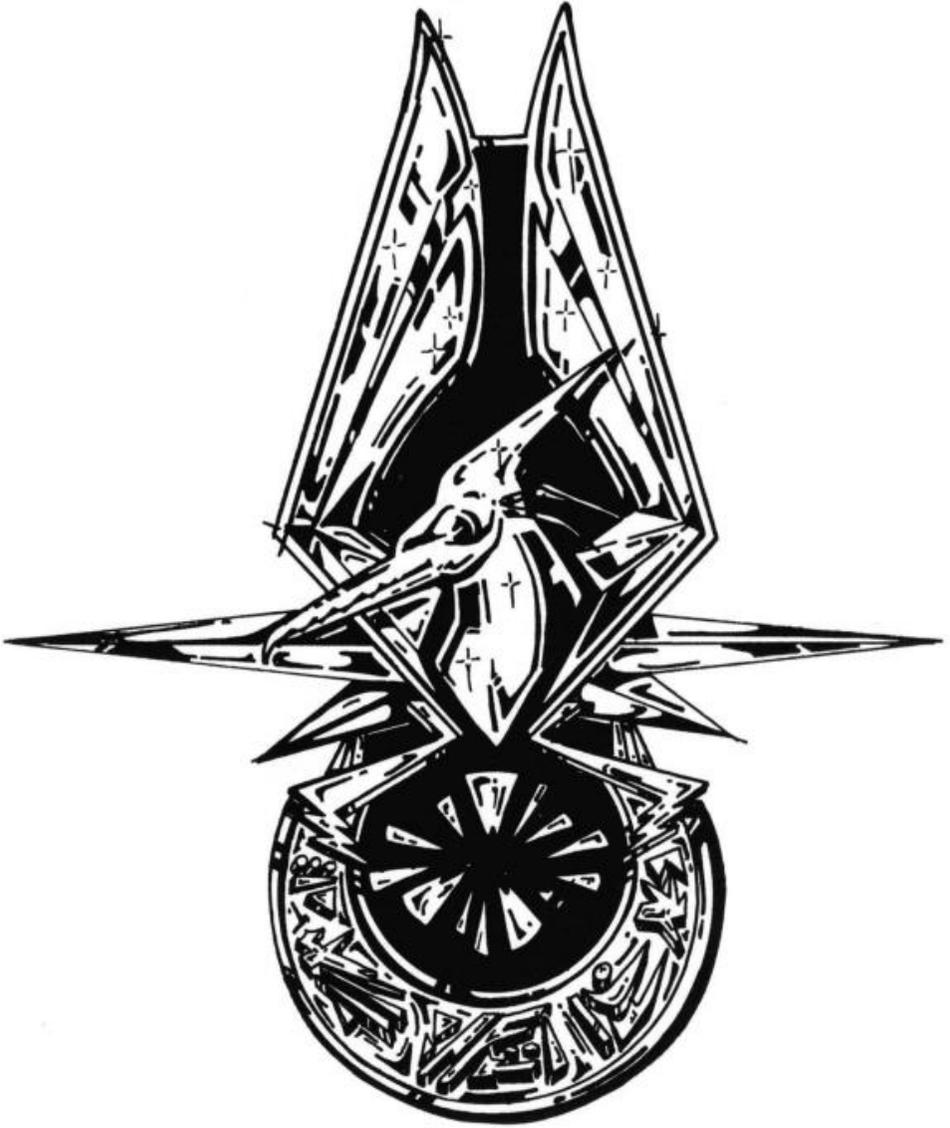
"TO THE STRONGEST GO THE STARS"

ZAE MEDAL OF HONOR

A.9 THE ENEMY FLEET

Through a combination of other commanders' experiences in battle and the dedicated efforts of Krellan intelligence operatives, you have access to a large body of information on the ships and bases of the United Galactic Alliance. A summary of enemy ship characteristics is given in Table A-3, followed by detailed descriptions and drawings of each ship.

Table A-3.Specifications of the Enemy Fleet

	Heavy Cruiser	Light Cruiser	Destroyer	Frigate	Scout	Freighter	Star Liner	Star Base	Orbital Fortress
Max. Speed[1]									
Hyperdrive	8	8	8	8	7	6	6	-	-
Sublight	0.9	0.9	0.9	0.9	0.9	0.7	0.6	-	-
Torpedoes	30	20	15	10	10	60	0	?	?
Torpedo Tubes	5	2	1	1	1	0	0	2	4
Phaser Banks	6	2	2	1	0	0/1	0	2	2
Phaser Range[2]	5	5	5	5	-	-	-	7	7
Total Power[3]	5000	3000	2000	1000	500	1000	1000	15000	12000
Supplies[3]	1200	1000	600	500	200	3000	2000	?	?
Defensive Shields	4	1	1	1	1	1	1	1	1
Critical Systems	13	13	11	11	10	10	9	?	?
Tractor Beam	1	1	0	0	0	1	0	?	?
L.R.S. Range[2]	20	20	20	20	20	10	10	20	20
Officers	58	45	30	25	15	10	10	?	?
Crew (Ratings)	372	325	170	145	110	105	190	?	?
Marines	100	70	50	30	25	20	25	500	?
Cargo	-	-	-	-	-	10000	-	?	-

NOTES: 1 Speed is in C-Factors.
2 Range is in system points.
3 Total Power and Supplies are given in units.

UGA Heavy Cruiser   Invincible Class
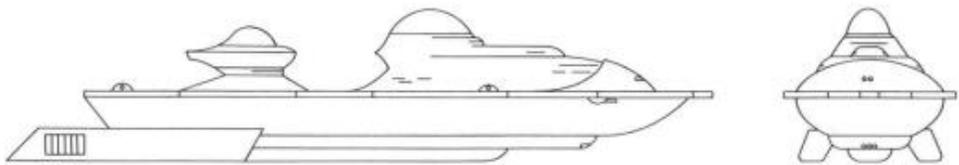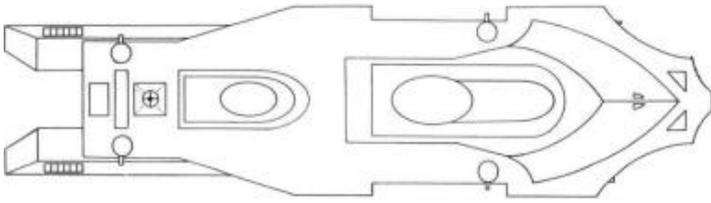
- **Primary functions:** Exploration and conquest of new territory
   Defense of UGA

The *Invincible* class heavy cruiser is the newest and most powerful ship in the UGA Star Fleet. Its armament - five torpedo tubes and six phasers - makes it a match for a Krellan battle fleet. Its only known weaknesses, which should be exploited, are: 1) it carries only 20 torpedoes, so can lire only four full salvos; 2) it carries only 70 space marines, making it vulnerable to capture by boarding; and 3) each ship usually operates alone, without escorts.
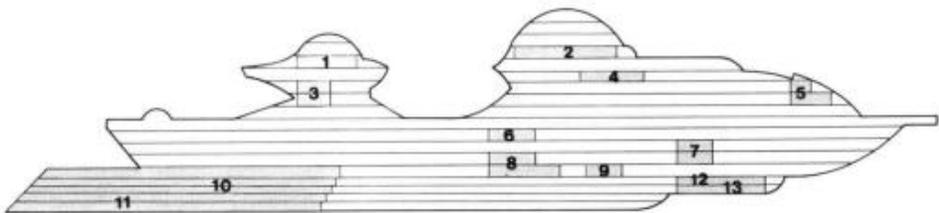
1	Long Range Sensors	8	Auxiliary Power Units
2	Primary Bridge	9	Transporters
3	Auxiliary Life Support	10	Engineering
4	Weapon Control	11	Main/Auxiliary Engines
5	Shield Control and Generator	12	Tractor Beam
6	Main Computer	13	Short Range Sensors
7	Primary Life Support		
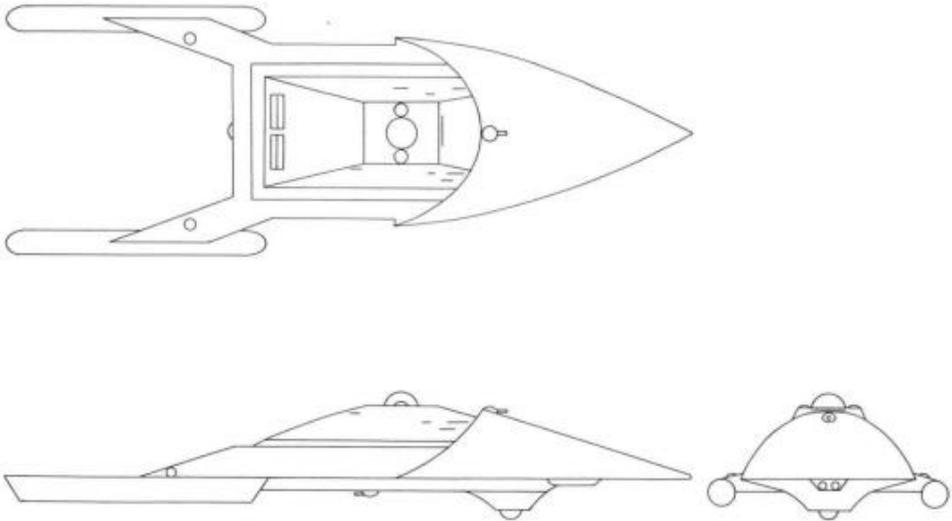
- **Primary function:** Patrol and enforcement

