



Kiffryn's Cats Star Cluster - Route Map
Routes shown are available at Effectiveness 4

Stellar Crusade Game Manual

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Parts Inventory:

Your game should include the following items:

- One game box
- Two disks labeled "Game (A)" and "Scenarios (B)" (the IBM version includes two 5.25" and one 3.5" disk)
- This rulebook

1.0 Introduction

The broadcast was a Mandatory; failure to watch was an imprisonable misdemeanor. Consequently, nearly every citizen of the People's Holy Republic was dutifully attendant when First Elder Gresham stood before the Council in the Central Committee Hall on Progress and raised his seamed face toward Heaven, lifting his hands above his head...

"The hour has come Comrades. No more can we tolerate the insidious machinations of this 'Corporate' League. In two years, the Terran Navy, cowed by their revisionist government, will leave us to our fate. We will be alone.

"Our test is at hand! The Communing God has put a task before us and we shall not falter. We must drive the sickness of capitalism from our home. We must burn out the evil of this League of Devils with the fury of an exploding sun!

"Join me in this most holy of quests. Swear with me by The Blood of Saint Mao that none shall rest until this holy war is prosecuted to its just and righteous ending. Join me in this Stellar Crusade!"

Sixteen days after his declaration of war, First Elder Gresham died of an apparent stroke, after which his driver, Vasily, disappeared without a trace. The resulting struggle for his place on the council lasted nearly six years. Six years of desperately needed time for the League to prepare...

2.0 Playing Stellar Crusade

Stellar Crusade is a two player game of exploitation and conquest on an interstellar scale. Two factions, The League and The People's Holy Republic compete over the span of decades for control of a small, but richly endowed, star cluster in a remote arm of the galaxy. The League is always controlled by a human player while the P.H.R. may be either human or computer controlled.

Installation and System Requirements

ATARI ST Version:

Stellar Crusade needs most of 512K to run properly. If you have a 512K machine, try to minimize the number of desk accessories on your system disk. If you have more than 512K, be sure to leave at least that much for system and program use. The game should work with most desk

accessories, but if you're not certain, boot your computer with the Stellar Crusade Game Disk (disk A).

If you plan to use a hard disk or double sided 3.5" disk, copy the complete contents of both the Game and Scenario disks into the same directory (folder). There's no restriction on the "path" from which the game can be loaded.

If you use two separate disks, the scenario disk must be inserted into drive B (if available) or whichever drive the program asks for.

IBM PC XT/AT Version:

The game requires about 200K of free RAM. This means that on machines with 256K you won't be able to use any TSR (Terminate and Stay Resident) programs like Borland's Sidekick (Sidekick is a registered trademark of Borland International). If you have trouble getting the program to run, change your AUTOEXEC.BAT file to prevent loading any TSR programs you might be using and reboot.

The program supports the following graphics adapters: CGA, MCGA, EGA64K, EGA256K, HGA and VGA. One of these adapters must be present for the program to run.

If you're using a hard disk, copy the contents of both the Game and Scenario disks into a single directory.

Starting Up

Make a copy of your disks for playing the game. Don't use the masters.

ATARI ST Version:

Put the Stellar Crusade Game Disk (disk A) in drive A and power up your computer. If you have only one disk drive, the program will automatically prompt you to insert the Scenario Disk (disk B) at the appropriate time. If you have a two drive system, put the Scenario Disk in drive B.

Make sure that your computer is in Low Resolution Mode. Stellar Crusade won't run if it's not. If there's no open window for drive A, open the drive A icon. Double click the icon titled CRUSADE.PRG and follow the prompts as they occur. Once the program tells you to insert your save disk, the game is entirely memory resident. You can put your game and scenario disks away.

IBM PC XT/AT Version:

The Stellar Crusade Game Disk doesn't come equipped with DOS, so boot your computer normally. Then, put the Stellar Crusade game disk (disk A) into drive A and type "CRUSADE". If you have a two drive system, put the Scenarios disk (disk B) into drive B. If you only have one drive, the computer will prompt you to insert the Scenario disk at the appropriate time.

To install Stellar Crusade on a hard disk, simply copy the contents of both disks into a sub-directory. You can name the directory anything you like.

If your game and scenario files are in the default directories of your copies of the master disks, just type "CRUSADE " and press RETURN to start the game. If you copied the game and scenario files into a sub-directory, use the DOS command "CD" to change the current directory before you type "CRUSADE".

Once the game is loaded, the program will tell you when it needs to have disks swapped. The game disk is required to be in the boot drive at all times, unless the program tells you otherwise.

Loading a Saved Game

ATARI ST Version:

Once the program has started, you'll be asked if you want to load a previously saved game. If you do, you'll be presented with a standard GEM (GEM is a registered trademark of Digital Research Corporation.) file dialog box listing all the save files on drive A. You can change drives by clicking the button above the list of files. Clicking cancel will start the default game (The Long Campaign).

Notes on the GEM file selector box:

Files are selected by clicking the mouse on a file name. If you want to search another drive or directory, move the text cursor (a vertical line) up to the current path definition and make any changes you need with the keyboard. In order to search the new path for saved game files, move the cursor over to the vertical (scroll) bar to the right of the file display and press the left mouse button.

IBM PC XT/AT Version:

Once the program has started, you'll be asked if you want to load a previously saved game. If you do, you'll be prompted to make sure that your saved games are in one of the system's drives. Select the drive and you'll see a list of available files. Type the number of the file you want and press RETURN.

Documentation Check

After you select a scenario or saved game, the computer will ask you to do a documentation check before it will allow you to start the game. This will take the form of a question about some section of the rules. (See the list at the end of this file.)

Example:

Please type the first word of section: 2.0, subsection: Prompts and press enter.

The correct response would be "sometimes" (without the quotes). You have three chances to get the right response.

Game Modes

If you're starting a new game, the program will display a menu for selecting the scenario, reality levels and difficulty. Reality levels are either "on" or "off" while difficulty ranges from "Pushover" to "Hideous" (see section 6 for specific effects). If you choose "Random", the computer will pick a difficulty without informing you of the result.

Maintenance and Training

When selected, this reality level requires you to manage the maintenance of your ships and military units. This means you'll have to supply spares to the Fleet and rations to Army. See "Maintenance" in section 5 for details.

Command Control and Fog of War

This enables hidden movement and covert operations. If Fog of War is switched off, all fleet movements are visible to either player and certain menu options related to Special Ops (see Special Ops in section 5) will be disabled. The Commanders selection in the Assign menu will also be disabled.

If you're not familiar with the game, it's a good idea to keep both of these reality levels turned off. They add significant complexity to the game.

Talking to the Computer

ATARI ST Version:

With the exception of naming ship classes and save game files, everything in Stellar Crusade is done with the mouse. Selections are always made with a single click of the left button. Whenever the menu bar is visible at the top of the screen, moving the cursor over the name of a menu will reveal a list of selections. If you don't want to choose any of the selections listed, simply click anywhere on the screen that's not part of the menu. The menu will disappear.

IBM PC XT/AT Version:

Except for naming ship classes and save game files, you can control almost everything in Stellar Crusade with the numeric keypad. On the main map, cursor movement is done with number

keys.

Cursor speed will increase if you hold down the shift key with one of the other keys.

The center (5) key toggles between cursor movement and the menus. If the menus are active, one of the menu titles will be highlighted and the cursor won't move. Use the even numbered keys to "pull down" and "release" menus or to move between menu selections. Use the ENTER key to make a selection.

Don't press the NUMLOCK key. The program knows when to expect numeric values and when to look for cursor controls.

The Map

The map is an isometric view of the space surrounding the Kiffryn's Cats Cluster. The XY plane is the Equatorial Plane of the Galaxy with X increasing spinward and Y increasing outward. The Z axis indicates distance "above" (toward galactic north) or "below" the Equatorial Plane.

ATARI ST Version:

The XY plane is marked off in 5 light year squares. Black squares indicate the approximate location of star systems as they would be seen by an observer positioned north of the Equatorial Plane. This makes it easier to correlate the isometric map with the Route Map.

Distances north (above) or south of (below) the Equatorial Plane are shown with color coded elevation dots. Gray dots are north of the plane and green dots are south. The dots are spaced at 2 light year intervals.

Systems are shown as large dots with small rectangles nearby. Unexplored systems are white, League systems are gold and Republic systems are red. When League ships are in a system, the rectangle will be shown in gold and contain a dark task force marker. A Republican presence in a system will be shown with a red rectangle. If the system contains both League and Republic ships, the box will contain a white X on a blue background.

IBM PC XT/AT Version:

Note: The colors mentioned here refer to the default colors used in the CGA mode. Your color scheme may differ.

The XY plane is marked off in squares. Each square represents a distance of 5 light years. The approximate distance of systems above or below the Equatorial Plane is shown by the length of the line connecting it to the XY plane of the map.

Systems are shown as large dots with small rectangles nearby. Unexplored systems are green, League systems are yellow and Republic systems are red. When League ships are in a system, the rectangle will contain a yellow task force marker. A Republican presence in a system will be shown with a red marker. If the system contains both League and Republic ships, the box will contain a green X.

The menu bar at the top of the screen will change during the course of the turn to reflect the options available to you and the large dialog box at the bottom of the screen is used for general information and prompts.

