

# STAR WARS THE CLONE WAR

TM

## GAME MANUAL



## **EPILEPSY WARNING**

### **PLEASE READ THIS NOTICE BEFORE PLAYING THIS GAME OR BEFORE ALLOWING YOUR CHILDREN TO PLAY.**

Certain individuals may experience epileptic seizures or loss of consciousness when subjected to strong, flashing lights for long periods of time. Such individuals may therefore experience a seizure while operating computer or video games. This can also affect individuals who have no prior medical record of epilepsy or have never previously experienced a seizure.

If you or any family member has ever experienced epilepsy symptoms (seizures or loss of consciousness) after exposure to flashing lights, please consult your doctor before playing this game.

Parental guidance is always suggested when children are using a computer and video games. Should you or your child experience dizziness, poor eyesight, eye or muscle twitching, loss of consciousness, feelings of disorientation or any type of involuntary movements or cramps while playing this game, turn it off immediately and consult your doctor before playing again.

#### **PRECAUTIONS DURING USE:**

- Do not sit too close to the monitor. Sit as far as comfortably possible.
- Use as small a monitor as possible.
- Do not play when tired or short on sleep.
- Take care that there is sufficient lighting in the room.
- Be sure to take a break of 10-15 minutes every hour.

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## INTRODUCTION

### The Story So Far..

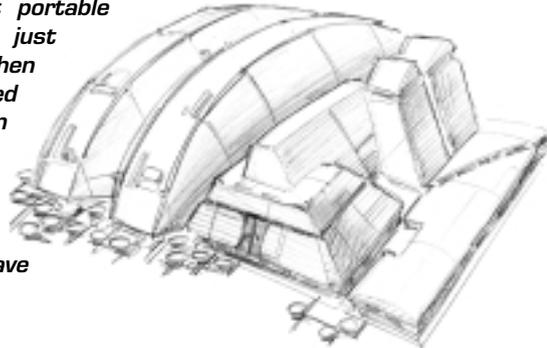
*If the space age started with Sputnik, the interstellar age started with Pathfinder II. By the early 23rd century Humans had settled every vaguely habitable lump of rock in the Solar System. A developed colony existed on Mars, with smaller ones on Titan, Ganymede and a number of the larger asteroids. The energy crisis was over, with limitless solar power and almost limitless hydrogen scooped from the Jovian atmosphere and accelerated earthward. Humanity was in a golden age, Earth was in the midst of the most sustained period of prosperity and peace in history, and enough of a frontier existed to keep most of the more adventurous souls out of trouble.*

*Still the stars beckoned.*

*Oh, we had reached the stars before Pathfinder. The first probe, Stellar 7, entered the Alpha Centauri system in the year 2056, after only 28 years flight time. The perfection of cryogenics allowed a manned vessel, the U.N.S. Neil Armstrong, to reach the system in 2109; flight time 37 years. While the voyage of the Armstrong was hailed as a triumph, it was clear that the problem of accelerating any substantial mass to relativistic speeds was so great that interstellar flight was simply not worth the trouble.*

*The equations said travel faster than light was possible, at least in theory. The mission of the Pathfinder Project was to see whether the equations could become reality, whether the fabric of space-time could really be curved on demand, whether two distant points could really be brought closer together by the massive application of energy. Einstein, it seemed, could not be cheated, but he could be manipulated. If we could not travel faster than light, it seemed that we could at least bring our destination closer.*

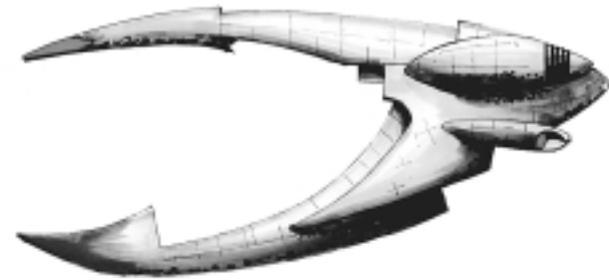
*It began with Pathfinder I. In June 2198 the unmanned vessel slipped into what inevitably became known as hyperspace and completed a journey of six light days in less than two hours. After the initial jubilation, it was realized that this was only the beginning, that the technology required to fold space-time had almost limitless potential. Pathfinder II ironed out the bugs and included the first portable hyperspace field generator, just powerful enough so that when the unmanned probe entered the Alpha Centauri system on September 21st, 2207 it could send a message that reached Earth in considerably less than the four years it would normally have taken.*



*The news that the stars were within reach caused both jubilation and trepidation on Earth. Mankind would go to the stars, but if we could do it, so could others. We were no longer safe behind our Einsteinian barrier. No one with any vision could seriously believe that we were alone in the Galaxy. Sooner or later Humanity was bound to meet another species. Would they be behind us technologically, or so far ahead that they would brush us aside just as European powers had brushed aside less developed peoples in their push to dominate the globe? Some commentators postulated that any developed species must be peaceful but the biologists quickly pointed out the flaws in this argument. Any species with enough drive and intelligence to develop interstellar flight must have displayed enough aggressiveness to dominate their home-planet in the first place. Opinion remained split on whether our first contact was likely to be with a cuddly teddy-bear or with a slaving killing machine.*

*Whoever we were likely to meet, it was considered only prudent that we be as prepared as possible. For the first time space weapons were seriously considered. When the mission to Barnard's Star was launched in 2216 it was accompanied by one of the first star destroyers in the newly formed United Nations Navy.*

*The wisdom of a "be prepared" policy became evident in 2235, when a scouting force entered the Deneb system and was immediately attacked by forces of the Saurischi, an aggressive reptilian species. Although Humanity lost that first battle, we learned enough from it to be able to win the war. Just as we were congratulating ourselves, we discovered that the Saurischi were the least of our worries. When our former enemies approached us for a treaty so that we could jointly fight a new species known only as The Hive, we knew that our problems were only just beginning. Little did we know that the Hive Wars would last for over two hundred years and bring Mankind to the brink of destruction. What had begun as a reach for the stars had become a bitter struggle for survival.*



## About REACH FOR THE STARS

REACH FOR THE STARS is an epic game of galactic exploration and conquest for up to six players. An unparalleled flexibility in gameplay allows players different gaming experiences each time they play. Build a mighty galactic empire from a single planet. Defend an existing empire from the incursions of younger, more vibrant species. Research game-winning technologies. Build starships and lead them into battle against your enemies.

REACH FOR THE STARS is legendary in the computer gaming world. Originally released in 1982, it defined the space 4X genre (explore, expand, exploit, exterminate) and in its day was one of the world's most loved strategy games. This new version was rewritten from the ground up by the original designers, Ian Trout and Roger Keating. The new Reach For The Stars contains a far greater depth of gameplay than the original, due to improvements in technology and to seventeen years of experience at the cutting edge of strategy game design.

## Quick Start

Install REACH FOR THE STARS by inserting the game disc in your CD-ROM drive, and following the on-screen instructions. If you encounter difficulty installing the game, or for more detailed instructions, see the section *Getting Started*, which begins on page 4. Once the game is installed, double-click on the REACH FOR THE STARS icon to begin. (You can also start the game from the Programs menu.) When the introductory sequence ends, the Startup Screen appears.

Select Single Player to bring up the Game Selection Screen, and click on the **Campaign Mode** button to begin a campaign game. The first three scenarios of the campaign constitute a tutorial for REACH FOR THE STARS, guiding you through planetary development, research, starship construction, colonization, war and diplomacy. In addition, tooltips are available throughout the game. Tooltips are brief descriptions of game elements that are activated by placing the mouse cursor over a screen element.

If you prefer to familiarize yourself with the game as a whole, turn to the *Game Interface* on page 6.

## GETTING STARTED

This section provides detailed information on installing and running REACH FOR THE STARS on your computer. If you encounter technical difficulties during installation or gameplay, consult the *Troubleshooting* section beginning on page 56.

## System Requirements

To play REACH FOR THE STARS, be sure your system meets the following system requirements:

- Pentium 233 MHz IBM PC or compatible
- 64 MB of RAM
- Windows® 95 or 98 - NOTE: This is a Windows 95/98 game and cannot be played on Windows® NT 4 or below. Multitasking is not recommended when playing REACH FOR THE STARS
- An **Uncompressed** hard drive with <<??>>MB free for the "Recommended" install (180 MB for minimal install)
- 4 X CD-ROM drive or faster
- A DirectX 7 compatible video adapter with 4MB of memory and a Color SVGA Monitor

This game requires that DirectX 7 or higher be installed to your hard drive. The option to install DirectX 7 appears during the game installation. After installation, you may register REACH FOR THE STARS electronically. A DirectX compatible network adapter is required for network play.

## Installing the Game

REACH FOR THE STARS must be installed on your hard drive and the game CD in your CD-ROM drive to play this game or use the Editor:

Insert the CD into the CD-ROM drive. When the pop-up window appears, click on the Install option. If you have disabled the Windows Autorun, or if it does not function, **explore** the CD and double-click on the Setup icon. Follow all on-screen prompts to complete the installation.

## Electronic Registration

**If you did not register your copy of REACH FOR THE STARS after installation and wish to do so later:** From your desktop select the Start button, click on Programs, click on the folder that contains REACH FOR THE STARS and click on Register for Free Stuff. Follow all on screen prompts.

**Note:** *If you register electronically, or via the registration card, you will be provided with a code to unlock an additional scenario.*

## Uninstalling the Game

Select the Uninstall option from the REACH FOR THE STARS program folder in the Windows Start menu, or choose Settings from the Start menu, and select Control Panel. In the Control Panel, select Add/Remove Programs, left-click on REACH FOR THE STARS, and click on the Add/Remove button. The game and all of its components are then removed from your hard drive, except for your saved games or edited scenarios.

## Electronic Documentation

The editor manual is provided on the game CD in the form of an Adobe Acrobat PDF file. If you do not already have the Adobe Acrobat Reader, you can install the software following these instructions:

Insert the game CD in your CD-ROM drive, **explore** the CD, and double-click on the Acrowin folder, located in the root directory. Double-click on the file entitled Acroread.exe and follow the on-screen prompts.

Once Acrobat Reader is installed on your system, you can read the document by opening the folder on your hard drive in which you installed the Adobe Acrobat reader, and double-clicking on the file Acroread.exe. From the File menu of Adobe Acrobat, you may open Editor.pdf, located in the root directory of your game CD.

## Starting the Game

Every time the CD-ROM drive is closed with the CD in place, the REACH FOR THE STARS Autorun program displays a menu with the options to Play the game, view the Readme, install Adobe Acrobat, install DirectX, or install DirectPlay file. REACH FOR THE STARS can also be started by opening the Start menu, selecting Programs, choosing the folder where the game was installed and clicking on the REACH FOR THE STARS program item.

For complete and specific "how to play" information, please refer to the appropriate sections of the manual. Some changes were made too late to include in this manual. Please read the Readme file in your game directory for more information.

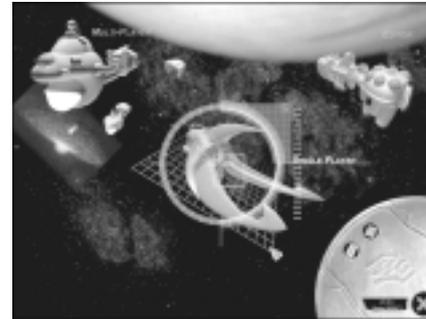
## Saving Games

REACH FOR THE STARS requires space on your hard drive for Saved Games and temporary files. Each saved game can take up to 200Kb of hard drive space.

## GAME INTERFACE

REACH FOR THE STARS is a turn-based strategy game. Game-play is separated into turns, each representing a fixed amount of time. During each turn you engage in a range of activities including exploration, colonization of new worlds, planetary development, starship construction, diplomacy and war with other players. These aspects of game play are discussed in detail further in the manual. A great deal of effort has been expended to make REACH FOR THE STARS as userfriendly as possible while still retaining an impressive depth of game-play. It is expected that you will, at times need to refer to this manual in order to better understand some of the subtleties of the game but we are confident that you will find the game interface both elegant and easy-to-use.

## The Startup Screen



When you start the game the first screen you see is the REACH FOR THE STARS Startup Screen, which has several choices. The major choices, to play the game in single player or multi-player mode, or to use the game editor, are selected using the appropriate ship icon in the main part of the screen.

### Single Player

Select the Single Player ship icon to begin a single human player game. You must select a player name or enter a new player name before proceeding to the **Game Selection Screen** by selecting the **Forward (>>)** button in the bottom right-hand corner. To select a player name simply click on the name in the list. To enter a new player name click on the + button and enter the name in the text field that appears. If for any reason you wish to remove a player name, use the - button. Selecting the **Back (<)** button goes back to the previous screen. See page 8 for more details on the game selection process.

### Multi-Player

Select the Multi-Player ship icon to host or join a multiple human player game. You are asked to select a player name or enter a new player name and you then have the option of hosting a game or joining a game created by another player. The **Host** and **Join** buttons are immediately above the words Player Selection. To host a game click on the left-hand button. To join a game click on the right-hand button. See the section beginning on page 13 for more information on multi-player games.

### Editor

Select the Editor ship icon to start the Editor, which allows you to modify or create species, tech trees, scenarios and campaigns. More information about the editor is available on page 54, and a detailed Editor manual is available on the game CD, as an Adobe Acrobat PDF file.