The *Patton* class light cruiser was the most powerful ship in the UGA Fleet before the development of its larger successor, the heavy cruiser. It is still a formidable adversary, nearly as powerful as a battlecruiser, but not a match for a full battle fleet. Light cruisers are often accompanied by a destroyer or frigate escort.
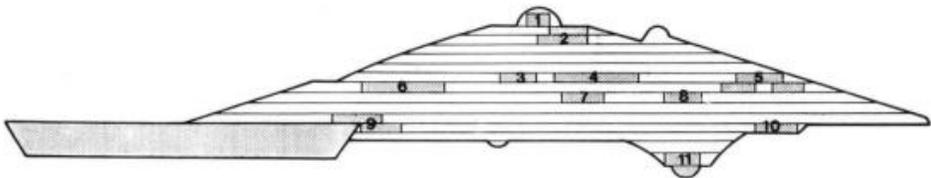
1	Long Range Sensors	7	Primary Life Support
2	Bridge	8	Transporters
3	Auxiliary Bridge	9	Engineering
4	Main Computer	10	Tractor Beam
5	Weapon Control	11	Short Range Sensors/Tracking
6	Shield Control		

UGA Destroyer

Leopard Class
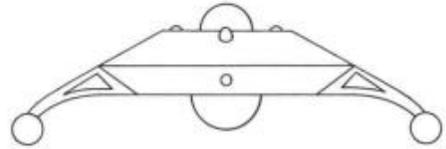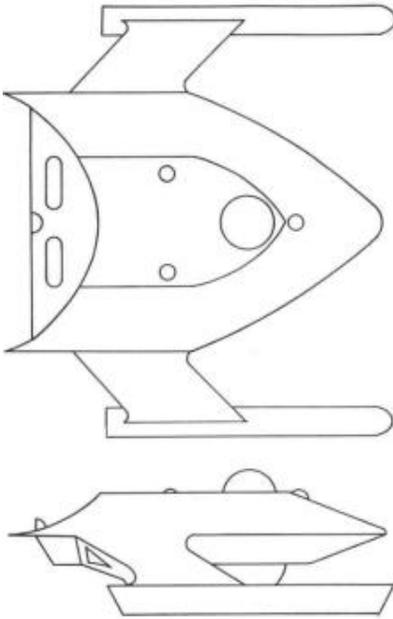
- **Primary function:** Patrol and enforcement

Destroyers are the mainstay or the UGA Fleet, quite powerful for their size but less numerous than their Krellan counterpart. They are used individually for patrol, and in squadrons of three to five ships for major battles. The main weakness of the *Leopard* class vessels is their lack of sufficient energy reserves to power both phasers and shields during extended periods of combat. They also lack a tractor beam, and are susceptible to capture by boarding.
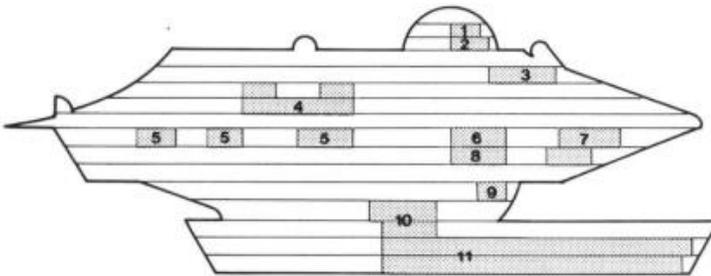
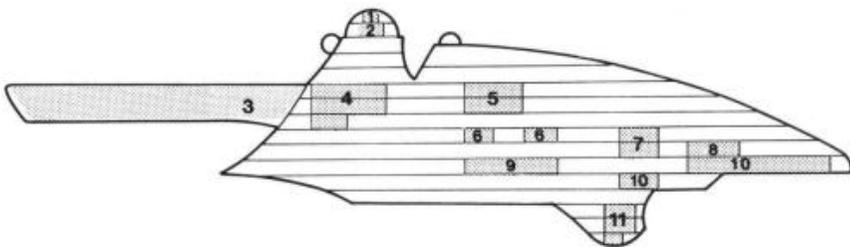|			
1	Long Range Sensors	7	Weapon Control
2	Shield Control and Generator	8	Auxiliary Life Support
3	Primary Bridge	9	Short Range Sensors
4	Main Computer	10	Engineering
5	Primary Life Support	11	Main/Auxiliary Engines
6	Auxiliary Power		
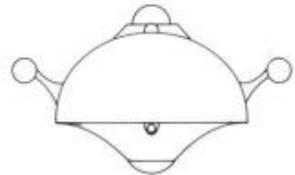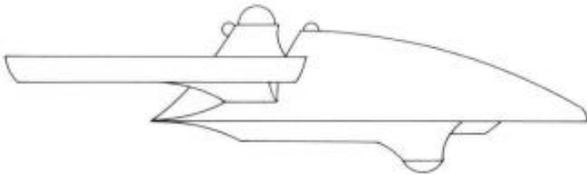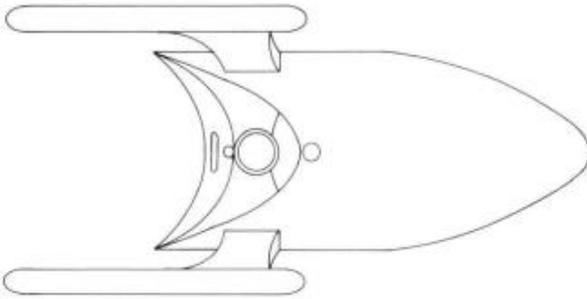
- **Primary function:** Escort

The *Australia* class frigate is the most numerous type of warship in the UGA Fleet, and is used almost exclusively for escort duties. One or more frigates usually escort freighters and starliners, and are sometimes attached to a heavy or light cruiser. Frigates are roughly equivalent to Krellan Piranha class destroyers in size and strength, but with the addition of a phaser bank. However, the phaser can be a powerful energy drain during extended combat, and their shields will usually collapse before the end of a battle.

|			
1	Long Range Sensors	7	Auxiliary Life Support
2	Shield Control and Generator	8	Primary Bridge
3	Main/Auxiliary Engines	9	Auxiliary Power
4	Engineering	10	Weapon Controls
5	Main Computer	11	Short Range Sensors
6	Primary Life Support		

UGA Scout   **Daniel Boone Class**
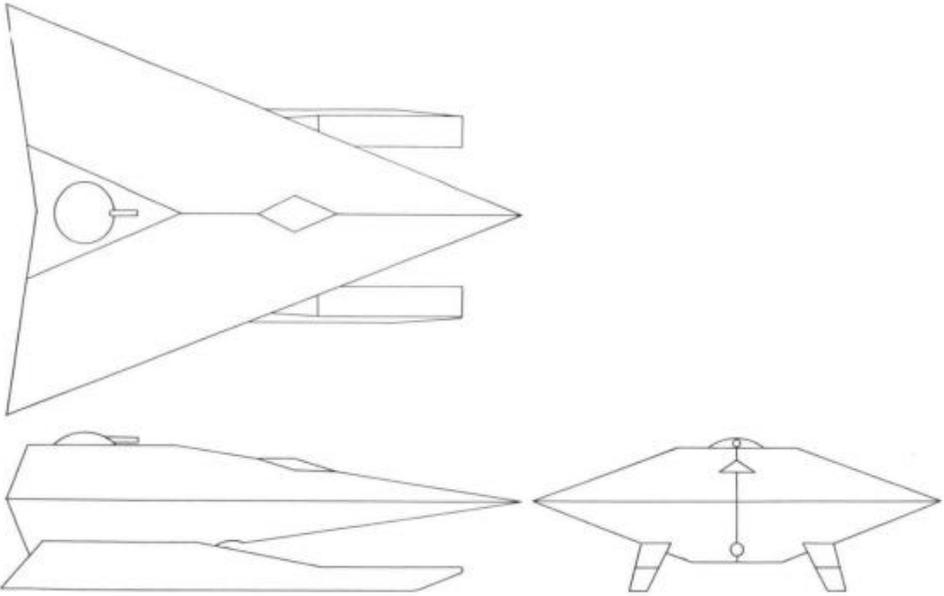
• **Primary function:** Exploration and intelligence gathering