Note: Information on the map which concern's your opponent's task forces, systems, etc. will only be as current as the last contact with them. See "Special Ops" and "Exploring a System" for details on scouting.

The Quick System Display

You can get an overview of the condition of a star system during your Movement or Economics Phase simply by selecting it.

ATARI ST Version:

Select the system by pointing to it and clicking the left mouse button. The Quick System Display will appear below the map and will disappear as soon as you move the mouse.

IBM PC XT/AT Version:

The map cursor will appear as a circle which you can position over a system with the cursor keys (be sure NUMLOCK is off). Select the system with the ENTER key.

The left half of the display is devoted to general information about the system, its current condition and its potential for growth. This is shown with four pie charts:

System Habitability and Farm Deployment

Slice 1
number of farms deployed + 99

Atari ST & EGA ... Green
CGA Red

This gives an idea of how the system's food output compares to an "ideal" production rate. The bigger the slice, the more food the system is producing.

Slice 2
(system habitability - farms) + 99

Atari ST & EGA ... Black
CGA Black

This slice shows you how much room there is to expand agriculturally. If the farms + 99 slice is small and this slice is large, the system hasn't really been exploited agriculturally.

The remaining slice is simply the "non-habitable" fraction of the system.

System Organics and Refinery Deployment

Slice 1
number of refineries + 99

Atari ST & EGA ... Red
CGA Red

This slice shows how the refinery output of this system compares to the ideal.

Slice 2
(system organics rating - refineries) + 99

Atari ST & EGA ... Black
CGA Black

This is an indication of the untapped organic resources in the system. If this slice is large and the refineries + 99 slice is small, then the system has unrealized potential.

System Metals and Mine Deployment

Slice 1
number of mines + 99

Atari ST & EGA ... Gray
CGA Green

Like its farming and organics counterparts, this slice give an indication of how this system's mining output compares to the ideal.

Slice 2
(system metals rating - mines) + 99

Atari ST & EGA ... Black
CGA Black

This slice shows the unused mining potential of the system.

System Industrial Development

Slice 1
number of factories + 99

Atari ST & EGA ... Blue
CGA Green

This slice gives an indication of how the system's industrial output compares to the ideal.

Slice 2
(99 - factories) + 99

Atari ST & EGA ... Black
CGA Black

This is the unused industrial potential of the system.

Note: A "+" symbol in a pie chart indicates additional resource production due to the some special characteristic of the system. This is a good thing. A "*" symbol indicates the presence of Spiders in the system. This isn't.

The right half of the Quick System Display is occupied by three boxes:

The Population Box shows the number of earthlike, protected and belt colonies in the system as well as the total system population. For the colonies, each "man" symbol equals one colony of that type. For total population, each "man" symbol represents 1000 people. Lines under the symbols represent powers of 10. For example, one double underlined symbol followed by seven underlined symbols next to "KPop" would indicate a total population in the system of $(1 \times 10^2 + 7 \times 10^1) \times 1000 = 170000$ people.

The Army Box will contain a number of smaller boxes. Each of these is a deployment site that can contain one military unit. Any military units deployed in the system will appear in these squares.

The Navy Box will show one symbol (similar to the task force markers used on the map) for each friendly ship in the system. The ships aren't differentiated as to size or condition and no more than 90 ships can be shown. If this box is completely full, you've got most of your fleet here and probably don't need to count ship symbols anyway.

Above the Population Box is a row of small flag symbols. The number of flags here indicates the loyalty of the system to the owning player.

Note: just like the map, the accuracy of this display is only as good as your last contact. Unless you own the system, if you haven't had ships here lately, don't take this information too literally.

Prompts

Sometimes the program will pause (to give you a chance to read a message, etc.) and wait for you to give it the OK to continue.

ATARI ST Version:

The computer will beep and display a mouse icon at the far right of the Main Dialog Box. Press the left mouse button to continue.

IBM PC XT/AT Version:

The computer will beep and display a "key" symbol ("<>") at the far right of the Main Dialog Box. Press any key to continue.

The Turn Sequence

Each game turn represents three months (one quarter) and is divided into three phases with the People's Holy Republic going first in each of the first two phases. The Resolutions Phase is simultaneous and executed entirely by the computer.

The order of events in a game turn is:

- Game Save
- P.H.R. Economics Phase
- League Economics Phase
- P.H.R. Movement Phase
- League Movement Phase
- Resolutions Phase

The Economics Phase

This is where you'll do all your economic planning, expansion of industrial facilities, production of ships and military units, etc.. Although the actual work in this phase gets done by way of the Econ menu, bear in mind that a great deal of useful information can be gleaned from the other menus, particularly the Assign menu.

The Movement Phase

During the movement phase, you'll issue orders for any covert operations, move ships, passengers and cargo between systems, organize task forces and transfer ships between commands. If you're playing one of the long scenarios, the act of movement into a system occupied by your opponent isn't necessarily an invitation to open war. Check the scenario descriptions for details.

The Resolutions Phase

All command level combat, ship-to-ship combat, assaults, exploration, production, maintenance, covert operations and calendar functions take place during the Resolutions Phase. The computer will also calculate and display current victory levels.

If Command Level combat occurred during the quarter, the computer will display a report of "tonnage hit" for both sides. The numbers displayed represent the number of cargo and assault systems damaged.

In the long scenarios, there will be a chance in this phase that unplanned war will break out after the fourth quarter of 2330.

Saving a Game

At the beginning of each turn, you'll have the opportunity to save the game in progress.

ATARI ST Version:

Select the appropriate button in the dialog box, when it appears, with the left mouse button. If you choose to save the game, a standard file dialog box will appear. The computer will automatically create a new save file name based on the current game time. For example, if you save the game in the 3rd quarter of 2337, the default save file name will be "SC032337.DAT". You can change this name if you like.

IBM PC XT/AT Version:

If you decide to save a game, you'll be prompted to insert your save disk. Tell the computer which drive to use. You'll be shown how much free space the disk has and asked to confirm your drive selection. The computer will automatically create a save file name based on the current game turn. If you save the game in the third quarter of 2337, the default file name will be "SC032337.DAT". If you like, you may change the file name, but not the extension, before pressing ENTER to save the game.

Ending a Game

The game will automatically end after the number of turns specified in the scenario you're playing or if certain scenario specific conditions are met. The computer will total victory levels for both sides and enter a limited two-player mode so that both sides' systems and remaining forces can be examined.

You can select End Game from the General Menu at any time during your turn. The computer will allow you to end the game with current victory levels.

3.0 Movement and Combat

"In space there are no battle lines, no convenient bits of terrain to help delineate the edges of contested territory. There are only skill and technology. Fall behind in either one and you lose. Lag in both and you lose without knowing why." Raspian Bez (codename "R. E. Lee), Fleet Admiral Ret.

Task Forces

Task forces are the basic unit around which your fleet is organized. Each side has up to 36 task forces at its disposal with three (33, 35 and 36) normally reserved as holding forces for ships under repair. Read "Command Autonomy" in section 3, for more information on the repair task forces.

Although it's possible for ships assigned to the Escort and Raiding Commands (see "Commands") to engage in limited combat, the real action is in the Fleet. Only ships assigned to task forces may engage in ship-to-ship combat or launch assaults on enemy held systems.

Missions

There are three types of mission available to task forces: Transport, Attack and Reserve. Although their names are more or less self explanatory, each mission has unique features.

Task forces on Attack missions will attempt to engage any opposing ships in the system they occupy if hostilities have broken out.

Task forces on Transport Missions will not engage in any aggressive action unless they're in an enemy held system and they're carrying one or more military units. If they are, they will attempt a space to ground assault (see "Space to Ground Assaults").

Task forces with reserve missions will not attempt to engage opposing ships, even during open war. They will, however, defend themselves if attacked. This means that only side needs to be on an attack mission in a system for combat to break out.

Transfers vs Reassignment

When two active friendly task forces occupy the same system, they may exchange ships freely with no delay. This is a transfer. You may also transfer ships into an inactive task force (effectively splitting one task force into two smaller ones). If the receiving task force isn't in the same system, it will be moved.

Reassignment of a ship can occur in two ways. First, if you send a ship from one task force to a force in a different system, that's a reassignment and the ship will spend 1-4 turns in transit before arriving at its destination. Second, any movement of a ship to or from a command is a reassignment and suffers the same delay.

Cargo

Any ship equipped with either cargo capacity or assault capacity can carry cargo. A ship can load any moveable unit (These are listed in the Moveable Units section of the System Report) whose size is less than or equal to its remaining current capacity. You may load any combination of moveable units as long as the ship's capacity isn't exceeded. You may not split cargo or passengers between ships.

Damage due to combat or normal wear and tear may reduce the capacity of a ship below the combined sizes of items it's already carrying. If this happens, the ship will still be able to continue transporting them, but may be unable to reload any units it unloads. This happens frequently with Exploration Teams since their large size takes up every cubic centimeter of cargo space in the biggest freighters and damage to even one of their transport's cargo modules will strand them until repairs can be made.

Assault capacity is identical to cargo capacity with the added ability to launch military units in assaults. All military units, except Special Forces, must be launched into combat from assault rather than cargo boxes. Special Forces may be launched from any cargo carrier.

The Transport Pool

The Transport Pool is essentially your Merchant Marine. The computer will automatically total all undamaged cargo/assault capacity in the pool and use it to distribute surplus raw materials among your systems.