**Credits**

In the bottom-right of the screen is the **Game Key**, containing several buttons. The top-left button, with a series of parallel lines is the Credits button. Click here to examine the list of credits. Press any key to stop the credits and return to the Startup Screen.

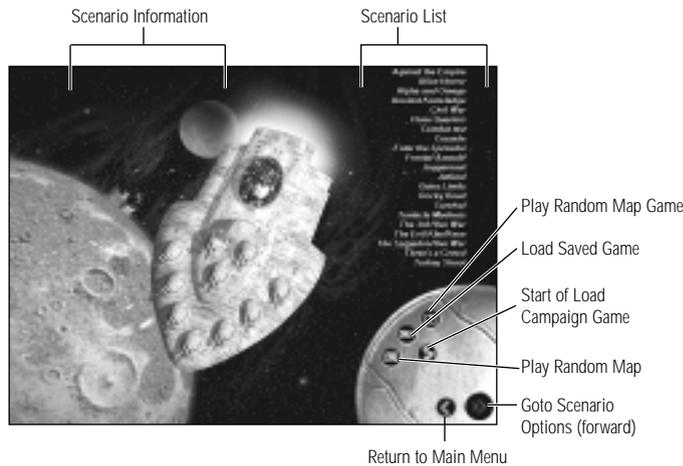
**Opening Movie**

The button at the top-right of the Game Key, with the icon of a movie camera, plays the opening movie. Press any key to stop the movie and return to the Startup Screen

**Exit**

The red **X** button at the lower right of the screen quits the game and returns you to your Windows desktop.

**The Game Selection Screen**



You can choose to play a new campaign, a new scenario or a random map or to load a saved game.

**Stand-Alone Scenarios**



There are over a twenty stand-alone scenarios included with REACH FOR THE STARS. These scenarios provide you with pre-generated maps and game parameters, such as victory conditions and number of players. Click on a scenario to view its description, and click on the Forward button to choose that scenario.

You are taken to a **Scenario Setup Screen**, where you can set game parameters. Select the side you wish to play. Click on the Forward button to begin the scenario. For a detailed description of this screen, see page 71.

**Saved Games**



This button brings up a list of saved games. Choose between Stand Alone Scenarios and REACH FOR THE STARS campaign games. Select a name and click on the Forward button in the lower right to resume that game. You can also delete your saved games from this screen.

**Random Map**



The Random Map Generator creates new maps based on the variables you provide to the computer. For a detailed description, see *The Random Map Generator* on page 12.

**Campaign**



The campaign consists of a linked series of 20 scenarios in which you, controlling all of Humanity must expand your Empire, either allying with, or defeating all other space-faring species. Victory in a scenario advances you to the next scenario in the campaign. Technology researched in one scenario is carried over to subsequent scenarios, as are starship designs and colonies. In the course of the campaign you will face a range of challenges, some requiring military solutions, others requiring research, planetary development or diplomatic skills. Click on this button to begin a new campaign and click on the Forward button to start playing. You can also view the Demo of the Tutorial from this screen.

**Exit**

The **Exit** (<) button returns you to the Startup Screen.

**The Scenario Setup Screen**



The Scenario Setup Screen allows you to choose your side and configure game options. There are three main buttons on the Setup Screen Game Key, accessing three areas: Side Selection, Diplomacy Options and Game Options. You can also set the length of the turns from this screen, simply adjust the slider above the Game Key. This is primarily a feature for multi-player games but may be used in single player games to create additional pressure. If you are playing a multi-

player game, you can activate the Chat function from this screen as well.

**Side Selection**



By default the Scenario Setup Screen allows you to choose your side. At the upper right corner is a list of all the sides in the game, and who is controlling them. Click on a side name or icon to bring up a larger version of the icon. Choose between Human or Computer control, or turn that side Off, which means that side will not be in the scenario. If you choose Computer control, select one of three difficulty levels for the AI.

### Diplomacy Options



When you select the Diplomacy Options button, a chart of all the sides in the scenario appears, giving each side's relationship to each other side. By clicking on the boxes, you can alter the starting diplomatic state of each side. For details, on *Diplomacy*, see page 33.

### Game Options



When you select the Game Options button, a list of sound, display and game-play settings appears:

**Incidental Sound:** A slider allows you to alter the volume of various game sound effects.

**Incidental Music:** A slider allows you to alter the volume of in-game music.

**Tool Tips Delay:** Sets how quickly tool tips pop up when you rest the mouse cursor over a screen element.

**Wing Animations:** If this box is checked, the various control wings which are used slide into place. If the box is not checked they simply appear.

**End Turn Indication:** This option sets the kind of notification you are given when your turn is over; in games where the turns are timed.

**Auto Design Ships:** If this box is checked, when you create a new ship class in the Ship Design screen, the most advanced weapons, shields and defense systems are automatically added to the hull you choose. You can make changes to these suggestions before saving the ship.

**Tech Tree Randomness:** Each species has a set Tech Tree, the order in which certain technologies become available. This option implements an amount of randomness into the research process.

**Tech Tree Look Ahead:** New technologies which can be researched are grouped into **Tech Eras** (see page 71 for a fuller description). Tech Tree Look Ahead determines how many Tech Eras are visible beyond the current one. For instance if the Tech Tree Look Ahead is two, then you would be able to look at the current Tech Era and the two eras following it.

**Show Details When Unresearched:** Clicking in this checkbox allows you to see full details of unresearched technologies. If the box is not checked only a basic description of the technology is available.

**Combat Sound:** A slider allows you to alter the volume of the sound effects during combat.

**Combat Music:** A slider allows you to alter the volume of the music during combat.

**Auto Resolve Combat:** In certain situations, the outcome of a battle is practically assured, and time can be saved by having the AI automatically resolve combat and give the results. This option sets the threshold for automatic resolution.

**Reserve Quality:** Up to 96 ships per side may appear on screen at any one time. Additional ships are kept in reserve and are automatically added to the combat fleet to replace losses. This option decides between holding your best ships in reserve as long as possible, or protecting your weakest ships instead.

**Critical Hit Chance:** This options alters the chance of your ships scoring critical hits, which cause more damage. The more likely critical successes are, the faster combat is resolved.

**Display Options:** This option allows you to select how much detail is shown when each combat round is resolved.

### The Random Map Generator



The random scenario generator allows for an infinite number of ever changing games. There are six areas of map and game configuration.

#### Game

In this area you can configure game Length, in turns, and the conditions for Victory. The three victory conditions are Galactic Dominion, which results when you destroy all other sides, Largest Empire, in which the winner is the side with the most

planets under their control at the end of the time limit, and Largest Population, which also is determined by the largest at the end of the time limit. The Advanced functions for this area allow you to choose the turn limit more precisely.

#### Players

Here you choose the race for the human player, and choose the number of other sides in the game. You can set the number of sides to Random. If you use the Advanced options, you can choose the race for each side, and choose their tech trees separately. You can also customize each side's identifying color and symbol.

#### Economy At Start

In this section you choose the amount of Resource Points and Science Points all the sides start with, or choose Random for it to be a random amount. With the Advanced options you are able to set the starting amounts for each side separately.

#### Map

This portion controls the size and composition of the game map. You can select an approximate height, width and number of stars, or use the Advanced options to set these parameters precisely. With the option Star Placement you are able to arrange the stars either randomly, or in clusters, which are more conducive to empire building.

### Civilization

In this area you choose the level of civilization all the sides start with, from a single colony ship to an advanced civilization with one or more colonies already. Choose Random for the degree of civilization to be a random amount. With the Advanced options you are able to set the starting levels for each side independently, including the Resource Point value of their starting fleet.

### Technology Development

This option allows you choose the Tech Level all the sides start at, or choose Random for it to be a random level. With the Advanced options you are able to set the starting level for each side separately.

## Playing a Multi-player Game

Unlike most turn-based games, the turns in REACH FOR THE STARS are played simultaneously. That is, any computer opponents and any human opponents in multi-player games play their turns at the same time as you. Once all players have finished their turns the next turn commences. This allows for exciting multi-player games without the tedium of having to wait for other players to complete their turns.

### Connection Types

There are three different ways to connect the players in a game.

IPX Connection for DirectPlay allows you to play up to six-person multi-player games over an IPX Local Area Network. Each player must be connected to the same network. Every network is different, and something in your network's structure may effect game play or prevent you from connecting. If you encounter difficulties consult your Network Administrator.

Internet TCP/IP Connection for DirectPlay allows you to play up to fourplayer multi-player games over the Internet. Alternatively you may also select this for TCP/IP games over some networks. In order to play a TCP/IP game, each player must know the host's IP address. If you are the host, your IP address is given when you choose to host a TCP/IP game.

MPlayer on MPath connects you to the MPlayer game server, where you can play up to four-person multi-player games. See the *MPlayer* section on page 14 for details.

### Hosting a Multi-player Game

To host a multi-player game, select Multi-player from the Startup Screen, and choose a name, or enter a new name. This is the name that will appear to other players in the game, identifying you. Then choose the **Host Game** button to enter the **Multi-player Game Selection Screen**. From this screen you can enter a name for your game. This name appears on a list of games available to your players, so it is better to choose something descriptive, such as Mike's Civil War: 2-player instead of simply Mike's Game if there are likely to be several games on the same network. You can also choose a Password for your game. This prevents players who do not know the password from joining.

Once you have chosen a connection method, choose a scenario from the list. You can also choose to load a previously saved multi-player game or start a random map game instead of starting a new scenario.

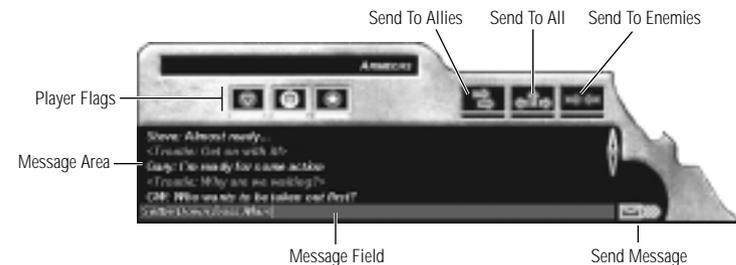
When you have chosen your game, click on the Host Game button again to proceed to the Scenario Options Screen described above on page 8, where you can set parameters, such as turn time limits, and choose which side to play. When you have chosen your side, your name appears next to it on the Options Screen. As your players join, their names appear next to their chosen side. When all your players have joined, click on the Forward button to begin the scenario.

**Note:** If you choose a scenario that allows more players than you have, then the remaining player positions are controlled by the computer.

### Joining a Multi-player Game

To join a multi-player game, select Multi-player from the Main Menu, and choose a name, or enter a new name. This is the name that will appear to other players in the game, identifying you. Then choose the **Join Game** button to enter the **Multi-player Game Selection Screen**. Choose your connection method, then click on the Search for Games button to locate any games you can join. Click Join Game again when you have highlighted the game you wish to join. If a password was used by the host, you must enter it before you can go to the Scenario Options Screen. There you can choose your desired side from the list available. When all the players have joined, the host will start the game.

### Chatting With Other Players



In multiplayer games the **Chat** button, located on the Game Key, becomes active. If another player has sent you a message the Chat button flashes. Clicking on this button opens a Chat Window at the bottom of the screen. Messages appear in the body of the window. They are prefixed by the player name and the text is in that player's side color. Scroll arrows on the side allow you to examine old messages.

Along the top of the window are up to seven colored buttons, one for each other player. Clicking a button flags that player to receive messages. To the right of the side buttons are three yellow buttons. The left button (two right facing arrows) flags messages to be sent to *all allies*. The center button (three arrows in different directions) flags messages to be sent to *all other players*. The right hand button (two arrows facing each other) flags messages to be sent to all enemy players.

To send a message simply type it into the field at the bottom of the window and click the Send (envelope) button.

### **Mplayer.com**

In addition to other multiplayer connection options, REACH FOR THE STARS can be played over the Internet game service, mplayer.com.

#### **What Is Mplayer.com?**

Mplayer.com is the #1 multiplayer game service on the Internet. Playing REACH FOR THE STARS on mplayer.com means that a player in a remote location can challenge other players in remote locations, and they'll play in real time—like they're all sitting in the same room. Mplayer.com offers hundreds of innovative features, including real-time voice-chat that lets you verbally taunt your opponents and praise your teammates. When you sign up for mplayer.com you're joining a friendly online community where you can participate in regular tournaments, contests, and special events.

#### **Pricing**

Mplayer.com is FREE—there are no charges or monthly fees to play REACH FOR THE STARS on mplayer.com.

#### **So How Do I Get Started?**

Installing mplayer.com is simple. Just follow these easy steps and you're on your way to the excitement of online multiplayer gaming!

#### ***There are several ways to install mplayer.com from WARLORDS BATTLECRY:***

- From the game CD-ROM Autorun Menu select the option to Play on mplayer.com
- From the Windows Start Menu select REACH FOR THE STARS and then the option to Play on mplayer.com
- From *inside* the Game select the option to Play on mplayer.com from the Multiplayer menu
- From the REACH FOR THE STARS Program folder click on the icon to Play on mplayer.com

#### ***This will start the mplayer.com installer which will:***

Check for mplayer.com – if you don't have it, we'll install everything you need! Just follow the easy install instructions at the prompts. During the process, you'll set up a mplayer.com account and select your mplayer.com member name and password.