The *Daniel Boone* class scout is the primary ship used by Star Fleet to explore unknown space in search of new planets and civilizations to exploit. In war, scouts are generally used on Intelligence-gathering missions in enemy space. Scouts usually operate alone and are very self-sufficient. However, they are lightly armed and weak in combat, and will usually summon a cruiser in a dangerous situation. The UGA scout is outmatched by Krellan destroyers.
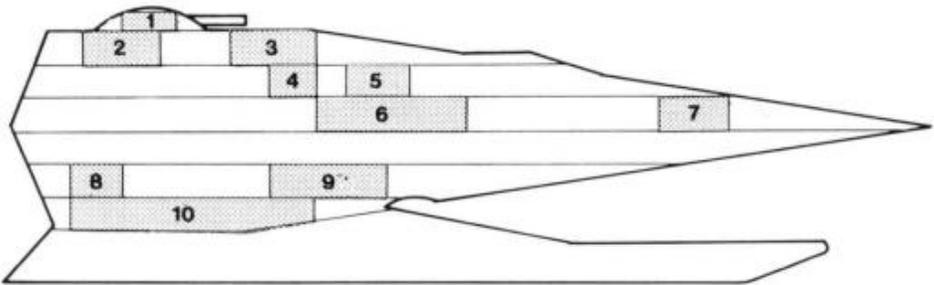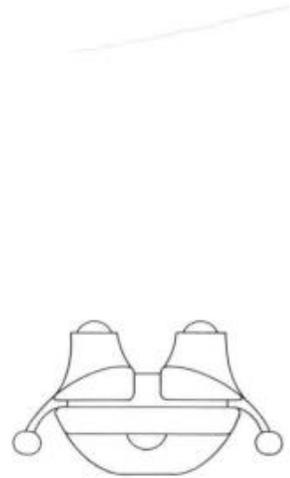

| 1	Photon Torpedo Bay	6	Life Support System
2	Shield Control	7	Sensors
3	Bridge	8	Transporters
4	Weapon Control	9	Auxiliary Power and Life Support
5	Main Computer	10	Engineering
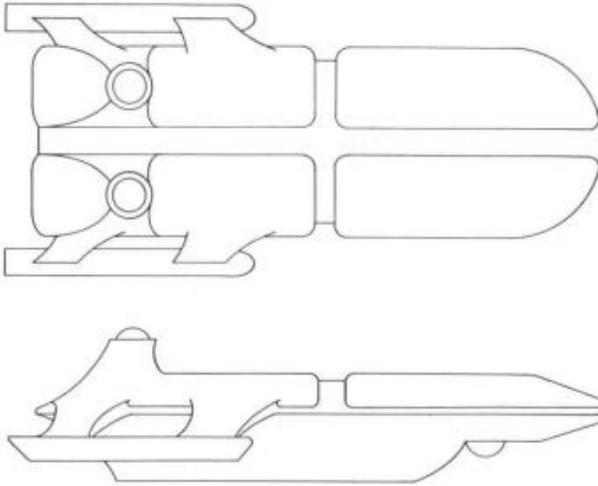
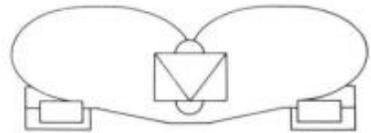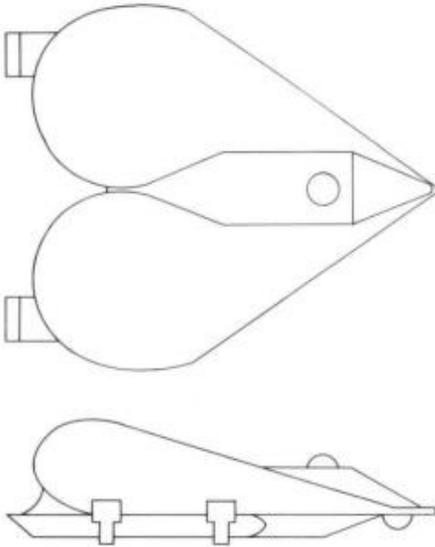- **Primary function:** Transport of supplies and UGA troops

Freighters are the largest ships in the UGA fleet, combining the functions of Krellan supply and troop transports. The *Star Trader* class vessels travel between civilized planets and to starbases. They are unarmed (except the latest models have a standard phaser), slow, and easy prey if you are fortunate enough to encounter one traveling by itself, but in many cases a freighter will have one or more frigate escorts. Capturing a freighter is a good way to replenish your energy and supplies if you are far from a starfort.
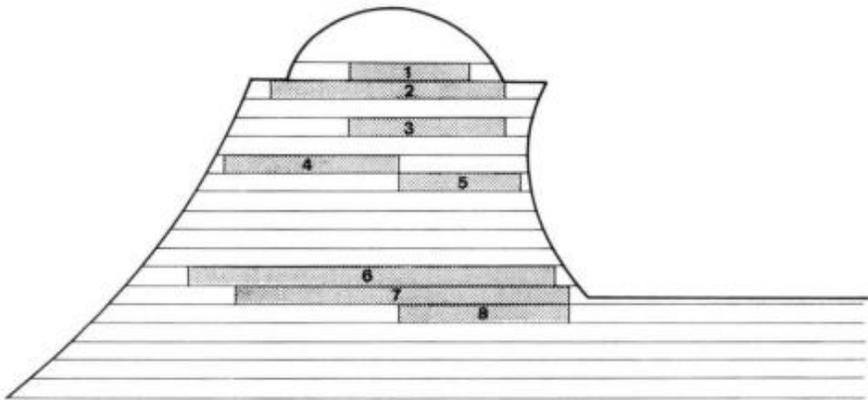
1	Bridge	5	Tractor Beam
2	Shield Control and Sensors	6	Engineering
3	Main Computer	7	Engineering
4	Primary Life Support/Transporters	8	Auxiliary Power Units