Ships in the Transport Pool, don't require maintenance, but are subject to attack by ships in the enemy's Raiding Command once hostilities begin. If Command Autonomy is enabled, any damaged ships will be automatically sent to Task Force 33 for repairs. Once they're fully functional, they'll be reassigned to the Transport Pool.

Commands

There are four major commands in Stellar Crusade: Training Command, Escort Command, Raiding Command and Special Support Command, each with its own specific mission.

Training Command

This is where new ships and repaired ships not automatically reassigned to one of the other commands are sent. Ships in Training Command don't require maintenance and can never be attacked. They are, in effect, your strategic reserve.

Escort Command

Ships assigned to Escort Command are tasked with the protection of your Transport Pool. Any ships in the enemy Raiding Command will be attacked by your escorts during Command Level Combat in the Resolutions Phase, assuming hostilities have broken out. Ships in Escort Command require no maintenance, but can be damaged in combat. If Command Autonomy is enabled, damaged ships will be automatically sent to Task Force 35 for repair.

It's a good idea to install a larger than normal proportion of Anti-i weapons on escorts, since the majority of raiders will be i-Space drive equipped.

Raiding Command

Ships in Raiding Command spend their time trying to disrupt the enemy's shipping with hit-and-run attacks on his Transport Pool. Like escorts, raiders require no maintenance, but are subject to attack. Damaged ships in Raiding Command will be sent to Task Force 36 if Command Autonomy is enabled.

Because of the nature of convoy raiding, ships equipped with i-Space drives perform particularly well here, but don't forget that most of your enemy's escort's will have Anti-i weapons.

Special Support Command

One support ship must be available per Special Ops point spent on reconnaissance of enemy systems. Ships in the Special Support Command don't require maintenance, but do suffer a 2% attrition rate each turn. In other words, although they can't be damaged, they do have a 2% chance each turn of being lost altogether. Use old and/or inexpensive ships for this duty.

Command Autonomy

When command autonomy is enabled, damaged ships in the Transport Pool, Escort Command and Raiding Command will automatically be reassigned to task forces 33, 35 and 36, respectively, for repairs. As soon as ships in these task forces are fully functional, they will be reassigned to duty,

Normally, command autonomy should kept "on", since it frees you from having to constantly check the condition of ships in your commands. On occasion, however, you may want to specifically control your repair schedule. If you do, disable command autonomy.

Transit

When you reassign a ship, there will be a delay of 1-4 turns while the paperwork clears, new crews are trained and assigned, the ship is moved and the wheels of bureaucracy grind steadily along. During that time, the ship will be "in transit" to its new post.

You can check the destinations and planned arrival dates of ships in transit by selecting Ships in Transit from the Assign menu during your movement phase.

Ground Forces

There are four types of military unit in Stellar Crusade: Security Forces, Light Regulars, Heavy Regulars and Special Forces.

Security Forces are lightly equipped units composed mainly of reservists, local militia and other irregulars. Because of this, Security Forces are best applied in a defensive posture.

Regulars are the backbone of your ground forces. Well equipped and trained, they perform well both offensively and defensively. The difference between Light and Heavy Regulars is essentially one of equipment.

Special Forces are small, elite units trained in independent operation. As such, they require little in the way of fleet support in an assault on a system and may be launched from any ship that can carry cargo.

Moving a Task Force

During your movement phase you'll have the opportunity to move any of your active task forces between systems, subject to the limitations of range and the task force's condition. The movement range of a task force is equal to that of its slowest ship and only ready task forces can move. If a task force isn't in a friendly system, there's a chance it will fail to become ready. Should this happen, you'll have to reassign its ships to another task force to get them out.

When you select Move Task Force from the Move menu, the computer will prompt you to select a system of origin. Choose the system in the same way you would select a system to examine. Starting with the lowest numbered ready task force in the system, the computer will show you task force number, size, commander, mission and total cargo in the large dialog box at the bottom of the screen. You'll have the option to skip each task force.

If you want to move the task force, simply select a destination system. If it's within range, the computer will ask you to confirm the move (once the task force is in i-Space, you can't recind the order). Moving a task force to its current location is not a move.

You can only move a task force once in a game turn, but you can initiate a movement dialog as many times as you like. As long as you don't confirm a move, you can change your mind indefinitely.

Combat

There are two levels of conflict in the game. If limited hostilities are in effect, only Command Level combat will occur. This is essentially skirmishing and interdiction aimed at hampering the enemy's economy.

Once open hostilities have broken out, any task force with an attack mission in a system occupied by enemy ships will automatically engage. This means war.

Note: Once war breaks out, a "crossed swords" symbol will appear at the far right of the map display.

Weapons

There are four types of weapon used in the game: short range Anti-r, long range Anti-r, short range Anti-i and long range Anti-i. The specifics of each type are detailed in section 5, Ship Systems and Classes, but it should be mentioned here that ships in i-Space can only be attacked by Anti-i weapons. Also, long range weapons (both offensive and defensive) are expendable, that is, each long range weapon becomes "damaged" when it's fired.

Command Level Combat

Command level combat consists of hit-and-run raider strikes on enemy shipping with the intent of damaging their Transport Pool enough to prevent complete distribution of surplus raw materials.

Ships assigned to your Raiding Command will each attempt to locate a ship in the enemy Transport Pool. Each raider has a 5% chance of finding each enemy transport and will attack the first ship it finds.

Raiders equipped with i-Space drives will automatically inflict 1 to 10 points of damage for

each short range Anti-r weapon they mount. If a raider is not equipped with i-Space drives, it has a 10% x current effectiveness chance to score a hit with each short range Anti-r weapon and each weapon will do only 1 point of damage. Note that raiders never use long range weapons. If you design a ship purely as a raider, don't mount long range weapons on it.

After all your raiders have attacked, ships in the enemy's Escort Command will attempt to track them down and retaliate. Each escort has a 4% chance to locate each raider and will attack the first one it finds.

If an escort is attacking a target with a functional i-Space drive, it will fire its Anti-i weapons. Each Anti-i weapon has a 10% x current effectiveness chance to hit. Long range weapons do 3 points of damage and short range weapons do 1 point.

If an escort is attacking a raider operating in real space, it will use its Anti-r weapons with the same probability of hit. Short range weapons will do 1 point of damage. Long range weapons will do 5 to 15 points of damage, but, if the target is equipped with point defense systems, there's a 7% x number of point defense systems chance that each long range weapon which achieves a lock on will be shot down before impact.

Command Level Combat is mutual, that is your raiders will attack enemy shipping and his raiders will attack yours.

Ship to Ship Combat

At the end of a Movement Phase (after hostilities have begun), the computer will check for opposing task forces occupying the same system. If any task force in a contested system has an attack mission, combat will occur. Each battle is resolved separately and you'll have the opportunity to control the large scale actions of engaged forces at the beginning of each hour after the first.

Missions and Formations

During the battle, the forces of both sides will be displayed in formations appropriate to their missions. The individual task force commanders will decide what formation to use, but, generally, task forces with attack missions will be deployed in wedge shaped formations. Transport forces will be deployed in linear formations and reserves will usually be disorganized.

As long as both sides have task forces with attack missions in the battle, only those forces will actually be engaged. This allows you to screen transport and reserve forces during an engagement. If all of your attack forces have been eliminated, any of your other forces can be engaged. You can't change the missions of your task forces during combat.

Long Range Combat

Combat always begins at long range and will continue at long range until all long range weapons on both sides are exhausted. Not all of a task force's long range weapons will be fired at once. The actual number depends on the commander's attack rating, the total number of available targets and the number of long range weapons remaining in the task force.

Each long range weapon has a $(10 \times \text{firing ship effectiveness} + 10 \times \text{number of scanners}) \times 1\%$ chance to lock on to an enemy ship. A long range weapon that manages to hit will inflict 10 to 15 points of damage. This is enough to transform even the largest cruisers into rapidly expanding spheres of high energy particles.

Once the computer has determined how many long range weapons were able to lock on, the opposing ships' long range defenses will attempt to intercept inbound weapons. Each long range defensive weapon has a $3\% \times \text{firing ship effectiveness} \times \text{force commander's defensive rating}$ chance to intercept an incoming weapon. Intercepted weapons are destroyed. Notice that long range defenses have the advantage of being able to protect all friendly ships in the engagement.

Any long range weapons that survive interception will hit their target ships unless stopped by point defenses. A ship can only use point defense systems to protect itself. The probability that a ship's point defenses will stop an incoming long range weapon is $14\% \times \text{number of functioning point defense systems (maximum 70\%)}$.

Short Range Combat

When the engaged task forces have exhausted their supply of long range weapons, the battle shifts to short range. Short range combat will continue until the end of a round in which no ship receives a hit. This means that battles can end with surviving ships on both sides. Up to 5 short range weapons per ship will fire at the enemy per round with a 10% x firing ship effectiveness chance to hit. Each hit will do 1 point of damage to a randomly selected target ship.

Damage

Each point of damage inflicted on a ship incapacitates one of its systems. If a ship suffers more damage than the total of its remaining operable systems, it's destroyed.

If all of the command modules in a task force are destroyed, the task force commander is assumed to have perished in the line of duty and the task force will be placed under Central Command's control. A new (and unproven) commander will be promoted to take his place.