#### ***After installing mplayer.com, your Web browser will launch and connect you to the mplayer.com game page:***

- Make sure your game CD-ROM is in the disk drive.
- Now click on 'Play Now' to log onto mplayer.com and head to the Lobby of your game.
- Before entering the game's Lobby, we'll automatically download any additional files you might need to make the game playable on mplayer.com.

#### ***Now you are in your game's Lobby on mplayer.com:***

- Chat with other players by typing your message and pressing Enter.
- To enter a Game Room, double-click on a green Room icon.
- If you want to create a new Game Room, click on the Create Room button.

#### ***Almost there!***

- If you enter an existing Game Room, Click on the 'Ready to Play?' button, or;
- If you create a Room, wait for players, then click on the 'Launch Game' button.

#### ***Have fun playing on mplayer.com!***

#### **Customer Support**

Mplayer.com has a staff of highly trained Technical Support representatives waiting to answer any questions or solve any problems you can throw at 'em. If you're having trouble installing mplayer.com, contact a Technical Support representative by emailing support@mplayer.com or by calling (650) 429-3100 between the hours of 3 p.m. and 10 p.m. (PST), seven days a week.

For more information about mplayer.com visit our Web site at [www.mplayer.com](http://www.mplayer.com).

#### **Technical Info**

You need the following PC configuration to install our software and play games on mplayer.com:

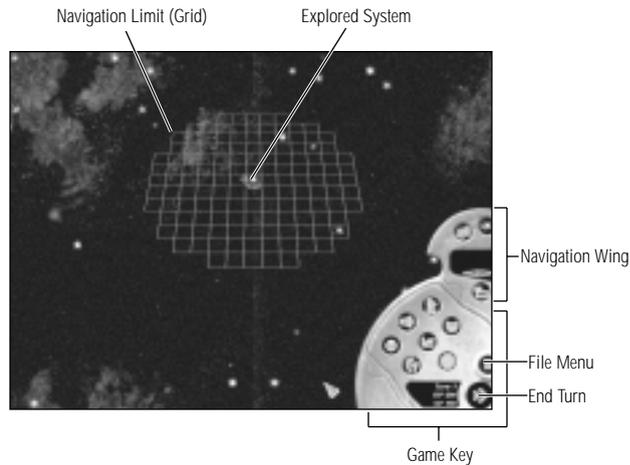
#### **System Requirements:**

- Windows 95
- Pentium processor
- 8 MB RAM (16 MB recommended)
- 14.4 KBPS or faster modem (28.8 KBPS or higher recommended)
- Internet access\*
- Web browser

\*AOL, CompuServe, and Prodigy do not yet support adequate TCP/IP connections for FAST gameplay. Low latency games, including turn-based or role playing games, however, can be played.

## The Main Screen

When you begin a game the **Main Screen** is displayed.



This is the screen where much of the gameplay takes place. The screen is separated into several distinct areas. The largest portion of the screen is occupied by the **Starmap**. The main feature of the Starmap is, of course, the stars, many of which will possess habitable planets. In the center of the Starmap pictured above is the star Sol, our sun. Once a star has been explored its name appears on the map. All stars containing a player colony show the star name in the color of the owning player: In this case the name Sol is in the player color for Humanity. If there are no colonies in the star system the name appears in white. There is also a starship icon in Humanity's color next to the star Sol. This indicates that the Humanity has one or more starships in the Sol system.

The other main feature of the Starmap is the grid centered on Sol. This shows your Navigation Limits. A Navigation Limit is a radius around all colonized star systems. You may send starships to any star within your Navigation Limit. Creating a new colony extends your Navigation Limit. You may also increase your Navigation Limit by researching better navigation technology (see *Research*, page 32).

To examine the Starmap, simply move your mouse cursor to the map edge in the direction you wish the map to scroll.

### The Game Key

In the bottom right corner of the Main Screen is the **Game Key**. It allows you to switch between the various game screens. The current screen is highlighted in yellow.



**Planet Production:** Select to access the **Planetary Production Screen**, where you can develop colonized planets. See page 29.



**Ship Design:** Select to access the **Ship Design Screen**, which allows you to design new ships. See page 34.



**R & D:** Select to access the **Research and Development Screen**, where you can research new technologies. See page 27.



**System Production:** Select to access the **System Production Screen**, which allows you to build ships, form fleets and balance your military and development spending. See page 29.



**Reports:** Select to access the **Reports Menu**, where you can select one of the various reports to view. See page 12.



**Diplomacy:** Select to access the **Diplomacy Screen**, which allows you to engage in diplomacy with other empires in the game. See page 33.



**Main Screen:** Select to return to the Main Screen.



**Chat Wing:** Only available in multi-player games. Select to access the **Chat Wing** and chat with other players in the game.



**Toggle Main Screen/Strategic Map:** Select to toggle between the Main Screen and the **Strategic Map**. The Strategic Map shows the entire map used in the current scenario or random map game, highlighting areas within your Navigation Limit, friendly colonies and alien colonies in explored systems.



**File Menu:** Select to access the **File Menu**, described in detail on page 7.

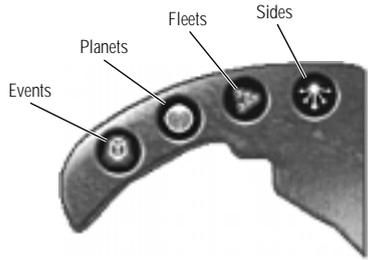


**Information Window:** This contains the current turn number and available **Resource Points** and **Science Points**. Resource Points are used to build starships and develop colonies. Science Points are used to research new technologies.



**Next Turn:** End the current turn. If timed turns are being used the time available is displayed on the **Next Turn** button.

**Reports Menu Options**



As with many strategy games, sometimes the best way to get an idea of what's going on in REACH FOR THE STARS is to look at a report. There are a number of reports in the game, all accessed through the Reports button on the Game Key. Above the Game Key in the Reports Screen is the Reports Wing, containing four buttons. Each of these buttons (with the exception of the Events button) accesses a list of reports represented by additional buttons down the right hand side of the screen. Clicking on one of these buttons accesses the report.

**Events:**

If the Events button is selected, a list of notable events such as colonization and battles are listed.

**Planets:**



The **Colonies Report** lists all current colonies in your empire along with the facilities built or queued to be built at each colony.



The **Colonizable Planets Report** shows details of any planets in explored systems which you could colonize. Planet size, atmosphere, temperature and gravity are all listed. The percentage compatibility for your species is listed, along with the maximum level of planetary facilities that can be built (level 1 through 4) should you form a colony there.



The **Enemy Presence Report** shows details of any enemy colonies present in explored systems.



The **All Known Planets Report** is identical in form to the **Colonizable Planets Report** discussed above, with the exception that all planets in explored systems are listed, not just planets able to be colonized.

**Fleets:**



The **Friendly Fleets Report** shows details on the location, composition and current movement orders of friendly fleets.



The **Enemy Fleets Report** shows details on the location, composition and current movement orders of enemy fleets.

**Sides:**



The **Species Report** lists details of the species encountered to date in the current scenario (including your own).



The **Starship Designs Report** lists all starship designs, both yours and other players', encountered to date in the current scenario.

**File Menu Commands**

The File Menu allows you access to many common game functions. Simply click on the File Menu button on the Game Key and select a command.

**Save:** Saves the game under the current name.

**Save As:** Saves the game under a new name.

**Load:** Loads a saved game.

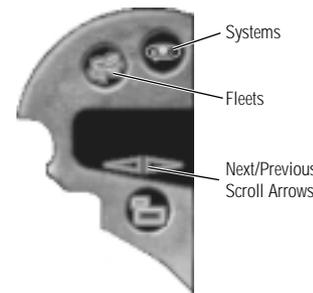
**Options:** Brings up a list of game options that may be modified.

**New Game:** Brings you to the Game Selection Screen, where you can begin a new game. Note that selecting this abandons any current games without saving.

**Minimize:** Minimizes the game.

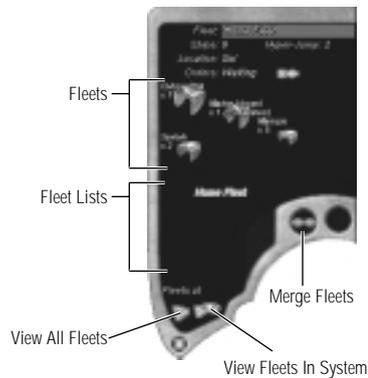
**Quit to Windows:** Exits the game without saving and returns you to the Windows desktop.

**The Navigation Wing**



The **Navigation Wing** allows you to cycle through lists of star systems containing your fleets and colonies. The two icons represent systems with fleets, and systems with colonies. Once an icon has been selected, use the **Next/Previous Scroll Arrows** to cycle through the systems in the list. As you cycle through these lists, the **System Wing** and **Fleet Wing** become active as appropriate. At the bottom of the Navigation Wing, overlapping the Game Key is a third icon, which toggles between the Main Screen and the Strategic Map.

### The Fleet Wing



Selecting a star on the Starmap that has a fleet present in the system brings down the Fleet Wing, which extends out from the top of the Game Key. It describes the fleets of starships present in star systems and in transit between star systems. The Fleet Wing also allows fleets to be split or combined and given movement orders. At the top of the Fleet Wing is a description of the currently selected fleet. Each fleet is given a default name when it is formed and this can be changed by entering a new name in the text field at the top of the Fleet Wing.

The line below the fleet name lists the number of Ships in the fleet and the Hyper-Jump capacity of the fleet. Hyperjump capacity is how far the fleet can move in a single turn (measured in grid squares). It can be improved by researching more advanced hyperjump technology (see page 32). The next two lines list the Location of the fleet, in this example, Sol, and the Orders given to that fleet. The currently selected fleet is waiting at Sol. Orders can be given to jump to another star or new ships can automatically be ordered to move to a form-up point.

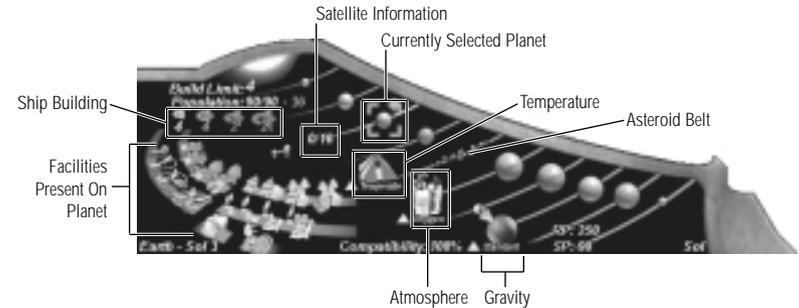
One of the ways to order fleet movement is to click on the green **Fleet Movement** icon, to the right of the Orders line. More detail on ship movement can be found on page 23. If a fleet already has orders, the red **Cancel Orders** button replaces the Fleet Movement button. Clicking on this button cancels the existing movement orders. If the fleet is part way through a move to another star then its orders cannot be cancelled and the Cancel Orders button does not appear.

In the center of the Fleet Wing are details of the actual ships in the fleet. In our example the fleet consists of one colony ship, one marine ship containing thirty battalions of marines, four Marozzo Class destroyers and two Saviolo Class cruisers. The warships have been named after two of Earth's most famous swordsmen. You can of course give new starship classes any name you like.

Below the fleet details section is a **Fleet List**, controlled by two buttons at the bottom of the Fleet Wing. Selecting the **Fleet View** button displays all known fleets in alphabetical order (including known enemy fleets). Selecting the **System View** button displays all fleets in the currently selected star system (including enemy fleets). The currently selected fleet highlighted. In this case two fleets are present in the Sol system, The Home Fleet and a second fleet, named Exploration Fleet. The Home Fleet is currently selected. To view details of the Exploration Fleet you would select that fleet from the list.

To the right of the list of fleets are two buttons. The first button, with the two converging arrows is the **Merge Fleets** button. Clicking this button merges all fleets in the currently selected star system into a single fleet. The second button, the **Planetary Colonization/Attack** button, is only active if you have a colony ship in a system containing a valid planet or a fleet in a system containing an enemy colony. Clicking this button initiates colonization by the currently selected colony ship or an attack on the enemy colony by the currently selected fleet.

### The System Wing



Selecting a star on the Starmap activates the System Wing. The System Wing extends out from the left of the Game Key and describes star systems and individual planets within those star systems. Each system can contain up to ten planets (including asteroid belts).

Each planet has three defining characteristics: temperature, atmosphere and gravity. Every species has its own environmental tolerances, which determine whether it can colonize a particular planet (see the *Species Information* section starting on page 43). For convenience, the orbital line passing through a planet has been color-coded based on whether that planet can be colonized or not. Planets may range from 100% compatible (green line), 75% (yellow line), 50% or 25% (orange line) to incompatible (gray line). If a colony is present on a planet, that species' symbol is displayed next to the planet. In the case above, Earth, the symbol for Humanity is shown next to Earth, showing that Earth is a Human colony.