- **Primary Function:** Transport of civilians in decadent luxury

The *Princess* class starliner is the epitome of Alliance decadence, catering to the every whim of the weakling ruling class. Traveling on regular routes between UGA colonies, they are unarmed and slow, but often escorted by one or more frigates. Because starliners carry a large amount of supplies and many passengers, capturing one will yield extra energy, many slaves for the Empire, and possibly vital information, as important UGA government officials are often on board.
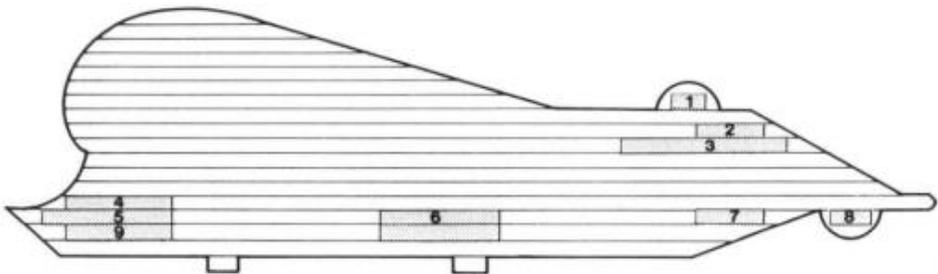
1	Bridge	6	Primary Life Support
2	Shield Control	7	Transporters
3	Main Computers	8	Sensors
4	Engineering	9	Auxiliary Engines
5	Main Engines		
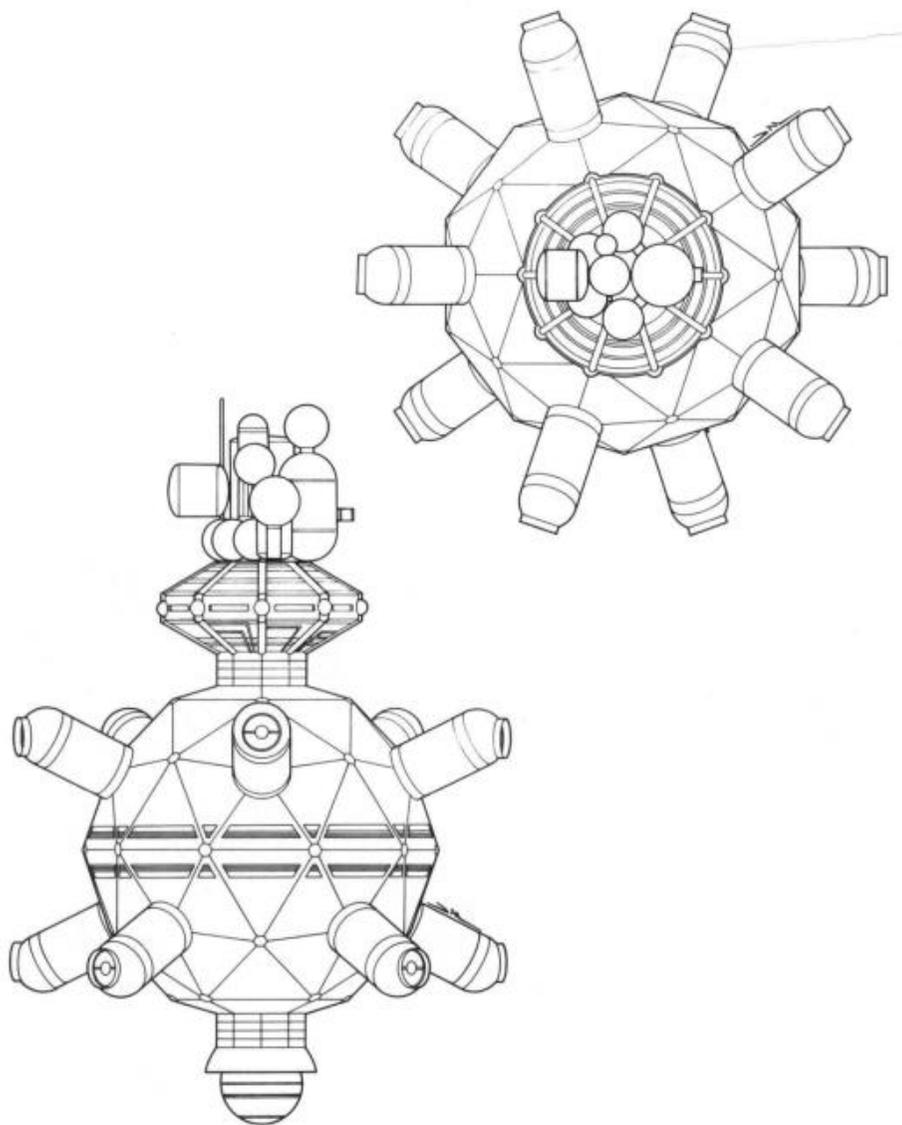
• **Primary functions**:   Repair and resupply of Alliance vessels

                                     Provides front-line defense against invasion

The *Guardian* class starbases are the backbone of the Alliance defenses. They are heavily armed space forts that provide shelter and support facilities for Star Fleet ships. It will require at least one battle fleet to destroy a starbase, probably more. Their phasers are very powerful, and out-range yours (seven points versus five), so exercise extreme caution when approaching a starbase.

A.10 UGA Regional Fleet Headquarters

No doubt the Krellan commander who succeeds in locating and destroying this outpost will live forever in the annals of the Empire. At present, we have very little data outside of the knowledge that such an outpost does exist somewhere deep in Alliance territory. It is an enormous artificial structure, probably the size of a large asteroid or a small moon.

A.11 Enemy Mines

The UGA has mastered the technology of using ship torpedoes as mines, dropping them in desired locations within a star system where they remain stationary and ready to explode upon contact with your ship. Because of its small size and low energy output, a mine cannot be detected by your ship until you are adjacent to it. If the mine is in your path and you are traveling at C-Factor 0.5 or higher, you will not be able to stop or swerve in time to avoid the collision. If a mine has been detected but not exploded, the **MINES** warning indicator on your Main Display will come on. When you move more than 5 points away from the last known mine, the indicator will go off. Mines can be destroyed by manually firing your phasers at them.

APPENDIX B
SHIP AND SIMULATION CONTROLS

This section describes the controls and switches that are accessible through your keyboard without having to go through the command hierarchy. First are described the Simulation Controls, which are accessible during the simulation (game) but are not directly involved with the control of your ship, but rather the simulation. Then are described the controls and switches for controlling your ship within the simulation.

B.1 FUNCTION KEY CONTROLS

There are 20 commands executed by using the ten function keys. Refer to Figure B-1 to see which keyboard set you are using. NOTE: The function keys specified in the following sections are for keyboard set B. The corresponding function key command for keyboard set A, if different, will be given in parentheses ( ). Set B has been made the default for version 2.0 because the horizontal configuration now is much more common now the very rare vertical configuration of Set A.

Figure B-1a. Set A Function Keys

Figure B-1b. Set B Function Keys

Velocity Controls

Type A	Type B	Control
F1	F2	Increase hyperspace speed by 1 c-Factor
[Shift][F1]	[Shift][F2]	Set maximum hyperspace speed
F3	F1	Decrease hyperspace speed by 1 c-Factor
[Shift][F3]	[Shift][F1]	Set zero hyperspace speed
F2	F4	Increase sublight speed by 0.1 c-Factor
[Shift][F2]	[Shift][F4]	Set maximum sublight speed
F4	F3	Decrease sublight speed by 0.1 c-Factor
[Shift][F4]	[Shift][F3]	Set zero sublight speed

You cannot increase your speed beyond the maximum capacity of your engines, nor can you adjust your speed while moving in hyperspace.

Course Controls

Type A	Type B	Control
F6	F6	Increase set course by 1 degree
[Shift][F6]	[Shift][F1]	Increase set course by 15 degrees
F5	F5	Decrease set course by 1 degree
[Shift][F5]	[Shift][F5]	Decrease set course by 15 degrees

Shield Controls

Type A	Type B	Control
F8	F8	Increase shields by 5%
[Shift][F8]	[Shift][F8]	Maximum shields (repeating *forces* **RED ALERT**)
F7	F7	Decrease shields by 5%
[Shift][F7]	[Shift][F7]	Lower shields (repeating *cancels* **RED ALERT**)

To manually issue or cancel a Red Alert, press the indicated keys twice. The first command lowers or raises shields; the second changes the alert status.

Engine Controls

Type A	Type B	Control
F9	F9	Start sublight engines – your maneuvering engines will first rotate the ship to the set course (if necessary) then start sublight engines followed by acceleration
[Alt][F9]	[Alt][F9]	Initiate Blink Drive once installed and active
F10	F10	Emergency Stop (stops engines – initiates deceleration and resets nav targeting)

NOTE: [Shift][F9] and [Shift][F10] no longer fire weapons.

B.2 SIMULATION/SPECIAL CONTROLS

This is a summary and description of the keys that control the simulation and special functions for your ship in the simulation.

KEYS	CONTROL	Default
[Ctrl][B]	Boss key	-
[Ctrl][D]	Ship Performance Data (SPD) logging toggle switch	ON
[Ctrl][E]	Engine sound control	-
[Ctrl][F]	Freeze simulation toggle switch	OFF
[Ctrl][H]	Controls Hot Keys menu	-
[Ctrl][I]	Ship Information System (SIS)	-
[Ctrl][K]	Function key set definition	-
[Ctrl][N]	Notepad	-
[Ctrl][O]	Display mission orders	-
[Ctrl][Q]	Quick save	-
[Ctrl][T]	Command menu tree	-
[Ctrl][V]	Full save procedure	-
[Ctrl][X]	Exit to DOS	-

[Ctrl][B] Boss Key
The Boss key adds a retro touch to the game (several games in the 1980s had them in case the boss walked in while they were playing a game). Once in the Boss screens, press [Enter] for the next screen, and [Esc] to exit. It ignores all other keys so that you can pretend to type. The screens were all created in a text screen design program called CREATOR, which Dr. Sorensen wrote in 1985 and 1986 to teach himself assembly language and to design the text mode screens in Star Fleet II. The screens in order are:

(1) Sample planning screen for Dr. Sorensen's software engineering task in support of the Space Shuttle program when he was a task manager in the Software Engineering Department for the Space Shuttle at the NASA Johnson Space Center in the mid-1980s.