Damaged ships can only be repaired by reassigning them to a task force in a system where spares are available. If the "Maintenance and Supply" reality level is enabled, you'll have to build spares to support your repair activities. Otherwise, spares are assumed to be universally available in systems you control.

Aggressiveness

At the beginning of each hour after the first, you'll be given the opportunity to order your commanders to engage aggressively. If you do, the probability of achieving hits / lock ons on both sides increases significantly giving the superior force a slight edge.

Disengagement

At the beginning of each hour after the first, you'll have the chance to order your forces to disengage. In a two player game, the computer will also ask which force wants to break off.

Disengagement is never automatic. The probability of a successful disengagement is based on the relative quality of the opposing forces' commanders. All things being equal, the attempt has about a 60% chance of being successful.

If disengagement succeeds, all task forces in the system, on the disengaging side, will be given a reserve mission and combat will end. Any assault that may have been planned will be aborted.

If you disengage from combat and then fail to move your ships out of the contested system, the enemy will be able to attack them again next turn. Don't forget to move them.

Caution: If your task force loses, it may not be able to move next turn. That is, it will show as having already moved. The only way to save the remnants of such a beleaguered force is to use reassignment. Reassigning ships in this way will immediately remove them from the embattled system, but will also take them out of action for the usual 1-4 turns. See "Transfers vs Reassignment" in section 3.

Space to Ground Assaults

Holding the space around a system is only half the battle. Even in the 24th Century, to own a system you still have to own the dirt.

Launching an Assault

If you have ships with a transport mission in an enemy system after ship to ship combat is resolved, the computer will check for military units in their holds. Only special forces units may be launched from normal cargo holds. All other units must be launched from assault holds. If a ship's cargo or assault capacity has been reduced due to damage, it can still participate in the assault, but it may need repair before it can load troops again.

If there are military units eligible to assault the system, the computer will automatically launch them from their transports according to the following priorities:

1. Task forces unload, in ascending order.

2. Transports unload in the same order in which they're listed when you examine their task force.

3. Units will unload in the same order in which they're listed in their transport's Cargo Available for Unloading box.

Units will be launched until each deployment site is filled or you run out of units.

Ground Combat

Once troops have landed, ground combat begins. Each day, the computer will display the current state of the battle for the system and calculate the each side's probability of destroying an opposing unit. This is done by adding the combat strength of each friendly unit in the system and multiplying the result by 1% for each point of the assault commander's Assault Rating (for attacking units) or System Defensibility (for defending units). The combat strength of a unit is equal to strength x capability. The commander of the highest numbered task force in the system will be the assault commander.

At the end of every day of fighting, system habitability, farms and population will be reduced by 1 each. If the battle continues long enough, it's possible to completely devastate a system.

Eventually, one of two things will happen. Either all military units in the system will be destroyed or only one player will have units left. If the only player to have units remaining in the system is the attacker, the system will change ownership with the following effects:

- Loyalty is set to 1
- Half of all local spares and rations will be captured. The rest will be lost.
- All build points accumulated in local shipyards and training centers will be lost.
- All local shipyards and training centers will be reduced in size by 1 to 20 points.
- All local intelligence centers will be destroyed.

Commanders

As supreme commander of your government, you have a large pool of willing leadership at your disposal. Some of your commanders are good. Some aren't. Some are specialists. The only way you'll know is to test them in battle. Until then, the only thing you can be sure of is their age.

During the Movement Phase, you can look at a summary of your commanders by choosing Commanders from the Assign menu. Each commander is rated for ship to ship attack, ship to ship defense and space to ground assault. Their ratings will range from 1 (incompetent) to 5 (brilliant).

For security purposes, none of your commanders' real names are used. Instead, each one has been assigned a codename. League commanders use codenames borrowed from the great military leaders of Terra's past. Republic commanders prefer names stolen from Old Earth biblical literature.

Task forces without commanders are assigned to Central Command. All task forces under Central Command authority operate with attack, defense and assault ratings of 2.

Special Ops

Special Operations are used to disrupt your enemy's economy and gather information in places the Fleet can't reach. Although you can allocate more than 10 build points to your intelligence centers, you may only invest 10 total operations options in fomenting rebellion and system reconnaissance. Any additional points spent on intelligence centers will go automatically into internal security.

Foment Rebellion

By encouraging popular unrest in enemy systems, you can reduce their loyalty. You'll need a support ship from Special Support Command for each option you allocate toward this activity. Well garrisoned systems are virtually immune to this kind of activity.

System Reconnaissance

Sometimes it's not practical to send ships into enemy territory to update your files on a system. This activity allows you to gather information covertly. One support ship must be available for each option you allocate toward System Reconnaissance.

Internal Security

This counterintelligence activity makes it more difficult for enemy special operations to succeed. Any unallocated options are automatically assigned to this activity.

Combat Scenarios

STOP!

You've read enough rules for a while. The two combat-only scenarios "Operation Gold River" and "Plan Jericho" are described in section 6. Play one (or both) of them to get a feel for the mechanics of managing your fleet before you move on to the additional complexities of exploration and economics.

4.0 Exploration and Colonization

"...so reach for Icarus! Reach for the stars!! Phase II homesites; from 10 square kilometers are still available!!! Call before midnight and you could win a trip for two to..."

Exploring a System

If you have a loaded exploration team in an unexplored system during the Resolutions Phase, it will be automatically unloaded and the system claimed in your name if the carrying ship is on a transport mission. The team will report statistics for habitability, metals, organics, deployment sites, defensibility and special characteristics. The loyalty of the newly acquired system is always 10.

Only the owner will know what a newly claimed system is like. Use System Reconnaissance to check on your opponent's systems. If both sides try to explore a system at the same time, each side has an equal chance to succeed, but there's a 20% chance that neither will. Only one or the other will actually be able to explore the system.

Special System Characteristics

There is a possibility that a newly explored system will have some unusual distinguishing feature. Only the game effects of these special characteristics are discussed here. Read the glossary for a more complete description.

Gasworlders

The system will add 3 extra units of organics to your surplus goods pool each turn for as long as you hold it.

Oort People

The system will add 3 extra units of metals to your surplus goods pool per turn while you control it.

Aborigines

The system will add 3 extra units of food to your surplus goods pool per turn while you own it.

Paleotechnology

The system will add 2 points per turn (instead of 1) to your research pool as long as it's under your control.

Spiders

Normally, the population of a world will grow spontaneously, but a system infested with spiders will be unable to grow until the spiders are eliminated. Each military unit deployed in the system increases your chances of eradicating a spider infestation. You can still add to the local population by importing colonies.

Colonizing a System

As the population grows on your home worlds, larger and larger numbers of people will seek the opportunities offered by the frontier and colonies will become available for transport to new

worlds. Essentially, colonization is nothing more than transporting people to newly explored systems. The trick is to turn an isolated group of a few thousand struggling colonists stranded in an undeveloped system into a productive industrial concern. Read section 8, "Designer's Notes" for hints on building successful colonies.

Once a system is colonized, two things will happen automatically. First, unless the system is infested with spiders, the population will begin to grow by itself. Second, the system's habitability will begin to gradually increase as people begin altering the environment to suit themselves.

Earthlike Colonies

The teeming masses are a fertile source of willing, if ill prepared, prospective colonists. Earthlike colonies are easy to transport, but require a habitability of at least 65 to deploy.

Protected Colonies

Protected colonies are usually financed by private corporations or well organized co-ops. They're well equipped and able to withstand the rigors of less favorable worlds. The minimum habitability for protected colonies is 35.

Belt Colonies

Equipped for environments up to and including total vacuum, belt colonies are expensive to field and difficult to transport. They can survive anywhere.

Kits

Kits are prefabricated, pre-packaged processing facilities that can be used to get new colonies started on the road to industrialization. There are four kinds of kit: farm, mine, refinery and factory. Each kit, when deployed, converts to one point of capacity of the appropriate type.

When you unload a kit from a transport, it automatically deploys. Be careful not to unload a kit accidentally. They're expensive to replace and vital to the expansion of your new colonies.

Note: Kits provide you with a method for extending the resource capacity of a system beyond its original level. If a system is fully exploited, that is, its deployed farm, refinery and mine values are equal to its habitability, organics and refinery ratings, you can still produce more of these raw materials by deploying kits in the system. This is expensive (extremely), but it does allow you to force the output of a system beyond the norm.

Exploration Scenarios

STOP!

At this point you know enough to play the Exploration scenario. It's a good idea to try your hand at this one before moving on to the campaign games.

5.0 Economics

"A leader's greatest fear is not that he will make errors in fiscal policy, but that his enemies will notice them." First Comrade Thrender Grone to the Committee on Internal Security, Brotherhood, 2297

Allocations

Each turn, you'll have the opportunity to direct the growth of your economy and military by "spending" build points. The process is broken into three steps for each system you control: Build Point Production, Build Production Facilities, Allocate Build Points.

The computer will take you through each step in order, displaying a separate page for each. Once you commit points in each step, you won't be able to take them back, but, at the end of the Allocate Build Points step, you'll be able to cancel the entire allocation for the system and start again. Once you commit the allocations for a system, you can't redo them later.

Selection of systems can be done manually, or you can let the computer choose systems for you. This is a good idea when you have several systems that need attention and you don't want to forget one. If you try to exit the Economics Phase without doing any allocations, the computer will warn you and prevent you from going on.