When you select a planet additional data is displayed. The name of the planet is shown in the bottom left-hand corner of the wing. This is usually a combination of the star name and a number: The nearest planet to the star is number one etc. In scenarios the designer may give the planet an additional name, such as in the case shown above, Earth. The temperature, atmosphere and gravity of the planet is shown along with a symbol showing how compatible each of these are with your species. In the case of Earth in the figure above, the temperature is temperate, with an oxygen atmosphere and, not surprisingly, Earth has standard Earth gravity. Each of these is compatible with Humans and this is indicated by the green triangle next to each name.

If the temperature, atmosphere or gravity is tolerable but not ideal a yellow diamond is displayed, and if a characteristic is intolerable to that species a red inverted triangle is displayed. Below the temperature, atmosphere and gravity characteristics, the compatibility of the planet with your species is shown, in this case 100%. Each yellow diamond reduces compatibility by 25%, so a planet with two green triangles and one yellow diamond will be 75% compatible and a planet with three yellow diamonds will be 25% compatible. Each yellow diamond reduces the maximum population that a planet can house by a set amount. This amount is different for each species. A red inverted triangle, indicating an incompatible environmental characteristic, renders a planet unusable by your species. Remember that planets unusable by you may be perfect for another species with different environmental needs.

The Build Limit is a number between one and four and representing the highest level of development that can take place on that planet.

If a colony is formed on a planet, additional information is displayed in the System Wing. The Population consists of three numbers. The first two numbers, in green are actual population and maximum population. On Earth in the above example we have a population of 90, equal to the maximum. The number in red, 36 in this example, is the number of marines a hostile player would be required to garrison the planet with, should the planet be invaded. The number of marines required is based on the planet's population and the ferocity of the species.

Below Population is the ship building capacity of the colony. Earth is a highly developed colony so it has the capacity to build four destroyers, four cruisers, two dreadnoughts and two super dreadnoughts in any one given turn (assuming of course technology to build these ships has been researched and the resource points to build them are available). Below the ship building capacity is a graphic of a satellite. This shows how many defense satellites are in orbit around the planet, in this case four out of a possible maximum of 16. The **Combat Value (CV)** of the satellites is 18. Satellite Combat Value is a number between one and 20.

Below the icons representing ship building capacity are graphics representing the facilities built on the planet. Each major planetary function (industry, research, ship building, satellite construction, colonist recruitment and marine training) is represented in the game by facility graphics. The first four functions each have four development levels, represented by different graphics and the last two, colonists and marines are represented by a single graphic. In the example of Earth, we can see that all planetary functions have been fully developed. The four icons at the top left represent the four levels of industrial facility. To the right of these are the icons representing the four levels of research facility. Underneath the industrial facility icons are the icons representing the four levels of ship building facility. Underneath the research facility icons are the icons representing the four levels of satellite construction facility. Finally, below the satellite construction facility icons are the two icons representing the colonist recruitment facility and the marine training facility. Development of planetary facilities is discussed more fully on page 27.

The final item displayed in the System Wing are the Resource Points (RP) and Science Points (SP) produced by the planet. These are shown in the bottom right corner of the System Wing. In this example Earth produces 500 Resource Points and 180 Science Points per turn.

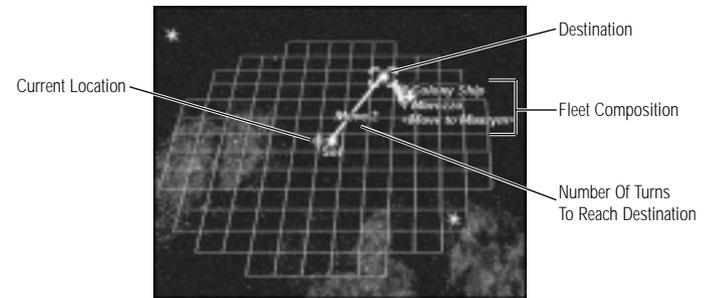
## EXPLORATION AND COLONIZATION

Once a star has been visited it is considered explored, and clicking on that star from the Main Screen activates the System Wing for that star system. This displays information about all the planets in the system.

### Movement

In order to explore and colonize star systems, you must first get there. Movement in REACH FOR THE STARS is very simple. All starships of a particular player have the same **Hyperjump Capacity**, which is how many grid squares the ships can move in a turn. If new technology is developed to increase Hyperjump Capacity all starships are considered to have the new capacity at the instant it is developed. Starships can only travel between stars, they cannot move to interstellar space. If the number of grid squares between the star you are at and the star you are moving to is less than or equal to your Hyperjump Capacity, you can move to that star in one turn. If it is more than your Hyperjump Capacity, the number of turns it will take increases accordingly. For example, a fleet with a Hyperjump Capacity of five takes two turns to travel to a star between six and ten grid squares away, three turns to travel to a star between 11 and 15 grid squares away, etc. As mentioned below, when movement is plotted you are shown how many turns the voyage will take.

### Movement Orders



Starships are given movement orders during the course of a turn and those movement orders are executed at the end of the turn. Movement orders can be changed or cancelled at any time up to the moment you click the **End Turn** button. Once you have clicked the End Turn button, movement orders cannot be rescinded. Fleets cannot be contacted in hyperspace and told to turn around. This is particularly important in planning movement between distant stars that will take multiple turns. If you send a fleet on a ten turn voyage, those ships are gone until they arrive at their destination ten turns later.

There are a number of ways to give movement orders, designed to make movement simple and flexible. Fleet selection is done in the Fleet Wing. Refer to the section starting on page 14 for a description of it. To move an entire fleet, select that fleet by double-clicking on the fleet name in the Fleet List. Then click on the destination star on the Starmap. Note that holding the mouse over a star while a fleet is selected brings up information about that star system in the System Wing. Also, a line appears between the fleet's current location and the destination, and text reports how many turns it will take the fleet to travel to that star. In the example illustrated above it will take the ships two turns to reach Maasym.

Alternatively, you can choose a destination by selecting the fleet and clicking on the Fleet Movement button. The text in the Orders line changes from Waiting to Move to and a text field appears. Enter the name of the star you wish the fleet to move to into the text field.

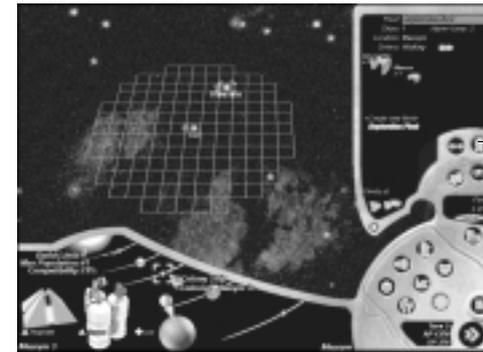
### Changing Fleet Composition

To move individual ships in a fleet, first select that fleet. Then click on the ship icons of the ships you wish to move. A single click picks up one ship, a double-click picks up all ships of that class. A shift-click picks up five ships at a time. To return ships to a fleet, simply right-click over the relevant ship icon. A single right-click returns one ship, a shift-click returns five ships and a double-right-click returns all ships of that class that have been selected. Once the required ships have been selected, clicking on the destination star orders them to travel there. This automatically creates a new fleet containing those ships. You can also create a new fleet by clicking on the text *Create New Fleet* that appears when some but not all ships in an existing fleet have been *picked up*.

To move ships between fleets present in the same star system select the ships you wish to move and click on the fleet you wish to add the ships to. Alternatively you can pick up a fleet from the Fleet List and merge it with another fleet in the list by dropping it onto that fleet. You can even merge fleets in different systems using this method. The merging fleet will move to the system containing the fleet it has been ordered to join, and then merge with it.

If the target fleet has orders to move to another star the merging fleet will move to the destination star, not the one the target fleet is currently at. It is also possible to move the target fleet while another fleet is already moving to merge with it. In this case the merging fleet will arrive at its destination, discover that the target fleet has moved on and move to the target fleet's current location or destination. Be careful because this can theoretically continue forever, with one fleet chasing another's tail.

## Planet Colonization



Planetary Colonization / Attack

Any planet with a colored orbital ring may be colonized. To colonize a planet, select a colony ship from a fleet currently in the same system as the planet and click on the planet to be colonized in the System Wing. Alternatively you can select a fleet containing colony ships, select the planet and then click on the **Planetary Colonization/Attack** button, at the bottom-right of the Fleet Wing. A third way to colonize a planet is to double-click on the planet, which selects it. Then move the mouse cursor over the star systems, until you find one with a fleet that has colony ships. Clicking on that fleet orders it to move to the planet's system and form a colony. Clicking just on a colony ship orders that colony ship to form a separate fleet which then moves to the destination planet to form a colony.

The screenshot above shows a planet in a newly explored star system about to be colonized. A single colony ship has been selected by clicking on the colony ship icon in the Fleet Wing. The cursor has then been moved over the planet to be colonized in the System Wing. Clicking on the planet orders the colony ship to found a new colony on that planet.

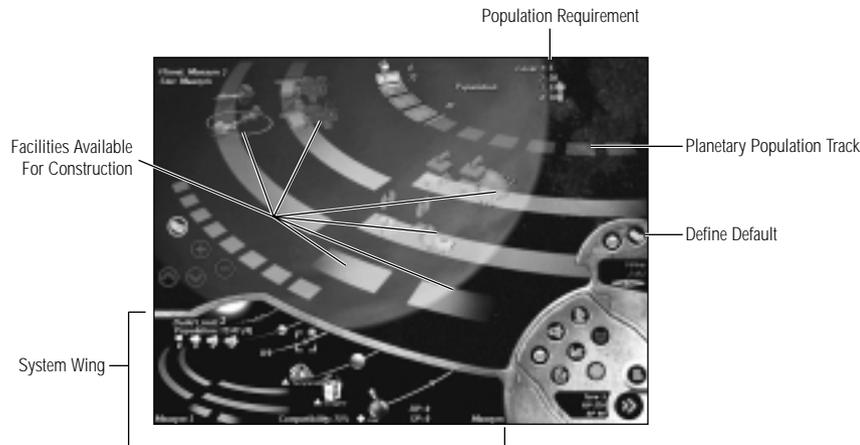
## Planet Conquest

If both your fleets and fleets belonging to your enemies are present in a star system, the **Fleet Combat Screen** appears at the start of the turn (see page 37). If all enemy fleets have been eliminated or have withdrawn, you may initiate planetary bombardment and/or invasion. To bombard and/or invade a planet select the fleet or ships you wish to use to attack and click on the enemy planet in the System Wing. Alternatively select the Planetary Attack button which initiates an attack on the enemy colony by the currently selected fleet. The mechanics of bombardment and planetary invasion are discussed on page 42.

## PLANETARY AND SYSTEM PRODUCTION

Some items in REACH FOR THE STARS are produced on individual planets. Others, such as starships are produced off planet. Once you have colonized a planet you will want to build up its facilities, industry, ship building etc. You do this from the **Planetary Production Screen**. The **System Production Screen** allows you to control starship production on one of two scales, system by system or centrally, so that all your ship building across your empire can be done with just a few mouse clicks. The screen also gives you central control over resource allocation, allowing you to divide your resources between planetary production and ship building.

### The Planetary Production Screen



From the Main Screen select the Planetary Production button from the Game Key. This opens the Planetary Production Screen. The example shows a new Human colony, Maasym 3, which is completely undeveloped. After discussing the basic features of the Planetary Production Screen this same colony will be shown a few turns later, when some development has taken place.

In the top left corner of the Planetary Production Screen is the name of the planet and the star that it orbits, in this case Maasym 3, orbiting the star Maasym. In the bottom left of the screen is the System Wing, described in detail on page 15.

The Navigation Wing is also present, but the icons in the wing differ from those in the Main Screen Navigation Wing. The top right hand button is the **Define Default** button. This is used to change the default production queue, described in detail on page 23. The button to the left of the Define Default button is the **Colony** button. Selecting the Colony button allows you to cycle through existing colonies using the Next/Previous Arrows.

### Colony Information

The main body of the Planetary Production Screen contains information about the colony. If defense satellites are present they are shown in the top right corner of the screen. Since this planet has just been colonized, it hasn't had time to produce any satellites.

Also in the top right of the screen are four yellow numbers, with the icons used for colonists next to the fourth number and that used for marines adjacent to the third number. These numbers represent the population required to build facilities of each level. In this case level one facilities can be built with a population of five, level two with a population of twenty, level three with a population of 55 and level four with a population of 70. The colonist icon is next to the number for level four facilities, indicating that colonist recruiting facilities can be built on any planet capable of sustaining level four facilities. Marine training facilities can be built at on any planet which can construct level three facilities. These levels differ from species to species.

### Planetary Population

Below and to the left of the facility level numbers is an arc. This is the **Planetary Population Track**. For each ten population a complete figure is shown. In this case the population is 12, so one and a quarter figures are displayed. There are two numbers shown just above the Planetary Population Track. The first, in red, is the size of the garrison required by any invading species, in this case, four. The second number, in orange, is the current population, here 12. The length of the queue shows the maximum population, in this case 41. Note that a population of 41 means that the maximum facility level you will be able to build on this planet is two. Maximum population is determined by planet size and by species compatibility. Maasym 3 is a small planet which is 75% compatible for Humans. Each species in REACH FOR THE STARS has maximum populations defined for different sized planets. Also defined for each species are the reductions in maximum population for less than 100% compatible planets. These details can be found in the *Species Information* section beginning on page 43.