(2) Design screen for a DEC/VAX program to help the operations team during an encounter when the Ultra Violet Plume Instrument camera on the DOD LACE satellite imaged the plumes of a sounding rocket flight as it passed overhead the rocket. Dr. Sorensen was the Observations Manager for the DOD satellite and designed this program to help them capture the data while doing all the activities required during a short 6-8 minute pass. His CREATOR program actually made an animated version of this so that he could show how it should work to the programmers who did the version on the VAX computer. This Encounter Management program was developed 1990/91. Note that there is nothing classified in this screen. It is just a sample layout design.

(3) & (4) This is some of the assembly language code of Star Fleet II to play background sounds, like the engine sound.

(5) A technical theory.

[Ctrl][D] Ship Performance Data Logging Toggle Switch
The Ship Performance Data (SPD) log is equivalent to the Flight Data Recorder on an aircraft. It records in a file the values of selected ship parameters approximately every 0.01 days MET. Each set of data parameters saved at a given MET is called a record. You can view the data via the Engineering command (M/E/E/D). You can toggle the recording of the SPD log ON and OFF by pressing this toggle switch. It can also be done in the Settings page of the Sign-On Options or through the Special Ops of your ship's computer.

[Ctrl][E] Engine Sound Control
There have been complaints from commanders about the sound of the sublight engines. Some people like it or tolerate it, but others find it annoying ("like a rock group amplifier buzz"). You can modify the frequency of the sound by pressing [Ctrl][E]. A window (Figure B-2) will appear that shows you the current value of the tone as a difference from nominal ("0"). You can use the [+] and [-] keys to increase or decrease the tone by 10 units respectively. That would normally be used for fine tuning. For large changes in tone, hold down [Shift] while using the [+]/[-] keys. This will alter the tone in steps of 100. The new relative tone will be shown. You can reset it to the simulation's default value by pressing [D] (the readout will say "0"), or exit without changing anything by pressing [Esc]. If you want to save the new tone, press [CR] ([Enter]). Note that this new tone value will be kept for you even if you start a new mission. NOTE: You can only use this command if your ship is not moving and time is stopped (i.e., engines have to be off, you cannot be moving in orbit around a planet, and you cannot be in REST mode). It is not sufficient to just Freeze the simulation – the unfrozen simulation must not be in a situation to update time. You must be stopped with no time updating.

Figure B-2. Engine Sound Control

[Ctrl][F] Freeze Simulation Toggle Switch
Stops the simulation and "freezes" the action. While the simulation is frozen, you cannot execute any command that uses time or performs any action. You can, however, view any information display and change settings. The MET value will blink in white while the game is frozen. Note that the simulation may not freeze immediately after you activate this control – actions that are occurring at your current time cycle (e.g., torpedo or bombardment hits) will complete before the freeze. To unfreeze the simulation, just press this toggle switch again or it will start automatically if you execute certain commands while frozen, like activate teleporters. The [Backspace] is the alternative key to toggle the freeze control, and is usually quicker and easier to use.

[Ctrl][H] Controls Hot Keys Menu

This is a shortcut to access the Hot Keys Controls Command from the main menu (L/H) because it can be executed from any of the four primary displays (Bridge Display, System Map, Navigation Map, War Map) and does not have to go through the menu. When executed, it will display the Controls box, which shows the definitions of all the [Ctrl] and [Alt] keys used in the simulation along with the current switch settings where applicable. From the Controls box you can toggle any switch setting or immediately execute any of the listed commands. See Section 1.9.1 for the instructions for using the Control box. Note: [Ctrl][H] can also be considered as the HELP key, as is common practice with many programs.

[Ctrl][I] Ship Information System (SIS)

The Ship Information System (SIS) provides information about your ship from within the simulation (equivalent to a ship wiki). This is accessed through the SIS shortcut [Ctrl][I].
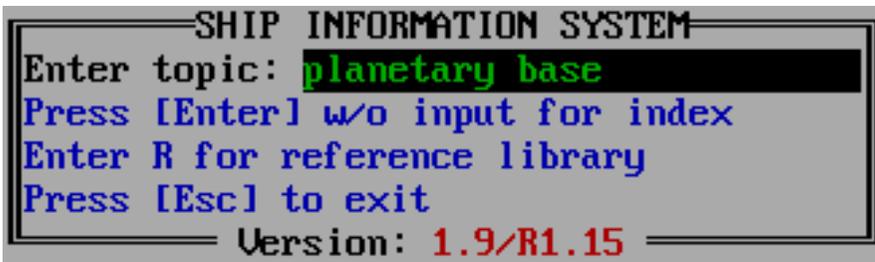

Figure B-3. Ship Information System (SIS)

The SIS box (Figure B-3) will prompt you for a topic (keywords). If the topic is in the database, then the information about the topic will be displayed in a window (Figure B-4). Press a key to remove the window or to go to the second page for longer descriptions. If you press [Enter] without a topic, then the topics index will be shown in alphabetical order (Figure B-5). Some keywords have more than one topic. Such cases will be shown by the keyword followed by a colon and then the topic options. When prompted again for the topic you must enter the first keyword followed by the rest of the topic from the options presented. Press a key to show the second page of the index. From the SIS box, you can also get direct access to the Reference Library. Just enter the single letter "R" for the topic (case insensitive). The alternate way to reach the Reference Library is through the Ship's Computer ([M]/[C]/[I]/[R]). Note that at the bottom of the SIS window the current version of the simulation is displayed (these figures are from a development Version 1.9 and will differ slightly from Version 2.0). Pressing [Esc] from the SIS window will return you to ship's control. Note that the SIS is only available from the four primary displays (Bridge Display, System Map, Nav Map, War Map).
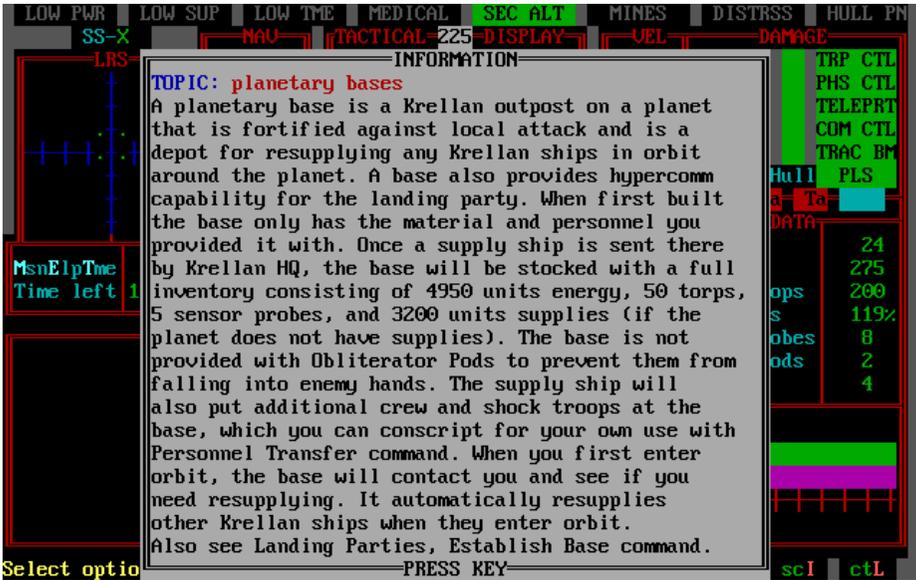
Figure B-4. Information Display in SIS

Figure B-5. Information Index in SIS

[Ctrl][K] Function Key Set Definition

This will show the function settings for the function key set that you have selected in the Sign-On options. The two types of function key sets are shown in Figure 8. Type B is the default since Type A has not been used since the early 1990s and is rare today.