Raw Materials

There are three basic types of raw material: food, metals and organics. A system will produce these based on the capacity of its farms, mines and refineries, within limits set by system loyalty. A system will produce 10% of its maximum output of the three types of raw materials for each point of loyalty, so a loyalty of 10 translates to full production.

Raw materials will be automatically used by any factories in the system. If the system's factories aren't able to consume all of the available raw materials, any remainder will be put into the Surplus Goods Pool for use next turn, if you have sufficient capacity in your Transport Pool.

Build Points

Each factory in a system is capable of producing one build point. To do so, the factory uses one point each of the three basic raw materials. Factories will automatically use locally available raw materials until they're exhausted. If you still have idle factories, you can draw from the Surplus Goods Pool to supply them.

Functionally, this means that you can have a heavily industrialized system that's low on raw materials produce build points with goods imported by your Transport Pool. Because it's important not to neglect your Transport Pool, it's a good idea to check the suggestions provided with the Economic Report to see if you have enough transport to move your surplus goods.

Building Production Facilities

When you look at a System Report, you'll see current sizes and build costs for every type of production facility in the system. This includes shipyards, training centers, intelligence centers, farms, mines, refineries and factories.

If you look closely, you'll notice that the cost of building farms, mines and refineries depends on the system's habitability, metals and organics ratings. The higher the rating, the lower the cost of the corresponding facility. This means that some systems are valuable as specialized sources of raw materials. Other production facilities carry a fixed cost of 10 points.

Building or expanding a production facility requires a point of idle population for each facility built or point of increased capacity which will then become employed (not idle). If a system doesn't have any idle population, it won't be able to expand its industrial capacity.

Allocating Build Points

Each turn, your systems' factories will produce a number of build points which you can then allocate for expansion, spares, rations, ships, military units and industrial kits.

A shipyard can be set to produce any one of the 20 classes available to you or it can produce spares which are necessary to maintain your fleet. You can change the class produced by a shipyard at any time, but any build points already accumulated will be lost.

Training centers produce military units or rations. Rations are used to maintain military units. Like shipyards, training centers can produce only one type of unit at a time.

Both shipyards and training centers will go through a partial refit when you change the type of their product. The first unit or ship produced will cost somewhere between 2 and 4 times the norm.

Special Note: If a system can't to acquire enough food (either through production of local farms or via the transport pool), there's a chance that food riots will break out. The system's loyalty will drop by one point for each quarter that the rioting continues.

Once the rioting starts, you have two choices: let the rioting go on or feed the population. Of course, you don't have to give them food, rubber bullets and tear-gas work almost as well. Deployed troops can stop rioting.

The Economic Report

The Economic Report is a planning aid for resource allocation. When you select Report from the

Econ menu, the computer will present you with a set of overlayed line graphs depicting the output (over time) of various critical economic factors. It will also suggest steps to take in order to maximize your industrial output.

You can look at one graph at a time by selecting Options, Clear Graph and then the line you want to see. You can use the same technique to look at the relationships of specific economic factors by clearing the graph and then overlaying two or more lines.

It's also possible to get an overview of your economics situation by choosing Current Data. The bar graph displayed by this option can help you see large scale imbalances at a glance.

Ship Classes

Although both sides begin the game with several "standard" ship classes, you have ample room to design new classes to suit your own style of play. You may modify a class whenever you like, and the revised design will be used on all subsequent builds of that class with no effect on older ships. However, any ships of the revised class which are still under construction will be scrapped and all build points invested in them lost.

Note: the computer identifies classes by number, not name. If you use duplicate class names, you won't be able to tell them apart, but the computer will.

Ship Systems

There are 12 types of ship system available, each with unique uses and limitations:

Long Range Anti-r Weapon

These weapons are the most devastating in the game. Any ship can be destroyed by a single hit from a long range Anti-r weapon. Their disadvantage is their expendability. Once fired, they become "damaged" and must be replenished during repair.

Restrictions: Only effective against ships in real space. Firing ship must have at least one r-Scan system operational.

Long Range Anti-i Weapon

Like their real space counterparts, these weapons can severely damage a ship and are expendable.

Restrictions: Only effective against ships in i-Space. Firing ship must have at least one i-Scan system operational.

Short Range Anti-r Weapon

Not as destructive as a long range weapon, but able to fire indefinitely.

Restrictions: Only effective against ships in real space. May not fire until all long range combat is complete.

Short Range Anti-i Weapon

Similar to short range Anti-r weapons.

Restrictions: Only effective against ships in i-space. May not fire until all long range combat is complete.

Long Range Defense

These systems can intercept and destroy incoming long range weapons regardless of target.

Restrictions: Like all long range weapons, these are expendable and must be replenished in repair.

Point Defense

Last ditch defensive systems used to destroy incoming long range weapons targeted at the firing ship.

Restrictions: May only fire at weapons about to hit the firing ship.

R Scan

Required equipment for any ship that mounts Long Range Anti-r weapons. Having more than one scanner increases the probability of a lock on.

i Scan

Acquires targets in i space for Long Range Anti-i weapons. Additional scanners increase the chance of achieving a lock on.

Command Module,

This is the C3I center for a task force. As long as one ship in the task force has a command module, it may have a commander. When the last command module in a task force is destroyed, the commander is assumed to be killed and a replacement is promoted back at Central Command. The replacement is not assigned to the force.

Restrictions: Task forces without a command module equipped ship will always be under the control of Central Command.

i-Space Drive

This variant of the standard interstellar drive, while bulky and expensive, allows a ship to "slip under" real space into i-Space. This makes it difficult to detect by normal means. As a result, the vast majority of convoy raiders are i-Space equipped.

Restrictions: Ships in i-Space can only be attacked by Anti-i weapons. i-Space Drives are extremely bulky.

Cargo Capacity

One point of cargo capacity allows a ship to carry one size point worth of cargo.

Restrictions: It's not possible to split a large cargo among several ships, so only the largest of transports can carry units like exploration teams.

Assault Capacity

This is cargo capacity with the additional ability to launch military units into combat.

The largest ship current technology can produce will contain 15 systems from the list above. With the exception of i-Space Drives and long range weapons, all systems take up the same amount of space. Ships equipped with i-Space Drives may only mount two other systems. Long range weapons and defensive systems take up two "spaces".

Production

After build point allocation, the computer will resolve production according to the following rules:

Shipyards

Each shipyard will accumulate the number of build points you specified toward production of a ship of the class (or spares) built there. If enough build points have accumulated, a new ship will be placed in transit to Training Command. If the shipyard is producing spares, one spare will be added to the system's Spares Pool for each build point.

Training Centers

Each training center will accumulate build points toward the type of unit produced there. If a unit is produced and there's an empty site available, it will be deployed. Otherwise, it will be held in reserve. Training centers producing rations will add one ration point to the system's Rations Pool for each build point.

Intelligence Centers

Each center will generate one operations option for each build point allocated.

Maintenance

If the "Maintenance and Training" reality level is enabled, the computer will check all ships assigned to task forces for wear and tear. Every ship system has roughly a 10% chance of failing each turn.

After checking for wear, the computer will attempt to repair all damaged ships in friendly systems that have spares available. Task forces with attack missions get highest priority and reserve missions wait until last. Lower numbered task forces are repaired first. Each repaired system expends one spare.

Military units lose one capability point each turn. If a unit is deployed in a system where rations are available, two points of capability will be added and one ration will be expended.

Units aboard ships can't receive rations. If you leave troops on their transports long enough, they'll deteriorate into uselessness.

6.0 Scenarios

Standard Victory Points

The following standard victory point schedule is used in all scenarios except the first two.

- For each friendly system: (population + colonies) x loyalty ÷ 100
- 50 x (current effectiveness - 4)
- 50 points per turn that a player occupies his opponent's home system. The League home system is Alger. The Republic home system is Progress.
- Research Pool ÷ 10

The first player to reach 750 wins immediately. If either player's total is reduced to 20 or less, the other player wins immediately. In the unlikely event of a simultaneous tie at 750, the P.H.R. wins.

Operation Gold River

"The conflict lasted far longer than anyone expected. Although the fighting was largely limited to the Brotherhood - Ramage C - Kiffryn's Star corridor, destruction was extensive in the affected systems. By the time it was over, Brotherhood had changed hands four times." - The Midas War, Fractal Press, 2349

This scenario picks up the action as the League is preparing to launch "Operation Gold River", the assault on Brotherhood. Play begins in 03/2345 and continues until 04/2347 (10 turns).

Victory Conditions: Whoever controls Brotherhood at the end of the game wins.

Special: There are no Economics Phases in this scenario. Actions will be restricted to movement and combat.

Plan Jericho

"Each side faced the conflict with its own expectations. The P.H.R.'s 'Plan Jericho' depended on the success of the feint at the Ramage Triad and, had it succeeded, could have sounded the death knell for an unprepared League." - The Doomed Jihad, Strategic Studies Institute, 2352

The Republic assault on the League borders comes in two prongs. The main advance is directed at Glance's Star while a smaller force is preparing for action in the Ramage Triad. Play begins in 04/2340 and ends in 04/2342.

Victory Conditions: One victory point is awarded at the end of the game for control of each of the following: Delta Felis, Epsilon Felis, Glance's Star, Bennet's Star, Kiffryn's Star, Ramage B, Ramage C and Brotherhood. A tie results in a marginal Republic victory.