### Facilities Types

Below the Planetary Population Track are the facilities that can be built on the planet. If the population is high enough and sufficient Resource Points are available to pay for it, *one facility is built each turn, until all possible facilities have been built*. Resource Points (RPs) are the basic currency of the game, and are used in two areas, building Planetary Facilities and constructing starships.

No facilities have currently been built so all their graphics have been grayed out. Clicking on any of these facilities replaces the System Wing with a graphic of the facility and a brief description of its function and rating. Each species' facilities are different so it is recommended that you examine the ratings in particular whenever you play a new species.

Facilities are a simple and graphically appealing way of measuring planetary development in several key areas. These areas are industry, research, ship building, defense, colonist recruitment and marine training.

### Industry

Industry is a measure of the economy of the colony. Industry produces RPs and each level of **Industrial Facility** increases the number of RPs produced by the colony. Industry is normally the first area to be developed on a new colony, because without industry you cannot afford anything else.

### Research

Research is a measure of the effort put into scientific research and its technological spinoffs, such as that new laser you need to toast your opponents' ships. **Research Facilities** produce Science Points (SPs) and each level of Research Facility increases the number of SPs produced by the colony. SPs are used to research new technologies.

### Ship Building

Starships are produced in large orbital factories. Each level of **Ship Building Facility** increases the number of ships that can be built in orbit around the colony.

### Defense

The Defense industry, constructing orbital defense satellites is represented by **Defense Facilities**. Once in place, Defense Facilities automatically build defense satellites at no expense. Each level of Defense Facility increases the maximum number of Defense satellites and their effectiveness.

### Colonist Recruitment

A **Colonist Recruitment Facility** allows colony ships to be built. The function of colony ships is to colonize compatible planets, expanding your empire.

### Marine Training

A **Marine Training Facility** allows marine vessels to be built. The function of marine vessels is to invade and capture enemy colonies.

### The Production Queue

Below the facility graphics is an arc of boxes that is currently empty. This is the **Production Queue**. To build facilities they must be placed in the Production Queue. The next facility to be built appears at the top of the queue, with subsequent facilities further down the queue. The five buttons between the Production Queue and the System Wing are to manipulate the Production Queue. The top button is the **Default Queue** button. Clicking this button places all available facilities in the Production Queue in the default order defined by you. This order is defined using the Define Default button on the Navigation Wing (*see below*).

Below the Default Queue button are four more buttons. The + button adds the currently selected facility to the Production Queue. The - button removes the currently selected facility from the Production Queue. If a facility in the Production Queue is selected it can be moved up or down the Production Queue using the **up** and **down** arrow buttons respectively.

### The Default Production Queue



Clicking the Define Default button on the Navigation Wing brings up the **Default Production Queue Screen** shown above. This is in many ways similar to the Planetary Production Screen. Clicking on a facility places that facility in the Default Production Queue. Clicking on a higher level facility will automatically place that facility as well as any lower level facilities that are prerequisites to building that facility. For instance, clicking on Level Four Industrial Facility places Level One Industrial Facility in the first available slot in the queue, followed by Levels Two, Three and Four. Once a facility has been included in the Default Production Queue it may be moved up or down the queue by selecting the facility and using the Up and Down arrow buttons to the left of the queue. Immediately above these arrow buttons is the Auto-Fill Queue checkbox. Checking this box automatically assigns the Default Production Queue to any new colony. The default queue order and the auto-fill setting is saved and used in all subsequent games. If you make changes to the Default Queue, you can implement them for all you colonies by clicking the Change to New Default Queue button.

### Planetary Production in Action

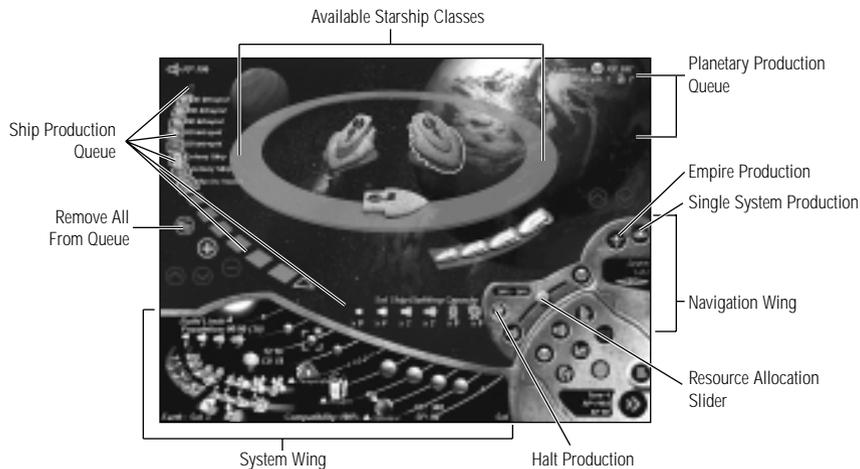


The graphic above shows the Planetary Production Screen for Maasym 3, after a few turns of development. Compare this screen to the one on page 20 to see the differences. Starting from the top:

- Maasym 3 now has one defense satellite out of a possible maximum of five. The combat value (CV) of the solitary satellite is six. Once Defense Satellite Construction Facilities have been built, satellites will be built automatically at no expense. This will continue until the maximum number of satellites has been reached.
- The two numbers on the population track have changed. The red number 9 indicates that an invading player would need to garrison Maasym 3 with 9 marines. The orange number 25 shows the current population.
- Four facility graphics are shown in their fully rendered state, indicating that they have been constructed. Two of the remaining facilities are shaded in green. This indicates that they have been added to the Production Queue. There are two facilities, Level Two Shipyard and Level Two Defense which are grayed out, indicating that these facilities have not been added to the Production Queue.
- In the Production Queue, green-shaded facility icons fill most of the boxes, corresponding to the green shaded facility graphics above. Note that there are two empty boxes on the Production Queue that could be filled with the two facilities that are currently grayed out.

Note that in the System Wing most of this information is also shown. We can see the population, the required garrison, the number of satellites and the facilities that have been constructed.

## The System Production Screen



The System Production Screen is again dominated by a central ring. This ring shows the starship classes that can be built. There are four buttons with different starship icons. These icons represent, from left to right, destroyers, cruisers, dreadnoughts and super dreadnoughts. Clicking on each of these buttons displays the ship classes of that size on the central ring (though if there are less than 14 ship classes, all are displayed on the ring at once). In the center of the ring are colony ship and marine ship graphics (if the species can build them).

To the left of the ring is the **Ship Production Queue**. Items to be built are placed in the queue and are built in the order they appear in the queue. There are five buttons that control this process, which appear to the left of the queue. The + button adds one ship of the selected type into the queue. The - button removes the selected ship from the queue. A ship may be moved up or down the queue using the **up** and **down** arrow buttons. The fifth button, with a partial arc on it, is the **Remove All From Queue** button. The number of items in the Ship Production Queue may exceed the number of boxes displayed. If this is the case, it is possible to scroll up and down the queue using the arrow buttons at either end.

The Ship Building Capacity of the currently selected system is shown at the bottom end of the Ship Production Queue. In this screen shot the capacity is zero destroyers, three cruisers and two of each other class of ship, reflecting that the entire system capacity of four destroyers is already in the queue.

The Navigation Wing can be seen above the Game Key. The wing differs from the Navigation Wing in other screens but still allows navigation between different parts of your empire. There are two icons in this version of the wing, the System button (resembling a star system) and the Empire button (a central star with radiating spokes to other stars). The System button is currently active, which means you are looking at production only for one star system, in this case the well-established Sol system. Text in the Navigation Wing tells you that this is system number one out of a total of two systems. The left and right scrolling arrows allow you to scroll between all systems in your empire. The Sol system is shown in the system Wing to the left of the Game Key. For a more detailed description of the System Wing consult the section on page 15. If the Empire button is selected, the screen changes somewhat and these changes are discussed on page 31.

### Allocating Resource Points

Nestled between the Navigation Wing and the Game Key is the **Resource Allocation Slider**. This slider allows you to allocate Resource Points between planetary production, represented by a planet icon, and ship building, represented by a starship. If enough RPs are available to build all queued items the slider is inactive. If not enough RPs are available, the slider becomes active and can be moved to determine on which items the RPs will be spent.

The slider can be dragged or the allocation of RPs can be changed 1% at a time by clicking on either the starship icon or the planet icon. Note that the total number of RPs allocated to ship building is shown at the extreme top-left of the screen and the total number of RPs allocated to planetary production is shown at the extreme top-right of the screen. If one of the queued starships cannot be built due to lack of RP it is shown in red on the queue. If a ship cannot be built because it exceeds the capacity of the available shipyards, it is shown in blue on the queue.

Also on the slider wing is the Halt Production button, the spanner with the slash through it. Clicking this button halts all production until it is clicked again. If the button is green, production is normal. If its is red, production has been halted.

At the top-right of the screen, below the number of RPs allocated to Planetary Production is a list of the facilities at the top of each Planetary Production Queue. In this example there is only one colony producing facilities and therefore only one facility in the list, a Level Two Industrial Facility being built on the colony Maasym 3. Note that the symbols used to represent the different facility types in this list are the same as those in the Planetary Production Queue.

As stated in the section on Planetary Production (see page 20) if enough RPs are available, one facility is built per colony, per turn. Commonly, not enough RPs are available and not all possible facilities are built every turn. Therefore this list of facilities, each of which is at the head of the Planetary Production Queue on its respective planet is in fact another queue. The facilities to be built are automatically listed in order of colonization. Facilities on the homeworld are listed first, followed by the first colony, then the second etc. The available RPs are assigned to the first facility in the queue, with any remaining RPs being used for the second and subsequent facilities. Facilities to be built this turn are displayed in green. If there are not enough RPs to build all facilities, those that will not be built this turn are displayed in red. If the population of a colony is insufficient for a facility to be built that facility is displayed in blue. Any facility may be moved up or down the queue using the up and down arrow buttons immediately above the Navigation Wing.

### The Empire Production Screen



Selecting the Empire button from the Navigation Wing accesses a slightly different version of the System Production Screen, the **Empire Production Screen**, which allows you to do ship building on an empire wide scale in just a few mouse clicks. One of the most obvious differences is that the System Wing is not displayed on this screen. Ship building capacity is for the entire empire. Ships built using pooled empire resources are flagged to a form-up point, a star system you designate. This system is named

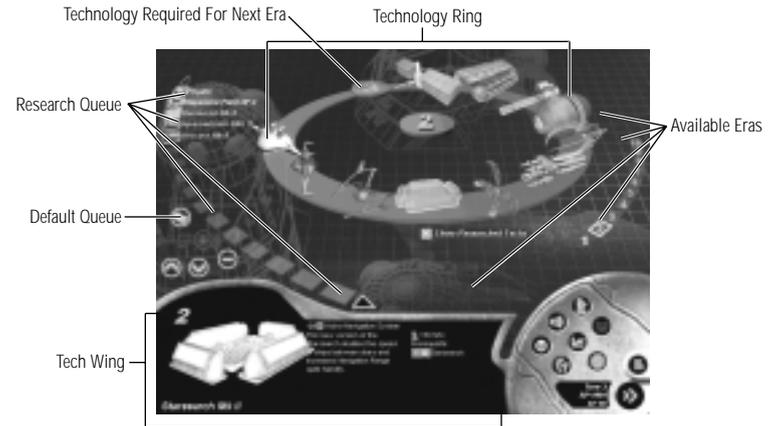
immediately above the Ship Building Capacity. The circular button above the Fleet name accesses the strategic map, allowing for selection of the fleet form-up point. Empire wide ship building is designed to streamline the end game in REACH FOR THE STARS when you may have dozens of colonies all producing multiple numbers of ships per turn.

It is possible to merge system and empire level ship production. If you set the system production for a specific system using the System Production Screen, that system gains a special status. When you access the Empire Production Screen, at the top of the production queue an icon represents that system. It is possible to micromanage as many individual systems as you want and do the rest of your ship building in the Empire Production Screen. It is presumed that any system you chose to micromanage must have greater priority than systems you didn't, so production in these systems is placed at the top of the queue in the Empire Production Screen. Once all the ships in an individual system's queue have been built, that system loses its priority status.

## RESEARCH AND DEVELOPMENT

Technology never stands still... and it certainly doesn't in REACH FOR THE STARS.

### The Research and Development Screen



One of the key elements of any game of REACH FOR THE STARS is researching new technology. This is done through the **Research and Development Screen**, shown above. Deciding what to research and even how much research to do is one of the most important decisions in any game. To access the Research and Development Screen click on that button (the microscope) on the Game Key.

Each species in REACH FOR THE STARS has its own **Tech Tree** with unique technologies. The technologies in each Tech Tree have been divided into **Eras**. An individual Tech Tree may have up to twenty eras, though the Tech Trees of most species included in the game have ten. An Era can contain up to thirteen distinct technologies as well as a move to the next era technology. It is not necessary to research all the technologies in an Era before moving to the next, but many technologies will be prerequisites for technologies in subsequent Eras.

The centerpiece of the Research and Development Screen is the ring showing all technologies in the current Era. The Era number is displayed in the center of the ring, in this case Era 2. To the right of the ring is an arc of available Eras. To view another Era Ring, click on one of the numbers in the arc. Note that each Era number is displayed on a colored base. The current Era number is displayed on a red base. Past and future Era numbers are displayed on gray bases. Eras that are not currently selectable are shown with gray numbers.