[Ctrl][N] Notepad

When this game originally came out (1989), it was normal for game players to have a pencil and notepad next to the computer to take notes during a game for later reference. Such a notepad is also useful for Star Fleet II so you can keep track of where you left your landing parties, where a suspected starbase was detected, etc. To avoid having to take up desk space with a physical pad and paper, or having to go to a different computer screen or window where you have another app running to keep notes, SF II now has its own internal notepad, which is accessed by the [Ctrl][N] hotkeys command. When you bring up the notepad (Figure B-6), you can type anything within the notepad window. You are limited to what is shown – you can't scroll up or down beyond the visible window. Your current notes will be kept during the mission, including if you save and resume the game. However, after the mission is complete, unlike with the logs, you cannot save the contents of the notepad. The notepad has a simple editor that provides the basic commands needed to keep your notes, although more advanced editing features, such as Find <text> are not included. Because you are limited to what you see, this find command is not really needed. The Notepad can only be accessed from the four primary displays and from the Reports, Messages, and combined logs. Here are the commands available to you in the Notepad:

> [Ctrl][M] **Notepad Menu**– this provides a pop-up menu of the commands available in the Notepad. Press any key to remove it.
> [Esc] – exits Notepad without saving any changes. You will be asked to confirm this.
> [Ctrl][S] – exits Notepad after saving any changes.
> [Ctrl][End] – clears/blanks the Notepad.
> [[Ctrl][Home] – moves the cursor to the upper left corner of the Notepad.
> [Enter] – inserts an empty line below your current line, and puts the cursor at the beginning of the new line.
> [Delete] – deletes character at cursor position. If the cursor is at the beginning of an empty line, then that line will be deleted and all the following lines will be moved up on line.
> [Backspace] – moves cursor to the left and deletes the character there. If you are on the first character, it will delete the last character on the previous line and move the cursor there. If the previous line is blank when you are on the first character of your current line, it will delete the blank line and move everything below it up one line.
> [Insert] – toggle switch for turning Insert Mode on/off. When on, an "**INSERT**" indicator will appear at the top of the notepad frame, and the cursor will be a flashing block instead of a flashing line. While in this mode, any characters typed will be inserted at the currently location, and pressing [Enter] will insert a new line.
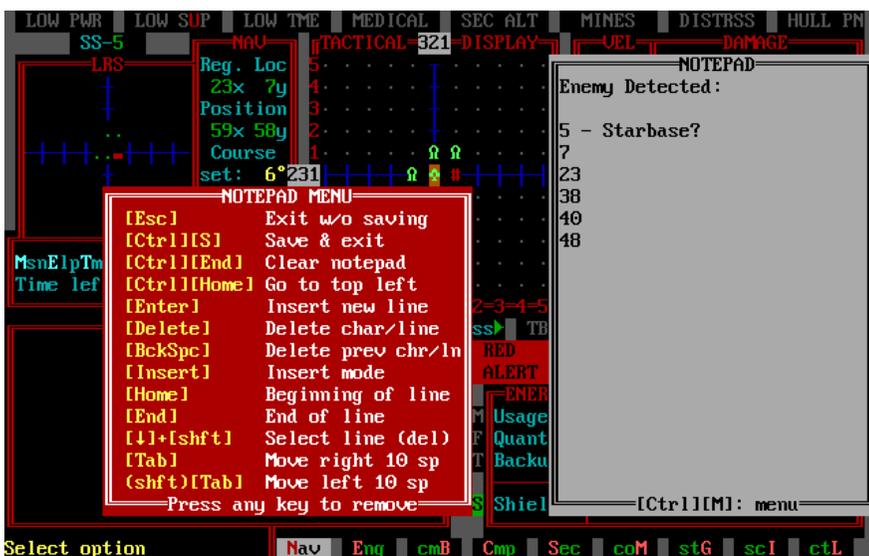> [Home] – takes cursor to the beginning of the current line.

Figure B-6. Commander's Notepad and Menu

[End] – takes cursor to the end of the current line. If you simultaneously hold down the [Shift] key, then it will select the whole line, which you can then delete if desired. [↑], [↓], [→], [←] – move cursor (with wraparound).

[Shift][↓]– select current line (to delete). It will be highlighted in white on black. Once highlighted, if you press [Delete] the highlighted line will be deleted and all the following lines will be moved up one line. If you press any other key, the highlighting disappears and the key pressed will be executed.

[Tab] – move cursor 10 space to the right. If you are in Insert Mode ("**INSERT**" indicator will show on the top line of the notepad box), then pressing [Tab] will insert up to 10 blank characters behind the cursor up to the end of the line.

[Shift][Tab] – move cursor 10 spaces to the left. If you press [Shift][Tab] while in Insert Mode, it will delete 10 characters to the left (up to the beginning of the line), which is just like pressing [Backspace]10 times. Thus, with Insert Mode on, if you press [Tab] and [Shift][Tab] you will have inserted then deleted 10 blank characters and be back where you started.

[Ctrl][O] Display Mission Orders

This shows the orders for you current mission and your progress to achieving your mission objectives. This is a shortcut for the Display Orders command in the Computer Command accessed by C/S/M/O (Section 1.4.4.1).

[Ctrl][Q] Quick Save

This shortcut will save the simulation using the last previously defined file name without further input from you. A message box will inform you the save has been completed and

show you the file name under which it was saved. If there was not previous save for this mission, then you will be prompted to enter a file name as if you had commanded a Save Simulation command (either [Ctrl][V] or from the main menu, C/S/S).

[Ctrl][T] Command Tree Menu

This shortcut will take you to the top level of the Command Hierarchy (Figure B-7) called the Command Tree because it consists of a number of limbs and branches that weave through the total command structure. This shortcut is equivalent to selecting L/T from the Main Menu. Using the Command Tree, you can view the major commands available to you and even select one as a shortcut to go directly to that command without having to go back through the Main Menu and sub-levels. The rest of the Command Tree and how to use it is explained in Section 1.9 Controls.
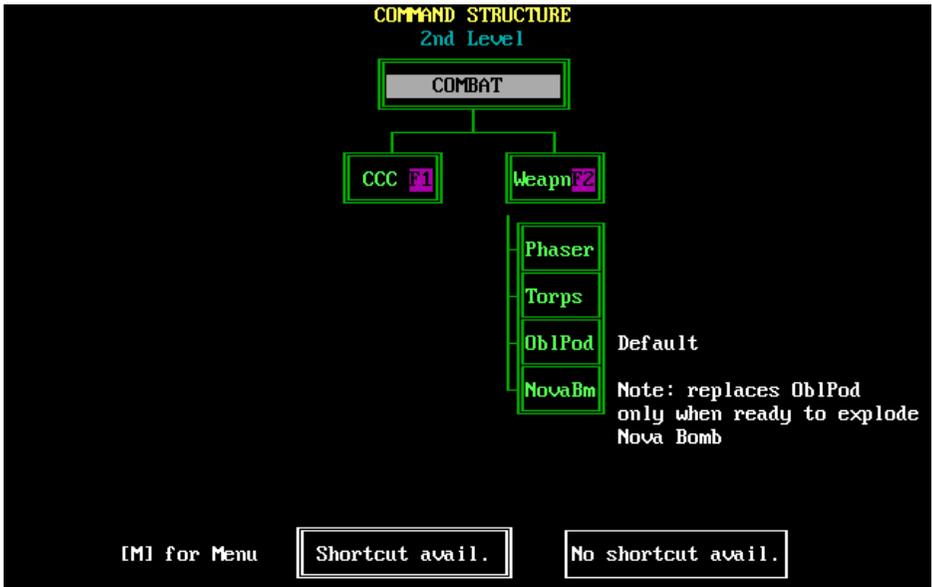

Figure B-7. Top Level of Command Tree Structure

[Ctrl][V] Full Save Procedure

This will save your current mission after you specify a name for it (8 characters maximum).

[Ctrl][X] Exit to DOS

This will exit you out of the simulation and back to the DOS prompt after confirmation.

B.3 SHIP CONTROLS

This is a summary and descriptions of the keys that control the ship.