Special: There are no Economics Phases in this scenario. Actions will be restricted to movement and combat.

Exploration

"The first heady rush of expansion lasted only five years, but it was exhilarating while it lasted. The border systems were rough, dirty and usually hungry. Law was something that came with the Navy ... and left with it. Fortunes were made (and frequently stolen) on the frontier." - The First Wave Botham & Walmer, 2348

This scenario is set in the chaos of the early twenties. Expansion is it word of the hour. Game play begins in 04/2320 and ends in 04/2324.

Victory Conditions: In addition to the standard victory point schedule, players will receive the following points:

- For each friendly system other than Progress, Brotherhood, Unity, Alger or Laird's Star: (population exclusive of colonies) x loyalty ÷ 10
- Cargo capacity of the Transport Pool ÷ 10

Special: This scenario doesn't include an Economics Phase, but does include pre-programmed production to support colonial expansion.

The War (historical)

The League was far more successful in its early attempts at colonization of the cluster than the Republic. Not willing to admit that ideology didn't cut much ice on the frontier, the Holy Bureau of Elders approved a campaign against League shipping. Of course, the League responded in kind. It was only a matter of time before the real shooting started.

The scenario begins in 04/2334 with the Republic's raiding campaign and continues until the standard victory conditions are met (usually about 45 turns). Open warfare usually erupts somewhere between turns 6 and 18.

Victory Conditions: Standard

Special: At difficulty levels above "challenging", initial P.H.R. farm, mine and refinery deployment levels will be increased by about 3 points per level.

The War (alternate)

When the Terran Navy pulled out in 2330, nearly everyone expected hostilities to break out overnight. That unhappy eventuality was forestalled by the internal power struggle that continued to cripple the P.H.R.. Here's what might have happened...

The scenario begins in 04/2331 with limited hostilities and continues until the standard victory conditions are met (usually about 55 turns). Open warfare will normally break out in 6 to 18 turns.

Victory Conditions: Standard

Special: The same special conditions specified in the historical war apply here.

The Short Campaign

After the chaos of the twenties, the economies of the League and P.H.R. had both stabilized. Territorial gains were well integrated and both sides felt relatively secure. Of course, no government is really satisfied when fresh territory is waiting to be claimed...

The Short Campaign begins in 04/2330 and continues until the standard victory conditions are met (normally about 75 turns). The cluster is currently at peace and you have a few years before friction will drive the League and the Republic into war.

Victory Conditions: Standard

Special: Initial P.H.R. naval forces will be increased by about 5 ships per difficulty level above "moderate". The additional ships will be small transports and warships. Initial P.H.R. factory, farm, mine and refinery deployment will be increased by about 3 each at levels above "challenging".

The Long Campaign

The 20's were marked by rapid expansion on both sides of the cluster coupled with growing friction over territorial rights. Fortunately, the Terran Navy's strict enforcement of the peace kept things quiet ... until they left.

This is the big one. The starting conditions of both sides are jumbled and will require careful planning to reach stable productivity. Play begins in 04/2320 and ends when the standard victory conditions are met (around 100 turns).

Victory Conditions: Standard

Special: The same special conditions specified in The Short Campaign apply here.

7.0 Solitaire vs Two Player Mode

In the two player mode, the computer will warn you with an alert box before proceeding to the next player's phase. This allows you to exchange places at the computer without worrying about seeing things you shouldn't.

Any game can be restarted in the two player mode, but only solitaire games may be restarted in solitaire mode. The computer isn't smart enough to handle the bizarre setups you might inflict on it.

8.0 Designer's Notes

A typical long campaign of Stellar Crusade can be divided into three distinct phases. First, players will explore as many stars as they can reach, while trying to consolidate their starting industrial base.

Effective exploration will require careful planning. The typical exploration task force should include at least one transport in addition to the ship carrying the exploration team. Additional transports should be loaded with spares. Once the exploration transport is damaged by "wear and tear", it will not be able to reload the exploration team until it has been repaired. It will probably be necessary to set up a bucket brigade of transports to keep the exploration forces in spares. The People's Holy Republic player should build a class of maximum size (15 cargo system) transports as quickly as possible in order to explore and exploit his neighborhood.

Neither player has a large supply of exploration teams to leave lying around. While the computer will produce new exploration teams, the rate of production is quite slow (one percent per quarter at any system with local population of 250 thousand or more).

Next, the players will expand into the cluster. Only a very unlucky player will fail to find a "nearly perfect" system near enough to his home system for easy colonization. Generally, it will be a good idea to concentrate on building up this system. Each player must identify the materials needed by his society, and colonize systems where production of these materials will be inexpensive.

The most effective way of setting up a colony is to produce ten factory kits for placement in a new system. Let your transport pool carry the necessary goods to run colonial factories until they become self supporting by producing local farms, mines and refineries.

If you know that you are going to be setting up a colony in a system but don't have the resources yet, be sure to move at least one colony to the system in order to begin building up the local habitability rating. Your transports can move earthlike and protected colonies around a lot faster than belt colonies.

Concentrate on one colony system at a time to begin with. You will not have the resources to do a good job on more than this.

It may be necessary to allow some slack in production at your original star systems in order to free up raw materials for use in starting up your colonies. Be sure to ship out enough population to support the buildup of colonial industry. No facilities may be built if no idle population exists locally to man them. Build the local colonial population up to around 100 thousand as quickly as possible.

If your planning is good, the colony should be self supporting in at least one category of raw materials production by this time, and you can begin building the next one if necessary. Be

sure to build up your raw materials production before building up factories, shipyards, etc., or you will end up with a lot of idle production facilities.

Keep an eye on what the other player is producing at his shipyards. While the ability to view the other player's current ship classes is not a particularly reliable way to count current force strengths, it can be useful in avoiding nasty surprises.

Depending on the distribution of resources in the cluster, the players will probably end up fighting over some star system eventually. Campaigns must be planned. Players should try to create a mix of large and small warship types. Large (100+) pools of spares must be accumulated at the star systems near the points of conflict.

Warships should be kept in Training, Escort, and Raiding Commands until they are needed in task forces. Once warships are pulled out of the commands and placed in active task forces, the players will have to maintain them. This will be expensive.

Active task forces should contain a few small warships as well as the larger, more powerful varieties. This will limit the cost effectiveness of enemy long range weapons since these weapons will select their targets at random. On the other hand, if you make nothing but small warships, you will soon bump against the 120 ship limit.

When you plan an assault on an enemy system, separate your forces into two or more task forces with different missions. This will force any defending forces to engage your attack task forces first, limiting the number of long range weapons your transport task forces will have to dodge.

Pay attention to the order in which military units are loaded onto transports. If you bring along a few extra units for occupation duty after a space to ground assault (a good idea if the other player maintains a reaction force), load them after any units you want involved in the assault.

If a naval battle is going poorly, don't be afraid to disengage your forces. There is no penalty for a disengagement attempt and any forces saved may live to fight another day.

Find out how good your younger commanders are. A 25 year old military genius is a very valuable asset. Command has a significant effect on the game.

Remember that once you begin hostilities, they can't be stopped. The League player should take advantage of his superior starting exploration position. An aggressive League player should be able to explore much of the cluster before the P.H.R. exploration program really gets rolling.

Both players would do well (in early games) to pay attention to the suggestions offered by the program during economics reports. The initial industrial growth potential of the P.H.R. should be exploited by the Republican player.

One last note: If you feel that you don't have enough resources to do a proper job of everything that needs to be done, you're right! Just remember that the other player is in no better shape.

9.0 Appendices

A - The System Report

Any time you select "Examine System" from a menu, you'll be prompted to select a system in the normal manner (read "The Quick System Display" in section 2, if you aren't sure how selection works). The computer will then provide you with a detailed display of all known information about that system. Data on friendly systems is always up to date. Data on other systems is updated only at the end of a turn in which you either have a physical presence there, after all combat, or you successfully perform covert reconnaissance. You can always tell how current your information is by looking at the report date in the upper right portion of the display.

System Characteristics (top section):

Loyalty ranges from 1 (simmering rebellion) to 10 (utterly loyal) and will affect your industrial output. Each point of loyalty translates to an additional 10% output from the system's farms, refineries and mines. If a system shows a loyalty of 9, it will produce 90% of its maximum output of raw materials.

Special characteristics of a system will generally have either a positive or negative influence

on the system's production. These include Gasworlders, Oort People, Aborigines, Paleotechnology and Spiders and are described in the Glossary.

Population is shown in thousands of people and will grow as the system is colonized to a maximum of about 5.5 million in with a habitability of 100.

Habitability, Metals and Organics ratings are generated when the system is first explored and range from 5 to 100. Habitability will increase with time once a colony is established.

Deployment Sites ranges from 3 to 8 and indicates the maximum number of military units that can be deployed in the system.

Defensibility directly influences the outcome of any ground combat in the system and ranges from 1 (poor) to 3 (good).

Movable Units (center section):

Colony, Protected Colony and Belt Colony all refer to units of 1000 people ready and equipped for movement to new star systems.

Exploration is the number of Exploration Teams available in the system. These teams are required to explore new star systems. Without them, your ships are just passing through.

Ships gives the number of ships in active task forces in the system. This doesn't include ships under construction.

Military will show a list of the military units deployed in the system. Each unit has its own unique designation.