Clicking on a technology on the ring activates the **Tech Wing** in the bottom left of the screen. This displays a graphic and description of the technology. At the left of the wing is the Era number above a graphic of the technology. Underneath this graphic is the technology name, in the example above the Astro-Navigation System Starsearch Mk II. To the right of the graphic is a description of the technology. The top line gives the Class of technology, in this case Astro-Navigation System. Each technology has a Description of its game effect. Before an item is researched, only a broad summary of its effect is shown. After it is researched, the game statistics can be accessed by selecting the researched technology.

At the right of the Tech Wing is the cost of researching the technology in Science Points (SPs), any prerequisite technology and any technologies enabled by researching this technology. A prerequisite is a technology that must be researched in order for another technology to be available. You can't research a car without first researching the wheel.

Above the Tech Wing and to the left of the central ring are a set of five buttons and the **Research Queue**, much like the Production Queue in the Planetary Production Screen. Technologies in the Research Queue are researched in the order they appear in the queue. Note that, unlike the Production Queue, the number of items that may be placed in the queue far outnumbers the slots available. Therefore arrow buttons have been placed at either end of the queue to scroll it up or down.

To place a technology in the queue, click on that technology on the Era Ring and click the + button. The technology appears in the first available spot in the queue. To move the technology up or down the queue, use the **up** or **down** button respectively. To remove a technology from the queue, select that technology in the queue and click the - button. Note that placing a technology in the queue automatically places any prerequisites not already in the queue or researched, in the queue before it.

The topmost of the five buttons is the **Default Queue** button, which adds all technologies in the current Era to the Research Queue.

## Technology Class Descriptions

There are eleven different classes of technology in REACH FOR THE STARS. When a technology of a particular class is described, there are certain standard pieces of information that are given.

**Hull Types** have a class size, which may be destroyer, cruiser, dreadnought or super dreadnought, a number of shields, a number of weapon mounts (spots where weapons may be placed on the hull) and a RP cost.



**Shield Generators** list the ship class size(s) the shield generator can be employed on, the type of shield, the Deflection (how good the shield is at deflecting incoming beam weapon attacks) and the RP cost to fit to a starship.



**Propulsion Systems** list the class size(s) the system can be attached to, the performance (see the section on *Combat* for more details of how the performance of your propulsion systems effects range and withdrawals in space battles) and a RP cost.

**Astro-Navigation** lists the Hyperjump rating (how many grid squares you can jump in a single turn) and the Navigation Limit (the maximum distance in grid squares you can jump from one of your colonies).



**Electronic Counter Measures** lists the class size(s) the system can be attached to, the ECM rating (the higher the rating the higher the chance of attacking missiles being deflected by ECM) and a RP cost.



**Offensive Projectiles** list the type (guided missile, torpedo, active mine, attack drone or stand-off energy missiles), the class size(s) they can be mounted on, a planetary attack value (used for planetary bombardment), penetration values at short/medium/long ranges and a RP cost.



**Defensive Projectiles** list type (proximity missile, seeker missile or defense drone), the class size(s) they can be mounted on, interception values at short/medium/long ranges and a RP cost.



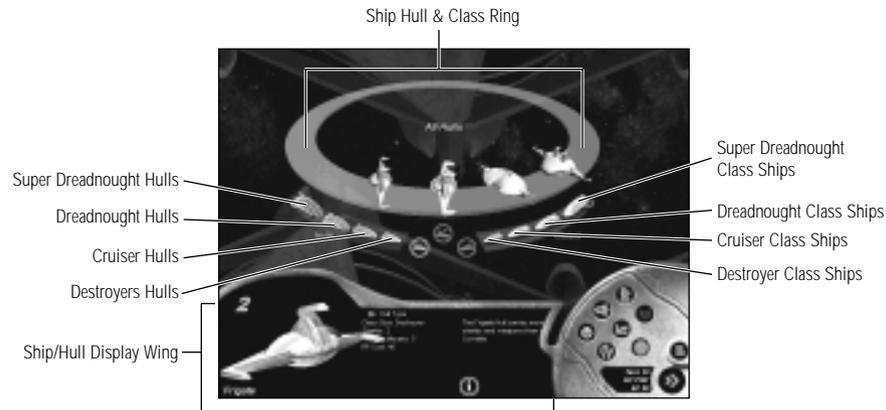
**Beam Weapons** list the type (laser beams, particle beams and disrupter rays), the class size(s) they can be mounted on, a planetary attack value (used for planetary bombardment), penetration values at short/medium/long ranges and a RP cost.

**Military and Colony** technologies list the specific improvements they make in plain English. They affect various elements of the game, usually improving the performance of existing technologies or facilities.

## SHIP DESIGN

In order to explore the galaxy and to defend yourself against hostile aliens you must build starships. Because you are constantly researching new technology you need to design new ships which use that technology.

### The Ship Design Screen



Designing ships is done using the Ship Design Screen, accessed by clicking on the Ship Design button (the rocket) on the Game Key. The Ship Design Screen is dominated by a central ring where the hulls which have been researched appear. It is upon these hulls that other technologies can be placed to create a starship. Below the ring are eleven buttons containing starship icons.

The four “wire frame” buttons on the left are for **hulls**. Clicking on each button displays all researched hulls of a particular size. From left to right the buttons are for Super Dreadnought hulls, Dreadnought hulls, Cruiser hulls and finally Destroyer hulls. Destroyers are the smallest hull type and Super Dreadnoughts are the largest. If there are fourteen or less hulls of all sizes researched, they are all shown on a single ring, and the separate hull buttons are grayed out.

The three central buttons are clockwise from the left: **Create New Class** which allows you to create a new ship class based on the selected hull, **Retire Class** which sends the selected ship class into retirement and **Modify Existing Class** which allows you to design an improved ship class based on the selected class.

The four “solid ship” buttons on the right are for existing **classes**. Clicking on each button displays all existing ship classes of a particular size. From left to right the buttons are for Destroyer classes, Cruiser classes, Dreadnought classes and Super Dreadnought classes. If there are fourteen or less ship classes of all sizes researched, they are all shown on a single ring, and the separate class buttons are grayed out.

Clicking on any of the four hull buttons displays the relevant hulls on the ring. Clicking on one of these hulls activates the **Hull Display Wing** in the bottom left of the screen. This wing displays information about the selected hull. In the above screenshot a Frigate hull has been selected. The hull is shown in the Hull Display Wing along with the class size of the hull (in this case Destroyer), the number of shields the hull can mount, the number of weapons it can mount and the number of Resource Points (RPs) the hull costs to build. Also displayed are the name of the hull and the Technology Era it is from.

### Creating and Modifying an Existing Ship Class

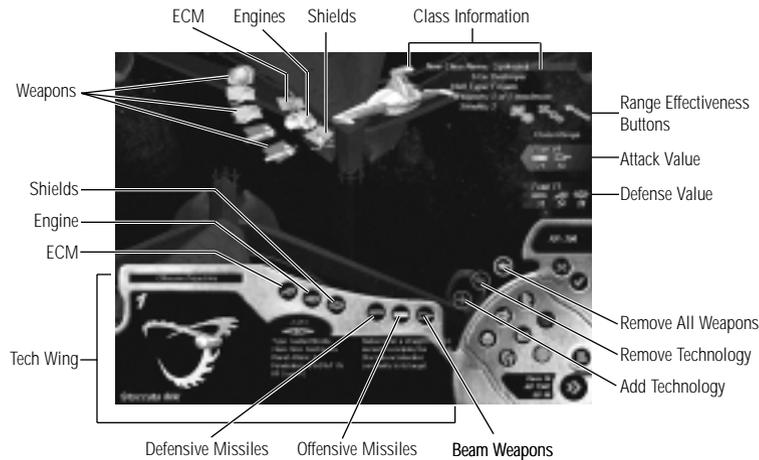
Clicking on one of the four buttons displays the relevant ship classes on the ring. Clicking on one of these ship classes activates the **Ship Display Wing**, which is almost identical to the Hull Display Wing. The ship class is shown in the Ship Display Wing. On the right side of the wing, information is shown about the ship class. The hull type the class is based on is shown, followed by the cost in Resource Points of building a ship. Underneath this are listed all the technologies included in the ship class. All ship classes must have shields, engines, an interstellar drive and an electronic counter measure system. In addition, practically all ships will be equipped with some kind of weapons. All these technologies are listed, along with their rating. Most of these ratings are used in combat and will be discussed in that section of the manual ([page 28](#)).

A new ship class can either be an entirely new class based on a hull, or a modified class based on an existing ship class. To create an entirely new ship class, click on one of the *hull* buttons and select one of the hulls displayed on the ring. The Create New Class button in the center of the screen will become active. Clicking on it accesses the **Class Design Screen** ([see below](#)).

To create a modified class based on an existing ship class, click on one of the *class* buttons and select one of the ship classes displayed on the ring. The Modify Existing Class button will become active. Clicking on it also accesses the Class Design Screen.

Selecting an existing ship class activates the Retire Class button as well. Clicking on this button removes the selected ship class. This is done to remove obsolete ship classes that you no longer have any intention of building. Note that a maximum of 14 ship classes of each hull size are allowable. This should be more than sufficient if obsolete ship classes are retired.

## The Class Design Screen



The Class Design Screen is where the nuts and bolts decisions of ship design are made. In the case illustrated above, the new Spikester Class destroyer is being built on the Frigate hull. The name of the new class can be entered in the text field in the top right of the screen. Additional information about the ship class is displayed below the class name.

In the center top of the Class Design Screen are two arcs of boxes. Each of these boxes is a slot that can contain a weapon or other technology. The top three boxes are for the electronic counter measures (ECM), the engines and the shields. The five boxes in the second arc are slots for weapons. Different hulls will have different numbers of weapon slots, with a maximum of 42. If the hull has large numbers of weapon slots these may be displayed in multiple arcs.

The technologies that may be placed on a new ship class are displayed in the Technology Wing at the bottom left of the screen. Six types of technology are available to be placed on starships, represented by the six buttons along the top of the Technology Wing. From left to right these technology types are: ECM, engines, shields, defensive missiles, offensive missiles and beam weapons. Each ship class also has an interstellar jump drive. This is not shown because the most effective jump drive is automatically installed in every ship.

Every ship must be equipped with an ECM system, an engine and a shield generator, and practically every ship is equipped with at least some weapons. Clicking on the buttons for any of these technology types displays those technologies in the Technology Wing. The name of the technology type is shown in the top-left of the wing. Underneath this is a picture of the technology, its name and Technology Era. To the right of this is information about the technology. Normally there is more than one technology of a particular type. Forward and back arrows allow you to scroll through the list of technologies. Note that only those technologies that can be used on the relevant hull size are displayed.

In the case illustrated above, the Offensive Projectiles button has been selected. The projectile being displayed is a Stoccata Mk II guided missile from Tech Era Two. It is missile three out of a total of three available missiles that can be mounted on a destroyer. It can be used on any ship of destroyer size or greater, has a planet attack value of one, a penetration value of 5% at close and medium range and 11% at range. For details on how weapon penetration values work, see *How Weapons Work* on page 49. Finally, the missile costs 1ORPs to add to a ship class.

To add technologies to a ship class, there are three buttons immediately above the Game Key. The + button adds the currently selected technology to the ship class. The - button removes all weapons from the ship class. This is useful in modifying existing ship classes where often all you wish to do is to replace old weapons with newer ones. Note that in the case of a new ship class the most effective ECM, engine and shield generator are chosen automatically, although these can be changed manually.

On the right side of the Class Design Screen information about the effectiveness of the ship class is displayed. The **Range Effectiveness** buttons are the three circular icons containing arrows pointing up and to the left. Clicking on these buttons shows the effectiveness of the ship class at close, medium and long range (for more information on ranges and their effects see the section on *Combat*, page 37). Below the buttons are a red bar representing attack value and a blue bar representing defense value. The red bar displays the total attack value and the attack values of missiles and beam weapons at the selected range. The blue bar shows the total defense value and the defense values of defensive missiles, ECM and shields at the selected range. Note that values may be higher than expected by adding weapon values together, due to the effect of military improvement technologies and rate of fire (see *Combat*, page 37).

Below the blue defense bar is the Purchasing Wing. This wing displays the cost of building a single ship of this class in RPs. It also contains a green **checkmark** button to accept the new ship class and a red **x** button to cancel the new class.

## DIPLOMACY

Diplomacy in Reach For The Stars governs the type of interaction possible between players.

### The Diplomacy Screen



A grid showing the diplomatic state between every Empire dominates the Diplomacy Screen. Each diplomatic state (described below) is represented by its own distinctive symbol. **War** is opposing red arrows, **Neutrality** is gray arrows moving in opposite directions, **Alliance** is green arrows moving in the same direction and **Unity** is linked blue arrows.

A graphic of your species is shown in the top left of the screen along

with your side symbol, trade rating and the number of RPs you gained from trade in the last turn. If one of the other empires is selected, a graphic of that species is shown in the top right of the screen. Next to the species graphic are the appropriate side symbol, trade rating and the number of RPs that side gained from trade with you in the last turn. In the top center of the screen the diplomatic state between you and the selected empire is shown, along with the number of RPs you gained from trading with that empire in the last turn.