KEYS	CONTROL	Default
[Alt][A]	Auto Alert Switch (AAS) toggle	AUT
[Alt][B]	Bombardment or Continuous Fire toggle switch	OFF
[Alt][C]	Combat Message Filter (CMF) toggle switch	OFF
[Alt][D]	Ship's DATA/TARGET DATA Display toggle	DATA
[Alt][E]	Electronic Counter Measures (ECM) toggle switch	OFF
[Alt][F]	Fleet Command	-
[Alt][G]	Current Display Grid toggle switch	Varies
[Alt][H]	Helm Manual Override toggle switch	OFF
[Alt][I]	Planet Status in System Map toggle (status or class)	Status
[Alt][J]	Travel directly to nearest starfort	-
[Alt][K]	Keep Star Maps Messages Box toggle switch	OFF
[Alt][L]	Locate star system	-
[Alt][M]	Go to Main Menu on the Bridge Display	-
[Alt][N]	Display Navigation Star Map	
[Alt][O]	Orbital display/Normal space display/Starfort docks/Realign display toggle	-
[Alt][P]	Go to Teleporters controls	-
[Alt][Q]	Go to Department Q	-
[Alt][R]	Rest Mode toggle switch	OFF
[Alt][S]	Display System Map	-
[Alt][T]	Target Designator Box (TDB) toggle switch	Varies
[Alt][U]	Krellan ships shields indicator toggle switch	OFF
[Alt][V]	Evasive Maneuvers toggle switch	OFF
[Alt][W]	Display War Map	-
[Alt][X]	Go to Combat Control Center (CCC)	-
[Alt][Y]	Go to Regional Strategic Command	-
[Alt][Z]	Go to Escorts controls	-

[Alt][A] Auto Alert Switch (AAS) Toggle
This is also sometimes referred to as the *Auto Shields Switch*, because its primary function is to raise or lower the shields automatically when the ship's alert condition changes. If the AAS is on, when your ship detects enemy presence (including mines) within range of your sensors, it will automatically send your ship to RED ALERT and raise the shields to their maximum level. Similarly, when your ship drops from RED ALERT to ORANGE ALERT or condition GREEN your shields will be lowered to conserve energy. The AAS will be lit in *green* and show the label "AAS" when active. You can switch it to MANUAL Mode by pressing the AAS toggle switch [Alt][A]. The indicator will change to *magenta* and the label to "man". In Manual Mode, you will have to raise and lower your shields manually

using the shield control function keys. Pressing the AAS toggle again will return the AAS to auto mode.

[Alt][B] Bombardment or Continuous Fire Toggle Switch
This toggle switch has two different functions, depending on whether or not your ship is orbiting a planet:

a. **Bombardment Mode (Orbit Only) – [**Alt][B] activates planetary bombardment once it has been set with the Bombard option in Strategic Command G/P/B (Section 1.7.4.1). In *salvo mode*, the weapons you have selected fire only once when you press [Alt][B] (note they may have to recharge or reload before they actually fire). The fire mode indicator above the TARGETS display will show "salv". In *continuous mode*, the selected weapons fire as soon as they are ready and keep firing until the bombardment is stopped, either automatically (when Red Alert is cancelled) or if you turn it off by pressing the [Alt][B] switch again. If continuous mode is active, the "cont" will blink in the fire mode indicator next to the weapons status indicators on the Bridge Display.

b. **Continuous Fire Mode (Normal Space Only)** – when in normal space, pressing [Alt][B] will activate continuous mode for your weapons. This means that as soon as a weapons is ready and has a target, it will automatically fire. This produces the maximum rate of firepower for your ship, and also is one less thing you have to worry about in a pitched battle. If you press [Alt][B] again, it cancels Continuous Fire Mode and your weapons have to be fired manually. If continuous mode is active, the "cont" will blink in the fire mode indicator next to the weapons status indicators on the Bridge Display. If Continuous Mode is not active, this indicator will be blank (cyan).

[Alt][C] Combat Message Filter (CMF) Toggle Switch
When turned on, the CMF will filter your reports and messages to only those that are considered essential. This is especially important when you are in combat and don't want the clutter of routine reports and messages. The CMF will be automatically turned off when you dock. You can toggle it on and off by pressing [Alt][C]. When the CMF is active the indicator light will be *orange.* The default value of the CMF is OFF.

[Alt][D] Ship's DATA/TARGET DATA Display Toggle
Pressing [Alt][D] will manually toggle from the ship's DATA display (Figure A-3) to the TARGET DATA display (Figure 6) or back again. When your ship goes to RED ALERT, the TARGET DATA will automatically be displayed. If you want to view your ship's data while in RED ALERT, you will have to toggle it back to the DATA display. When RED ALERT is cancelled, the DATA display will automatically replace the TARGET DATA display. The automatic changing of this display is unaffected by the setting of the AAS.

[Alt][E] Electronic Counter Measures (ECM) Toggle Switch

When in normal space, you can use ECM to help avoid hits from enemy torpedoes and phasers. While ECM is on (the indicator light is *magenta*), enemy weapons will be unable to lock onto your ship, but your weapons computer will also not be able to lock onto any enemy target. Range of the ECM is three points. When ECM is on, your sensors are inoperative; you only have visual range within the Tactical Display. All torpedoes within ECM range will lose their homing ability, but will continue on a straight path, which could still result in a hit. When ECM is turned off or the torps exit ECM range, they will resume homing if lock-on is achieved. ECM is very effective in defending against phasers, but may not prevent torpedo hits. ECM is a toggle switch activated via [Alt][E].

[Alt][F] Fleet Command

This is a shortcut to get to the Fleet Command display. It is the same as accessing Fleet Command through the Strategic Command from the Main Menu G/F. See Section 3.0 for how to use Fleet Command.

[Alt][G] Combat Message Filter (CMF) Toggle Switch

This toggles grid points on and off for the *Tactical Display*, *System Map*, *Navigation Map*, and *War Map*. These grid point help define the positions in the displays. In the *Orbital Display* it toggles the positions of the three orbits (High, Medium, Low) on and off. Each of the display has its own grid switch, so you can toggle the grid switch for one of the displays, but it won't affect the grid setting for the other displays. However, the exception is for the star maps (Navigation and War) – they use the same grid switch setting. The color of the grid points is specified in the Settings to either gray (default) or white. You can change the color in the Sign-On Options, or through the Special Services of Computer Command (C/S/T). When a new mission is started, the defaults are:

Tactical Display	**ON**	System Map	**OFF**
Orbital Display	**ON**	Star Maps	**OFF**

[Alt][H] Helm Manual Override Toggle Switch

This control is used to interrupt a targeted trip. When active, the identified target in the NAV section of the displays blinks in white, and you are permitted to manually navigate your ship. When you toggle Helm Override switch off, the Nav identification returns to normal and navigation computer will resume your travel to the specified nav target. The default value of the Helm Override Switch is OFF.

[Alt][I] Planet Status in System Map Toggle

There are two ways that planets can be represented in the System Map, either by their planet class, or their ownership status. The color of the planet symbols in the map will thus match either their ownership status or their planet class. Using this toggle allows you to switch between the two choices. The setting currently in effect is shown by the header in the Planets box in the upper right corner of the System Map display. If the switch is set to Status, then the Status heading will be in highlighted in bright cyan. If the planet class

setting is in effect, then the Cls heading will be in bright cyan. Pressing [Alt][I] will toggle between the two. The default setting is to show the planet class. Figure B-8 shows an example star system using each of the settings.
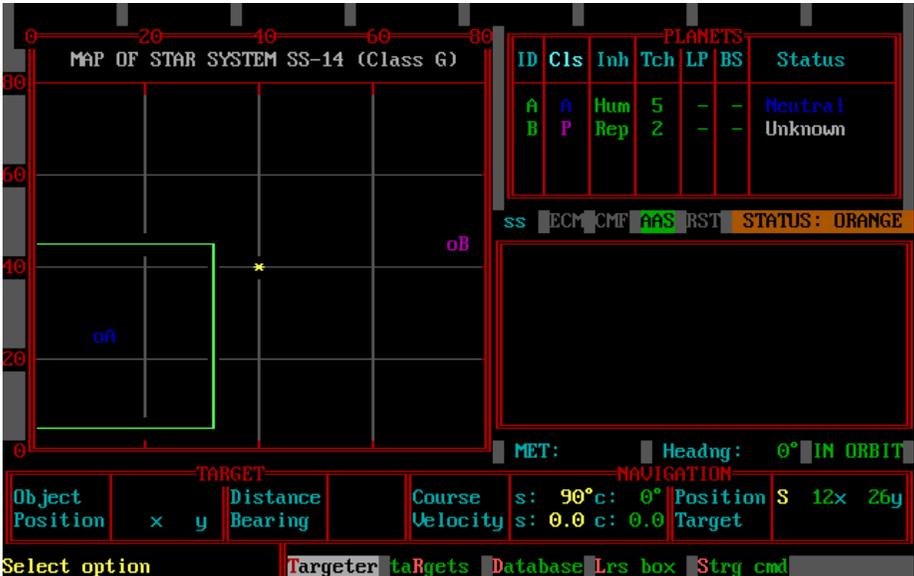

Figure B-8a. System Map Showing *Planet Class* Setting

Figure B-8b. System Map Showing *Ownership Status* Setting

[Alt][J] Travel Directly to Nearest Starfort
This is a shortcut to travel immediately to the nearest starfort. Once you confirm it, you do not have to do anything else until you confirm docking with the starfort. Your Navigation console will choose the starfort, set the Navigation Computer (using maximum speeds) and engage the engines. The Navigation Computer will also check to make sure there is no black hole in the intended path. This command simplifies the many steps that it would take to do this operation yourself.