Farm Kits, Mine Kits, Refinery Kits and Factory Kits are prefabricated industrial facilities awaiting transport. You'll need these to start an industrial base in newly colonized systems.

Production Centers (bottom section):

Shipyards may accumulate up to Sizebuild points per turn toward the production of whatever Type Produced is currently being built by the facility.

Training Centers work in exactly the same way as shipyards, but produce military units.

Intelligence Centers may generate up to Size covert operations points per turn. Covert operations points are used to perform Special Operations.

Farms, Mines, Refineries and Factories are basic industrial facilities. This is where the system's production comes from.

Spares and Rations are used to maintain naval and military units respectively. If the Maintenance and Training reality level is enabled, these will become vital.

B - The Task Force Display

If you choose the Task Forces selection from the Move menu, you'll be presented with a comprehensive report on all 36 of your task forces. Each task force will be shown with the following information:

Location

Name of the system where the task force is currently operating.

Size

The number of ships in the task force.

Status

This line is left blank for inactive task forces (those with no ships currently assigned). Active task forces will have a status of "Ready" or "Moved", and a mission suffix of A" (Attack), "T" (Transport) or "R" (Reserve).

One of the task force names will be shown in red. This is the selected task force. You may

select another one by clicking its number (ATARI ST) or using the cursor keys (IBM PC XT/AT).

You can look at the selected task force by choosing "Examine or modify task force". This will present you with a more detailed report and the opportunity to change its mission, load/unload cargo and transfer or reassign ships.

You can exit the Task Force Display by choosing "Exit to Map/Menu".

C - History of the Kiffryn's Cats Star Cluster

By the beginning of the 24th century, humans had been a space faring race for more than 200 years. Early colonization efforts, because of their expense, were funded by governments in much the same way that the kings of Europe financed the exploration of the New World in the 16th through 19th centuries on Old Earth. Of course, private concerns became involved as soon as it was economically feasible.

The majority of private colonies were established on government opened worlds, but many, for religious, political or other reasons, sought to break away on their own. Any group that could raise the necessary funds could perform its own utopian experiment on the frontier.

Interestingly, a sort of "fanaticism gradient" developed as the human race spread outward from Terra. Because of the expense and danger involved in independent opening of new worlds, only those with the greatest need tended to move to the outermost fringe of human space. Of course, one could never tell what one of these radical groups might stumble into.

The famous explorer Pyotr Kiffryn surveyed a remote, but potentially valuable, cluster of stars during his Second Grand Tour that, according to his astrogator wife, looked just like two of the ship's cats at play. The five stars of the primary cluster were named Alpha through Epsilon Felis in honor of the feline genus and the cluster was logged as the "Kiffryn's Cats" Cluster. By 2280, two groups were settled in the region.

The People's Holy Republic was founded by Neo-Christian Communists of Northern and Central America in the latter part of the 23rd century after the collapse of The People's Holy Marxist Union of Northwest American States. With the Reformed Worker's Bible as their guide, the P.H.R. set out to construct the ultimate worker's paradise. What they made was, predictably, a rigidly bureaucratized oligarchy that used its state mandated religion as a brutally effective form of mind control.

The League began as a private consortium of businessmen who sought to escape the increasingly restrictive trade policies of Terra and her near colonies (called the Central Systems). Originally called the Corporate League, it quickly developed into a loose federation of trading communities with virtually no political axes to grind. Within 15 years, the Corporate League had become simply "the League".

Because they were well financed and cooperative, the P.H.R. originally welcomed the founders of the League into the region. The honeymoon lasted a little over 28 years. When the League began rapidly expanding, developing newly explored systems as quickly as it surveyed them, a vocal fundamentalist faction within the Holy Council of Elders began objecting to the presence of "unrepentant capitalists" so close to their garden of eden. The extremists succeeded in cutting all economic ties with the League and obtained an old surplus Centaurian cruiser which they rearmed.

Because the League represented a significant quantity of capital and because it was something of an embarrassment to Terra and the Central Systems, clandestine aid began to flow into P.H.R. coffers. The struggle for control of the Kiffryn's Cats cluster had begun.

Ironically, it was the same Terran government that was seeding money into the P.H.R. that openly displayed its military strength to "maintain the peace" when friction with the League threatened to turn into a shooting war. During the early years of the 24th century, Terra maintained, at great expense, a peacekeeping fleet in the region. It worked. Although sabre-rattling became commonplace, no major armed confrontations occurred.

By the beginning of the 20's, however, pressure was growing in the Central Systems to reduce military spending. Playing "big brother" to dozens of fringe colonies was no longer a popular game and in 2320 Terra declared a 10 year countdown to the withdrawal of their military presence. Almost instantly, a thriving black market in surplus military goods developed on both

sides of the cluster.

Then, in 2328, First Elder Gresham declared the League an "abomination in the face of the Communing God". He called for a holy war, a crusade to stamp the presence of capitalism from the region. Only the premature demise of First Elder Gresham, and the subsequent struggle for control of the Council, prevented an immediate outbreak, but the battle lines had been drawn...

D - Glossary

Aborigines

While no technologically advanced races (other than humanity) had been found by the 24th century, several promising pre-technological species were known. These beings were useful as workers and, sometimes, as trade partners. A thorough search was always conducted for aborigines by exploration teams.

Build Unit

Also called Build Points. Build Units are the basic element of industrial production. They are used to construct ships, military units, etc. Build Units are produced from raw materials at factories.

Colonies

Colonies are privately organized groups of self financed volunteers ready to settle new systems as soon as the local government provides transport. Protected and Belt colonies aren't just better equipped, they're also generally organized by wealthier groups. Even if they're going to a perfectly earthlike world, they still tend to carry a great deal of baggage with them.

Commanders

Individual military commanders and their staffs. Given the time scale of the game, commanders will come and go. Both sides used code names for their commanders for security purposes.

Effectiveness

The technological levels of the societies represented in Stellar Crusade can change if the players invest in research. Anything left unspent automatically goes into research. Any class of ship you design will be given your current effectiveness level. Effectiveness has direct influence on combat and movement.

Exploration

Initial exploration of an entire star system is a major endeavor. It's a sobering thing to realize that, as of 1988, we still aren't sure we've found all the planets in our own solar system. It seems reasonable to assume that just about any system will have some economically useful features. The game assumes that some personnel remain behind in each star system and begin exploiting its resources. This is why a player gains some benefit from an explored system, regardless of whether it's ever developed. It also explains why the exploring player has to send in a massive team, while his opponent gets all that valuable information for free. By the time he gets there, the system is crawling with prospectors, salesmen, etc. who are happy to talk all about their new home.

Gasworlders

These are intelligent creatures who inhabit the upper layers of jovian worlds. While none of the gasworlders in the game are technological, they do trade exotic organics for certain manufactured goods.

i-Space

This is really a convenience of expression, since only a few physicists really understand this "imaginary space" where massive objects travel faster than light. Most ships are equipped with drives that "dip" into i-Space, allowing them to move in short jumps. There are, however, more specialized and vastly larger drive systems that allow ships to "stay under" for protracted periods. While in i-Space, ships are extremely difficult to detect.

Oort People

Oort people are an intelligent (?) life form of vacuum dwelling migratory organisms that feed on solar radiation. They've been known to exchange exotic isotopes for original musical compositions broadcast in the 1 to 6 gigahertz band.

Operations Options

These are the basic resources that you can allocate to covert activities. They're produced at intelligence centers and can be used to stir up trouble in the opposition's systems or help maintain security in your own.

Paleotechnology

There were several star faring civilizations that preceded us into the galaxy and their artifacts are a tantalizing source of discovery and frustration. Sometimes, these forerunner artifacts can trigger a scientific breakthrough.

Spiders

The debate concerning the origin of these vicious, arachnid predators still rages, but the smart money seems to be in favor of an interstellar "hive" race that collapsed for unknown reasons. Regardless of their origin, these ubiquitous terrors are a real threat in systems where local conditions favor them.

Military Units

These are units of about battalion strength that operate in star systems rather than deep space. There are four types of military unit: Security Forces, Light Regulars, Heavy Regulars and Special Forces.

Appendix E: Tables

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The War - Orders of Battle

LEAGUE

Task Force	Location	Ships
01	Alger	Working Girl x 2
02	Alger	Explorer x 3
03	Alger	Mordecai Fae x 7
04	Alpha Felis	Working Girl x 1
		Wasp x 1

Command	Ships
Training	Explorer x 5 Lion x 5 Spiderbird x 6 Wolverine x 14
Escort	Wasp x 12 Firebat x 16 Wolverine x 2
Raiding	Snake x 8
Transport	Working Girl x 9 Explorer x 1
Transit	Wolverine x 4 Firebat x 1 Snake x 1

System	Military Units
Laird's Star	01Sy, 02Sy
Alger	07Hy, 11Hy, 13Lt, 16Hy, 17Hy, 19Lt, 21Lt, 22Hy
Bw&s Star	05Hy, 06Hy, 15Lt, 18Hy
Killrynt Star	08Hy, 09Hy, 10Hy, 12Lt, 14Hy, 20Hy
Epsilon Felis	03Sy, 04Sy

P.H.R.