There are two buttons immediately below the grid. The left button brings up a more detailed Diplomatic Screen, dealing only with diplomatic relations between you and other empires. On this screen your diplomatic state with each other empire is shown, along with any embargoes you currently have against each empire, embargoes they have against you, your current proposals toward them and their current proposals toward you. The right button returns you to the original Diplomacy Screen.

On either diplomatic screen three wings can be accessed via the three buttons on the Navigation Wing. The leftmost of the three buttons brings up the Embargo Wing at the bottom of the screen. If another empire is selected, any embargoes you have against that empire are shown in the Now line on the Embargo Wing. Below this are the embargoes planned for next turn. By default these are the same as for this turn but they can be changed. In the screenshot shown above there is currently a Navigation Embargo against the Arimechs, but no Trade Embargo. In the next turn, the Human player is lifting the Navigation Embargo but imposing a Trade Embargo.

The middle button on the Navigation Wing brings up the wing showing your proposals. If another empire is selected, the current diplomatic state between you is displayed, as are the possible states that you may propose. Any proposal made on this wing is automatically delivered to the relevant empire at the end of the turn.

A proposal to move to a more hostile state cannot be refused, and the change in diplomatic state comes into effect the turn after you make the proposal. A proposal to move to a less hostile state must be accepted by the empire to whom you are making the proposal. The proposal will be delivered to the empire the turn after you make it, and their answer will be returned to you in the turn following that. To make a proposal more palatable to another empire you can add a bribe. You can bribe other empires with RPs or SPs (between 25% and 100% of this turn's production), a planet (which must be useable by that empire) or a technology (you are limited to offering the best technology of each tech type, e.g. your best shield generator or your best offensive missile. Hull types and improvements cannot be offered).

The third button on the Navigation Wing brings up the wing showing proposals made to you by the selected empire. You are limited to either accepting these proposals or rejecting them. If you have a counterproposal in place to the selected empire at the time their proposal arrives, you are considered to have rejected their offer. If the proposal offers you a planet or a technology, these are displayed and full information about the planet or technology can be gained by clicking on them.

### Diplomatic States

Your empire occupies one of four diplomatic states with each other player who has been encountered. This means that ships belonging to one player have entered a system containing ships and/or colonies of the other player. Players who have not encountered each other do not occupy a diplomatic state, just as Earth (at the beginning of the game) does not have diplomatic communication with any alien species, because it is not aware that any of them exist. Trade is a by-product of some diplomatic states. Following are descriptions of these four states.

#### War



War is the default diplomatic state. Two players at war cannot enter each other's systems without combat occurring. There is no trade between players at war. Note that because War is the default state, the first encounter between two species initiates a combat. This does not mean that the species have to fight, simply that they will enter the Combat Screen (*see page 44*). Once there, if both sides choose to withdraw, battle will not take place. However, if one player gets an itchy trigger finger..

#### Neutrality



In a state of neutrality two player's starships can enter each other's colonized systems without starting a war. They may also trade if possible (*see page 36*). You can move ships into another player's space either to colonize planets in that system (two species of different metabolisms could share systems) or to position yourself to declare war. You can of course move through another neutral player's space, appearing at a star beyond them if your navigation range allows such a long journey. If two players' diplomatic state is neutrality, war can be declared at any time by either player. War declared on one turn comes into effect on the next turn. Of course you can launch your invasion fleet before war is declared, timing the declaration to take effect the turn they arrive.

## Alliance



Allies can enter each other's space freely, can trade with each other and cannot go to war unless the alliance is broken. In addition allies are able to use each other's Navigation Limits. An alliance is unbreakable except for special circumstances. If either player in an alliance makes an alliance, forms unity (*see below*) or declares war with a third party then the option is given to the other player in the alliance to dissolve it. For instance Humanity has an alliance with the Trogarchs. Humanity then allies with the Saurischi giving the Trogarchs the opportunity to dissolve the alliance with Humanity. If you are presented with an option to break an alliance, you must act immediately, either breaking the alliance or leaving it intact. If an alliance is dissolved, a state of neutrality exists between the two former allies.

Individual scenarios may also contain *let-out clauses*, allowing alliances to be broken for reasons other than those detailed above. Some possible *let-out clause* events include: a player entering a certain system, developing a certain technology, bombarding a particular planet, and attacking or destroying a particular species.

## Unity



Unity is exactly like an alliance except that it cannot be broken under any circumstances. These are alliances so strong that your people would not follow an order to break them.

## Changing Diplomatic States

Diplomatic states are changed in the Diplomacy Screen. Select the desired empire, then click on the center button in the navigation wing to display your current diplomatic state with that empire. Click on the desired state to propose that change at the end of the current turn.

From a state of war a player may offer neutrality, alliance or unity to another player. That player sends a response in the affirmative or negative in their next turn.

From a state of neutrality you may declare war. The declaration of war is made on one turn, and is received the following turn at which point a state of war exists. It is not possible to refuse a declaration of war. Also from neutrality you may offer an alliance or unity which is agreed to or refused by the player you offer it to.

From a state of alliance you are given the opportunity to dissolve the alliance whenever your ally declares war on, or forms an alliance or unity with a third party. If an alliance is dissolved, the two former allies occupy a state of neutrality. You may offer unity to an ally and they either agree or refuse.

From a state of unity there can be no change.

## Benefits of Diplomacy

There are benefits to maintaining good relations with other empires, besides being free from enemy attack.

## Trade

Trade exists between players who are neutral, allied or united—unless a **Trade Embargo** is in place (see below). Each species has a Base Trading Percentage which may be modified upwards by Colony Improvements. Trade is calculated by multiplying this Base Trading Percentage by the number of RPs of non-starship expenditure of the trading partner. The resultant number of RPs is accrued to your total at the start of the next turn. This is done with each trading partner. Your trading partners will similarly accrue RPs by trading with you. Trade between two neutral players is halved. Note that the RPs accrued through trade are in addition to any generated by planetary industry. They are not subtracted from the trading partner's total, they are *generated* by the act of trading. Trade generates wealth because each trader exchanges something he values less to gain something he values more.

As an example, Humanity is trading with the Saurischi and the Lsls. Humanity has a Base Trading Percentage of 5%. The Saurischi have a Base Trading Percentage of 3% and the Lsls have a Base Trading Percentage of 7%. Humanity and the Saurischi are allied, Humanity and the Lsls are neutral and the Saurischi and the Lsls are at war. Humanity expends 100ORPs on items other than starships. The Saurischi expend 500RPs and the Lsls expend 200ORP.

Humanity gains 5% of Saurischi expenditure ( $.05 \times 500 = 25\text{RP}$ ) and 2.5% of Lsls expenditure (trading halved for neutrals) ( $.025 \times 2000 = 50\text{RP}$ ). So Humanity gains a total 75RPs through trade. The Saurischi gain 3% of Human expenditure ( $.03 \times 1000 = 30\text{RP}$ ), while the Lsls gain 3.5% (half of seven) of Human expenditure ( $.035 \times 1000 = 35\text{RP}$ ).

## Sharing Navigation Range

One of the benefits of an alliance or a unity pact is the ability for players to use each other's Navigation Limits. When you are allied or at unity with one or more other players, any area outside your Navigation Limits but within those of your allies' is shown on the starmap as a yellow grid. You may send starships to stars within these areas as if they were inside your own Navigation Limits. Allied players can embargo the use of their Navigation Limits (*see below*).

## Trade and Navigation Embargoes

Players may choose to embargo trade between them and players they are neutral towards or allied with. Players may also choose to embargo the use of their Navigation Limits by allied players. Players may not embargo trade with or use of Navigation Limits by players they are united with. A Trade Embargo simply ceases all trade between the two players for the duration of the embargo. A *Navigation Embargo* prevents any further use of your Navigation Limits by an allied player for the duration of the embargo. Trade and Navigation Embargoes may be declared by either player, and take effect in the following turn. Embargoing trade or navigation with another player is sure to displease that player, whether a human or a computer controls it.

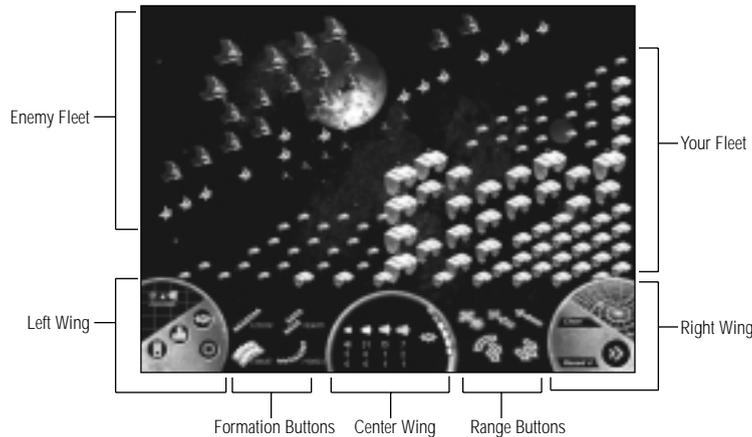
Embargoes are enacted and lifted from the Diplomacy Screen. Select the desired empire, then click on the rightmost button in the Navigation Wing to display your current embargo status with that empire. Click on the desired state to propose that change at the end of the current turn.

## COMBAT

When starships enter a system containing ships of a hostile power, combat takes place. All movement takes place between turns, so at the start of each new turn the computer checks to see if hostile ships are in the same system with each other. If so, combat takes place immediately. When combat occurs, the **Combat Screen** automatically appears. Combat takes place in a number of discrete combat rounds. Decisions about formation, range or whether to withdraw may be made in each combat round.

Combat in REACH FOR THE STARS is controlled by the player, but this doesn't mean that you oversee every ship movement and laser blast. Quite apart from the fact that this would rapidly become tedious, REACH FOR THE STARS is not a tactical space combat game. The amount of control you have over your fleets in combat is appropriate to the position of a commanding admiral. Your decisions in combat require genuine skill and make real differences to the outcome of battles, but like an admiral you leave decisions regarding individual ships to individual ships' captains.

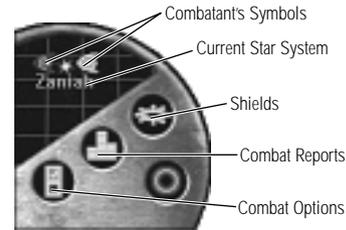
### The Combat Screen



The Combat Screen is dominated by the ships themselves. These are arrayed in one of four different types of formation, described below. Up to 96 ships per side may appear on screen at any one time. Additional ships are kept in reserve and are automatically added to the combat fleet to replace losses. Of these 96 ships a maximum of 8 may be Super Dreadnoughts, 16 Dreadnoughts, 32 Cruisers and 40 Destroyers. However, smaller ships may occupy empty slots assigned to larger ships (for instance, if you have just 50 Destroyers the first 40 will be displayed in the slots dedicated to Destroyers and the last ten will be displayed in the slots dedicated to Cruisers).

At the bottom of the screen are three information wings, and the buttons between the wings control fleet decisions. The buttons to choose fleet formations are immediately to the left of the central wing and the buttons to choose engagement range are immediately to the right.

### Left Wing



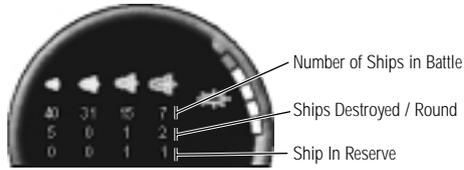
The wing at the bottom left of the screen contains a graphic showing the star at which the battle is taking place and which sides are fighting. This is particularly useful if more than one combat is occurring in a turn. Below this graphic there are three blue buttons. From left to right these are Combat Display Options, Combat Reports and Shields. Clicking on the Combat Display Options button allows you to select how much detail is shown when each

combat round is resolved. Watching every single shot can be exciting in small battles, but tedious in huge fleet actions. Clicking on Combat Report activates a dialog which explains what happened in previous combat rounds and helps you make decisions for subsequent rounds (see page 42). Clicking on the Shield button shows the state of each ship's shields, with green being OK, and yellow, orange and red indicating progressive loss of shields.

### Formations Buttons

Formations are chosen by clicking on one of the four formation buttons. The friendly fleet in the above example (your ships always appear nearer the bottom of the screen) is in **Vanguard** formation. The four formations are shown at the bottom of the screen, just left of the central wing (vanguard is highlighted). Selecting a different formation will not immediately change the on-screen arrangement of your ships. This occurs at the end of the combat round as combat is resolved. Formations have two effects. First, formations alter the effectiveness of your weapons. Second, some formations give advantages against others. *Formations* are described on more detail on page 40.

### Center Wing



The center wing displays information about the composition of your fleet. The top line shows the number of ships of each size on the screen. The second line shows the number of ships destroyed last round. The third line shows the

number of ships still in reserve. Clicking on an individual ship also shows information about that ship in the center wing. During the course of a battle you will want to examine your ships to determine whether they are close to being destroyed by cumulative damage. Ships are only destroyed when all their shields have been eliminated. Therefore, damage in REACH FOR THE STARS battles has a habit of accumulating until all of a sudden large numbers of ships are destroyed very quickly. To look at the shield status of an individual ship, simply click on that ship and the status is shown in the Center Wing, along with information on that ship type.