[Alt][K] Keep Star Maps Messages Box Toggle Switch
When you have a star map up and a message or report is received, a message window/box pops up, and disappears when the message is finished. If there is a series of messages in a row, then you cannot do other commands until there is a momentary break in the messages. There is an optional permanent message box (MB) that stays on the star map displays so that you can receive messages without interrupting your activities by toggling this switch on. The MB will be placed so that it will never cover your current ship's location or the target designator box (TDB) on the display. If either approaches the MB, then it will move to another quadrant of the display (try it out by moving the TDB). If you want to view the whole star map without obstruction, you can toggle off the MB by pressing [Alt][K] or through the Controls Box [Ctrl][H]. The default setting is OFF.

[Alt][L] Locate Star System
This is a quick way to locate the location of a star system. When you press [Alt][L], you will be prompted to enter the number of the star system. If executed from a star map, the TDB will appear over the specified system. If executed from another display, the regional coordinates of the star system will be given, and you will be asked if you wish to have the TDB move to the system on the specified star map. Press [N] for the Navigation Map or [W] for the War Map. Any other key will exit without changing the display.

[Alt][M] Go to Main Menu on the Bridge Display
This is a shortcut to go directly to the Main Menu. If you are not already in the Bridge Display, the Bridge Display will replace your current display. This shortcut only works when in one of the four primary displays. As an alternative shortcut for this, you can press the tilde key [~]/[`].

[Alt][N] Display Navigation Star Map
This is a shortcut to go directly to the Navigation Menu and display the Navigation Star Map to replace the command sequence from the Main Menu N/N. See Section 1.1.7.2 for the description of the Navigation Star Map and the Navigation command options.

[Alt][O] Orbital display/Normal space display/Starfort docks/Realign Display Toggle
This is a unique control because what it does depends on where you are and your ship's status. This switch affects what you see in your Tactical Display area. The Tactical Display with your ship at the center is considered your normal mode. The other three modes that are accessed by this control are:

a. **Orbit Display Mode (Orbit Only)** – when your ship goes into orbit around a planet or star, the Tactical Display is replaced by the Orbital Display (Figure 5). You can switch back to the Tactical Display by pressing [Alt][O], which will show the planet or star at the center of the display instead of your ship. Pressing [Alt][O] again will restore the Orbital Display.

b. **Starfort Docks Display Mode (Docked Only)** – when your ship docks with a starfort, your ship symbol at the center of the Tactical Display is replaced by the starfort symbol. Each starfort has a number of docks for Krellan ships and has a maximum capacity for how many of each type it can accommodate at once. If you press [Alt][O], the Tactical Display will be replaced by the Starfort Docks Display, which shows all the docks and ships currently docked at the starfort. This display and its operation is described in the Section 1.1.7.4.3. Pressing [Alt][O] again will restore the Tactical Display.

c. **Realign Display Mode (Normal Space Only)** – When you are in normal space, the coordinates of the points in the Tactical Display are relative to your ship, and this is called the *Body Coordinate System* (BCS) with your ship at the origin. However, the System Map coordinates are in the System Coordinate System (SCS) with the star or center of the system as the origin. The points of the BCS and SCS do not align with each other unless your heading is 0º, 90º, 180º, or 270º. This can result in two ships in adjacent system points could share the same point in your Tactical Display. The Realign Display Mode activated by [Alt][O] when your ship is in normal space temporarily realigns the objects in the Tactical Display to the SCS, which means that your ship may no longer be pointed, but means you can see all the objects close to you. When you are in this mode, the four bearing angles of the Tactical Display, which align with the system axes, will be shown as flashing black on magenta instead of the usual black on white. Your ship's symbol will be replaced by a white direction symbol (same as the ones used in the System Map) pointing in the approximate direction of your ship in the SCS. This will match its heading symbol in the System Map. You will stay in the Realignment Mode until you move your ship, start Rest Mode, or press [Alt][O] again. Note that this mode can only be accessed while you are stationary in normal space (i.e., not while docked, in orbit, or in hyperspace) and not in Rest Mode.

[Alt][P] Go to Teleporters Controls

This is a shortcut to go directly to the teleporter control menu in the Engineering Command (see Ops Manual Section xxxxx), which is equivalent to E/T from the Main Menu. This control only works in the four primary displays.

[Alt][Q] Go to Department Q
This is a shortcut to go directly to the Department Q control menu in the Science Control (Section 1.8.3), which is equivalent to I/Q from the Main Menu. This control only works in the four primary displays.

[Alt][R] Rest Mode Toggle Switch
Normally when your ship is not moving (in space or in orbit) and is not being resupplied while docked, the mission time (as indicated by the MET) stops. If your ship is in one of these states, but you want time to advance (e.g., to wait for probe reports, or for ships to get into position) you can set your ship into *Rest Mode* by using the Rest Mode toggle switch [Alt][R]. The MET will advance and the universe will update while your ship is in Rest Mode. Your ship must remain stationary in order to rest. Pressing the toggle switch again will turn Rest Mode off. If you start your engines, the rest mode will be canceled.

[Alt][S] Display System Map
This is a shortcut to go directly to the System Map Menu and display the system Map. See Section 1.1.7.1 for the description of the System Map and the Navigation System command options.

[Alt][T] Target Designator Box (TDB) Toggle Switch
This toggles the TDB on and off in the System Map, and the two star maps only. The default setting of this switch depends on the situation. When you need to choose a target, it automatically turns on, but does not always automatically turn off. One problem with have the TDB on is that it hides the symbols underneath the box outline. This control lets you choose its state.

[Alt][U] Krellan Ships Shields Indicator Toggle Switch
This toggles the shields indicator for Krellan ships on and off. This applies to the ship symbols in the Tactical Display, Orbital Display, and the Combat Information Display (in the CCC). Figure B-9 shows a UGA heavy cruiser symbol in the CID with shields down, and with shields up. If the Shields Indicator switch is off, then the shields will not show even if they're up. Only if the switch is ON will you see the shields symbol when the shields are up. The default value of this toggle switch is OFF.
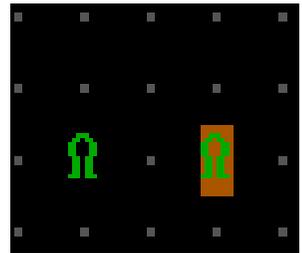

Figure B-9. KS Destroyer with shields down (L) and up (R)

[Alt][V] Evasive Maneuvers Toggle Switch
This toggles your Evasive Maneuvers order for Helm Control. It is a shortcut for the Evasive Maneuvers control in Helm (N/H/E). See Section 1.1.7.4.1 for a detailed description. The default position for this switch is OFF.

[Alt][W] Display War Map
This is a shortcut to go directly to the Navigation Menu and display the War Map to replace the command sequence from the Main Menu N/N. See Section 1.1.7.3 for the description of the War Map and the War Map command options.

[Alt][X] Go To Combat Control Center (CCC)
This is a shortcut to go directly to the CCC. This replaces the command sequence from the Main Menu B/C. This shortcut works from any of the primary displays. See Section 1.3.2 for the description of the CCC.

[Alt][Y] Go to Regional Strategic Command
This is a shortcut to go directly to the Regional Strategic Control (Total) menu in the Strategic Command (see Section 1.7.2), which is equivalent to G/R/T from the Main Menu. The War Map will replace the current display, and the three options (Space Forces, Legions, Losses) will be shown in the command options menu. This control only works in the four primary displays.

[Alt][Z] Go To Escorts Control Menu
This is a shortcut to go directly to the Escorts Menu in Strategic Command (Section 1.7.5). This replaces the command sequence from the Main Menu G/E. The Bridge Display will replace the current display, and the Escort Command options will be shown in the command options menu. This control only works in the four primary displays. Note that this control works even if you have no escorts, as is the case at Level 1 (Altern). However, if you select any of the command options from the Escorts Menu as an Altern, you will be informed that the command is not functional at your rank.

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