Task Force	Location	Ships
01	Alpha Felis	John Calvin x 1 Goliath x 1
02	Progress	Martin Luther x 1 Goliath x 3
03	Brotherhood	John Calvin x 1
04	Progress	Martin Luther x 1
05	Progress	Martin Luther x 2
06	Progress	Martin Luther x 2

Command	Ships
Training	Crossbow x 28 Chariot x 2
Escort	Charles Martel x 22
Raiding	Wrath of God x 2 Charles Martel x 1 Raider x 8
Transport	Martin Luther x 7 Goliath x 4 Trinity x 1 John Calvin x 1
Transit	Crossbow x 3 Chariot x 2 Charles Martel x 3

System	Military Units
Progress	14Hy, 16Hy, 17Hy, 18Hy, 19Lt, 20Hy
Glancet Star	03Sy, 05Sy, 02Sy, 07Sy, 09Sy
Alpha Felis	06Hy, 10Hy, 11Hy, 13Hy
Brotherhood	08Lt, 12Hy, 15Lt
Unity	01Sy, 04Sy

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The Alternate War - Orders of Battle

LEAGUE

Task Force	Location	Ships
02	Alger	Explorer x 4

Command	Ships
Training	Mordecai Fae x 6 Explorer x 4 Lion x 5 Lion 11 x 5 Snake x 1
Escort	Wasp x 15 Lion x 3 Nimblebee x 1
Raiding	Snake x 3
Transport	Working Girl x 10
Transit	Nimblebee x 3 Lion 11 x i

System	Military Units
Garnrna Felis	01Sy, 02Sy
Kiffryn's Star	03Lt, 05Hy, 10Hy, 11Hy
Alger	04Hy, 09Hy, 12Hy, 14Hy, 15Hy, 16Hy
Bennett's Star	06Lt, 07Hy, 08Lt, 13Hy

P.H.R.

Task Force	Location	Ships
01	Progress	John Calvin x 1 Goliath x 1
02	Glance's Star	Martin Luther x 1 Goliath x 1
03	Brotherhood	John Calvin x 1
04	Progress	Martin Luther x 1
05	Glance's Star	Martin Luther x 2
06	Unity	Martin Luther x 2

Command Ships

Training	Crossbow x 18 Chariot x 1 Charles Martel x 1
Escort	Charles Martel x 5
Raiding	Wrath of God x 4 Charles Martel x 4 Raider x 6
Transport	Martin Luther x 7 Goliath x 4 Trinity x 1
Transit	Crossbow x 1 Raider x 1 Charles Martel x 1 John Calvin x 1

System	Military Units
Unity	01Sy, 02Sy, 04Sy, 05Sy
Brotherhood	03Sy, 08Lt, 12Hy
Glance's Star	06Hy, 10Hy, 11Hy
Progress	07Sy, 09Sy, 13Hy

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Gold River - Orders of Battle

LEAGUE

Task Force	Location	Ships
01	Alger	Working Girl x 1 Mordecai Fae x 6
03	Ramage C	Explorer x 3
10	Ramage C	Wolverine x 4 Tiger x 1 Hawk 11 x 2 Eagle x 4 Hornet x 2 Lion 11 x 3
11	Ramage C	Wolverine x 1 Hawk 11 x 3 Tiger x 4 Lion 11 x 2 Hornet x 4 Eagle x 2
12	Ramage C	Wolverine x 2 Hawk 11 x 3 Tiger x 1 Lion 11 x 3 Eagle x 4 Hornet x 3

20	Ramage C	Mordecai Fae x 2 Spiderbird x 4
36	Laird's Star	Snake x 2

Command Ships

Training	Spiderbird x 4 Mordecai Fae x 6 Hornet x 1 Eagle x 1 Lion 11 x 1
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Escort
Raiding
Transport
Transit

Lion 11 x 4 Hornet x 3 Eagle x 2 Working Girl x 1 Snake x 3

System Military Units

Laird's Star	01Sy, 02Sy
Epsilon Felis	03Sy, 04Sy
Bennett's Star	05Hy, 06Hy, 15Lt
Ramage C	07Lt, 13Lt, 11Lt, 17Lt, 19Lt, 21Lt, 23Hy
Alger	08Hy, 09Lt, 10Hy, 11Hy, 22Hy
Kiffryn's Star	12Lt, 20Hy
TF 20	24Lt

P.H.R.

Task Force Location Ships

01	Progress	John Calvin x 1 Goliath x 1
02	Alpha Fells	Martin Luther x 1 Goliath x 3
04	Progress	Martin Luther x 1
05	Glance's Star	Martin Luther x 2
06	Unity	Martin Luther x 2
07	Progress	John Calvin x 3
08	Brotherhood	John Calvin x 2
14	Progress	Crossbow x 1
15	Brotherhood	Crossbow x 2
17	Brotherhood	Crossbow x 5
22	Brotherhood	Crossbow x 16
23	Brotherhood	Crossbow x 11 Charles Martel x 1
31	Brotherhood	Chariot x 3
32	Progress	Chariot x 1
36	Progress	Wrath of God x 1 Raider x 1

Command Ships

Training	Crossbow x 2 John Calvin x 1
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Escort
Raiding
Transport
Transit

Raider x 3 Crossbow x 3 John Calvin x 3 Goliath x 1
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Chariot x 1

System	Military Units
Unity	01Sy, 04Sy
Glance's Star	02Sy, 03Sy, 05Sy, 07Sy, 09Sy
Alpha Felis	06Hy, 10Hy, 11Hy, 13Hy
Brotherhood	08Hy, 15Hy, 16Hy
Progress	11Hy, 20Hy, 21Hy, 22Hy, 23Hy
TF 31	14Hy, 17Hy, 18Hy
TF 32	12Hy

Jericho - Orders of Battle

LEAGUE

Task Force	Location	Ships
02	Kiffryns Star	Explorer x 2
03	Bennetts Star	Mordecai Fae x 5
04	Gamma Felis	Wasp x 1
10	Delta Felis	Lion x 1 Wolverine x 6 Hawk 11 x 1 Bear x 3 Hornet x 1
11	Delta Felis	Lion x 2 Wolverine x 5 Bear x 2 Hornet x 1
12	Kiffryns Star	Wolverine x 7 Firebat x 1 Hawk 11 x 1 Bear x 3 Hornet x 1
20	Bennetts Star	Spiderbird x 4 Hornet x 1 Mordecai Fae x 1
33	Laird's Star	Explorer x 1
35	Laird's Star	Firebat x 1
36	Laird's Star	Snake x 1

Command Ships

Training
Explorer x 3
Spiderbird x 3
Wolverine x 2
Hornet x 3
Hawk 11 x 1
Bear x 4

Escort
Raiding
Transport
Transit
Bear x 1
Explorer x 1
Snake x 1

System	Military Units
Laird's Star	01Sy, 02Sy, 18Sy
Epsilon Felis	03Sy, 04Sy
Bennett's Star	05Hy, 06Hy, 15Lt
Deb Felis	07Hy, 11Hy, 13Lt, 16Hy
Kiffrynt Star	08Hy, 09Hy, 12Lt, 14Hy, 20Hy
Alger	17Lt, 19Lt, 21Lt, 22Lt, 23Lt, 24Lt

P.H.R.

Task Force	Location	Ships
01	Alpha Felis	John Calvin x 1 Goliath x 1
02	Progress	Martin Luther x 1 Goliath x 3
03	Brotherhood	John Calvin x 1
04	Progress	Martin Luther x 1
05	Progress	Martin Luther x 2
06	Progress	Martin Luther x 2
07	Progress	John Calvin x 1
08	Glance's Star	John Calvin x 3
18	Brotherhood	Charles Martel x 1
19	Brotherhood	Crossbow x 1
20	Baker's Star	Crossbow x 1
22	Glance's Star	Crossbow x 14
23	Glance's Star	Crossbow x 9 Charles Martel x 2
30	Brotherhood	Chariot x 1 Charles Martel x 3 Crossbow x 3
31	Glance's Star	Chariot x 3
32	Progress	Chariot x 1

Command Ships

Training
Escort
Raiding
Transport
Transit Goliath x 1
 Wrath of God x 2
 Charles Martel x 4
 Crossbow x 5
 John Calvin x 5
 Raider x 1
 Chariot x 1

System	Military Units
Unity	01Sy, 04Sy
Glancet Star	02Sy, 03Sy, 05Sy, 07Sy, 09Sy
Alpha Felis	06Hy, 10Hy, 11Lt, 13Hy
Brotherhood	08Hy, 12Hy, 15Lt
Progress	19Lt, 20Hy, 21Hy, 22Hy, 23Hy, 24Hy, 25Hy, 26Hy
TF 30	17Hy
TF 31	14Hy, 16Hy, 18Hy

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Military Unit Table

Type	Strength	Capability	Transport Size	Cost
Security Forces	2	1-4	3	4
Light Regulars	2-4	1-8	6	10
Heavy Regulars	3-5	1-8	8	12
Special Forces	1	1-10	2	10

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Section	Subsection	Word
2.0	Starting Up	make
2.0	The Turn Sequence	each
2.0	The Movement Phase	during
3.0	Missions	there
3.0	Cargo	any
3.0	Transit	when
3.0	Long Range Combat	combat
3.0	Ground Combat	once
4.0	Belt Colonies	equipped
5.0	Ship Classes	although
5.0	Production	after
6.0	The War (alternate)	when
9.0	D-Glossary	aborigines