### Range Buttons

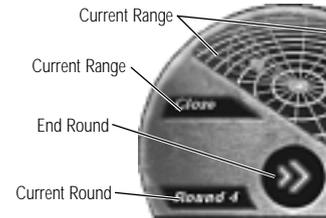
To the right of the center wing are the buttons controlling range and withdrawal. The top three buttons represent the three ranges, red for short, orange for medium and green for long. Clicking one of these buttons orders your fleet to try to move to that range. If both players select the same range, then ships move to that range for the next combat round. If the two players select different ranges then a calculation is done by the computer to determine the range that the next combat round will be fought at.

The primary factor in determining which side is successful is the quality of the ships engines on each side. The better your engines, the more chance you have of being able to dictate the range at which the combat takes place. If the average value of the engines in your fleet is 12 points or more greater than your opponents then you can practically guarantee that the combat will take place at the range you desire. Note that there is a possibility that neither side will get to fight at the range they selected. If, for instance the range was currently short, and the Humans selected short range while the KlaakKeen selected long range, the KlaakKeen may be successful in increasing the range to medium, but not to long.

Selecting a range button alters the numbers next to the Formation Buttons, to show the projected effectiveness of the fleet at the selected range.

Below the range selection buttons are two withdrawal buttons. The left-hand button is selected if you wish to withdraw, leaving a screen of destroyers. The right-hand button is selected if you wish to withdraw your entire fleet. If you attempt to withdraw, some of your ships will always get away, but there are no guarantees that all of them will be successful. Whether an individual ship withdraws successfully is based largely on a comparison between the ships engines and those of your opponents ships. Players with slow ships will find it more difficult to withdraw than players with fast ships. Leaving a screen of destroyers greatly increases the chance of other ships successfully withdrawing, but of course leaves your destroyers behind for at least one more combat round.

### Right Wing



The right-hand wing contains a graphic that looks like a radar screen. This shows the current range. If the range is currently long, a green cloud appears on the grid, if the range is medium, it is orange and if the range is short, the cloud is red. The range is also written next to this graphic.

At the bottom of the wing, the round number is displayed, in this case, round 4. At the bottom right is the End Round button, which ends the current combat round. Once both players have clicked the End Round button, combat for that round is resolved. Combat continues until one side has withdrawn or been eliminated.

When a fleet withdraws it is assumed to simply be moving out of range. If you wish to avoid further battle you must move the fleet to another star in the turn following the combat.

If colony or marine ships are attached to your fleet and all your ships are destroyed, the colony and marine ships are also considered destroyed. If your fleet withdraws, any colony and marine ships are automatically successful in withdrawing.

### Formations

A new formation may be chosen for each round of combat. There are two, sometimes contradictory, factors determining which formation you should choose. First, different formations favor different weapon types. Depending on what weapons your fleet is equipped with, different formations may change the combat value of your fleet significantly. The effects of each formation are shown below. Note that specific details on particular weapon effects are given in the section *How Weapons Work* on page 41.

#### Line of Battle



Advantage: +10% Shields (rounded up)

Disadvantage: Outer screen % Intercept -10%

**Notes:** Use when you don't have an outer screen or are facing mostly beam weapons.

#### Vanguard



Advantage: Beam Weapons Penetration +10%

Disadvantage: ECM -10%

**Notes:** Use when you have a lot of beam weapons, even better if he has too.

**Echelon**



Advantage: Missile Weapons Penetration +15%

Disadvantage: Shields -10%

**Notes:** Use when you have a lot of missile weapons, but not so good if opponent has lots of beam weapons.

**Crescent**



Advantage: Defensive Missiles + 10%

Disadvantage: Beam Weapons Penetration -10%

**Notes:** Use when opponent has lots of missiles, better if you also have lots of missiles.

The other factor determining what formation you choose is the interaction between that formation and the one your opponent chooses. Certain formations have an advantage against others. These advantages result in an increased **Rate of Fire** (ROF; see *How Weapons Work*, below) to one side or another unless identical formations are chosen, in which case no advantage is accrued to either side. These interactions are shown in the table below.

**Combat Matrix**

	LINE	VANGUARD	ECHELON	CRESCENT
LINE	-	0/++	++/++	++/0
VANGUARD	++/0	-	0/++	+/+
ECHELON	++/++	++/0	-	0/++
CRESCENT	0/++	+/+	++/0	-

+ adds 10% to the **Rate of Fire** (ROF) of all ships in that fleet

++ adds 25% to the ROF for that fleet.

The number to the left of the slash refers to the formations down the left side of the table, the numbers to the right of the slash to the formations across the top of the table.

So, for instance the formation that maximizes your firepower may be Echelon. But if your opponent chooses Crescent then you may have been better off choosing Line and gaining a ROF advantage, even though you would have been attacking with slightly reduced firepower. The conflict between maximizing your own effectiveness and minimizing your opponent's makes for an exciting battle of wills between two human players.

**How Weapons Work**

Understanding how an individual combat round is resolved should actually have as much bearing on how you design ships as on how you conduct space battles in the Combat Screen. Once the orders have been given and the range modified (see above), the two fleets fire their weapons at each other. For each round, a random firing order is calculated to determine in what order ships fire their weapons. The first ship then attempts to fire one weapon, followed by the second ship etc. When all ships have attempted to fire one weapon, they attempt to fire a second weapon in the same order; etc. until all ships have fired all weapons. When a ship attempts to fire a weapon, the chance is determined by the Rate of Fire (ROF) for the species, expressed as a percentage. If the ROF is greater than 100% there is a chance that the weapon may be fired twice (for instance, if the modified ROF is 125, each weapon will fire once and have a 25% chance of firing again).

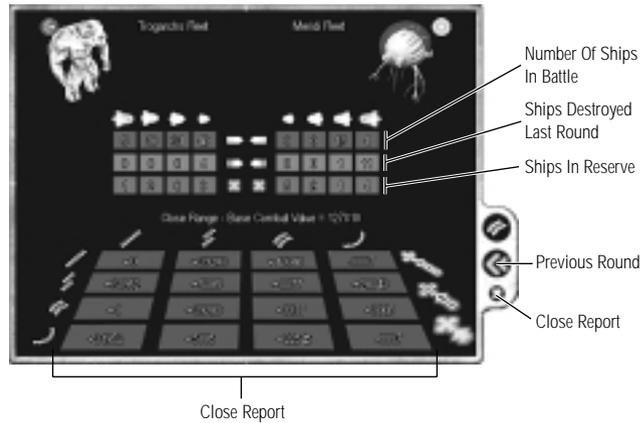
When a weapon is fired, it attempts to target a ship. This process is different, depending on whether the weapon is an offensive missile or a beam weapon. Offensive missiles must first penetrate the outer screen. The outer screen is composed of defensive missiles that attempt to intercept offensive missiles before they acquire a target. A proportion of each ship's defensive missiles are assigned to the outer screen. The offensive missile's penetration value at the current range is compared to the defensive missile's interception value at the same range, and a random factor is included to determine whether the interception has been successful.

If it is successful, the offensive missile is destroyed. If the offensive missile isn't destroyed, it targets a specific ship. That ship uses its remaining defensive missiles to target incoming offensive missiles specifically targeted at it.

If the ship's defensive missiles fail to intercept the incoming missile, the missile is targeted by Electronic Counter Measures (ECM). The effectiveness of ECM is compared to the penetration value of the offensive missile and a random factor is included to determine whether the missile has been disabled. If the missile is still active, it impacts the ship's shields. The shield prevents damage to the ship but is depleted by the hit. If all shields are destroyed then a single additional hit (by a missile or a beam weapon) will destroy a ship.

Beam weapons are more effective because they are harder to stop. The only defense against beam weapons is shields. Beam weapons target shields directly. The penetration value of the beam weapon is compared to the deflection value of the shield and a random factor is included to determine whether the beam was successful in destroying a shield. Once all weapons on all ships have been fired, the combat round ends. If both sides have ships remaining, a new round commences.

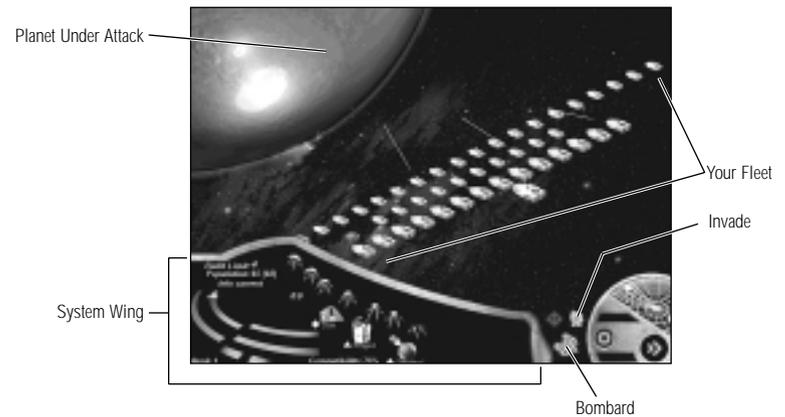
## Combat Reports



Combat Reports explain in detail what happened in the previous combat round and help you to make informed decisions about what orders you should give in subsequent rounds. At the top of the report the two sides in the battle are shown. In the center is a table showing the number of ships of each size that each side has on the screen (the top line), in reserve (the middle line) and the number that were destroyed in this last round (the bottom line). At the bottom of the report is a table showing the interaction between the various formations. Your formation is shown at the side and your enemy's along the top. The numbers show how your combat value would be modified with each combination of formations.

If the last round button is selected (the double left facing arrows at the bottom right of the report) the report changes to show what happened in the last combat round. At the top of the report are the range orders given by each side and between them, the range the round was fought at. The table in the center of the report is unchanged. At the bottom of the report is a list of what happened to each attack. The number of missiles intercepted by inner and outer missile screens and by ECM is listed, as are the number of beam weapon attacks deflected by shields and the number of shield hits made by missiles and beam weapons.

## Bombardment and Invasion



Once one fleet has destroyed or driven off all its opponents in a system it may attack enemy colonies in that system. Only one enemy planet may be attacked per system, per turn. Attack may include satellite combat, bombardment and invasion, all in one turn. As described on page 19, initiating **Planetary Attack** is almost identical to initiating **Colonization**. You select the ships or fleet to attack with, and then the planet to be attacked is selected either by using the Planetary Attack button or clicking on the target planet in the System Wing. If defensive satellites are present around the planet this activates the **Satellite Combat Screen**. If no satellites are present it activates the **Planetary Attack Screen**. The Satellite Combat Screen is similar to the normal Combat Screen. Formations are irrelevant and all ships automatically fire at their optimal range. Combat continues until either all satellites are destroyed, all attacking ships are destroyed or the attacking force withdraws. If all satellites are destroyed, the attacker proceeds to the Planetary Attack Screen.

The Planetary Attack Screen is very simple. There are three buttons in the wing on the right-hand side of the screen, Bombard, Invade and Withdrawal. Clicking the Bombard button uses the fleet's weapons to attack the planet's surface. Weapons use their Planetary Attack ratings.

The main effects of Planetary Attack are destroying facilities and reducing population. If you have a large fleet planetary bombardment can take a while. Clicking the **Space Bar** skips the animation and shows the results of the bombardment. Obviously if you wish to capture all enemy facilities intact you should not bombard the planet prior to invasion.

With or without the benefit of a preliminary bombardment, a fleet can invade an enemy planet. Clicking the **Invade** button sends a force of marines down to the planet's surface where they attempt to gain control. If the invading force has enough marines it will be successful and the enemy colony becomes controlled by the attacking player. The effects of bombardment and invasion are immediate. How many marines are required to make an invasion successful and the effects of that invasion are determined by the compatibility of the attacking species with the defending.

If the attacker is **Identical** to the defender (i.e. the same species) they need more marines than the defender's Ferocity Value (the red number shown next to the population in the System Wing). If the invasion is successful then the planet becomes the attacker's property. All facilities switch to the new owner's graphics and operate at their values.

Despite being unhappy about being conquered the population will eventually settle down and the difference between conqueror and conquered will be forgotten.

If the attacker is **Compatible** with the defender (i.e. their environmental needs are similar) the attacker needs more marines than the Ferocity Value. If the invasion is successful the planetary population is reduced by the Ferocity Value. Reproduction rate is halved for as long as the planet remains under the new regime. All "military" facilities (shipyard, defense, colony and marine facilities) are destroyed. Shipyard and defense facilities can be rebuilt. Civilian facilities remain, but cannot be built up. The planet is also looted by the marines, with the proceeds being added to the attacker's RPs. This represents a sullen population languishing under the jackbooted heel of the vile alien invader.

If the attacker is **Incompatible** with the defender then the planet cannot be conquered. The population can however, be wiped out. To invade a planet occupied by an incompatible species the attacker must have twice as many marines as their Ferocity Value. The enemy population is reduced to zero and all facilities are destroyed.

If a species is unable to live on a planet, it cannot invade it. In any invasion the marines used disappear once they have completed the invasion.

	Humanity Sprnadoi	Meridi Lsls	The Hive Arimechs	Saurischi Cambri	Combine Myrmodi	Outies Polyphim	Trogarchs Crypholites	Klaa-Keen Cetaci
Humanity	▲ ▼	▼ ◆	▼ ▼	◆ ▼	▲ ◆	▲ ▼	▼ ▼	▼ ◆
Meridi	▼ ▼	▲ ▼	▼ ▼	▼ ◆	▼ ▼	▼ ▼	▼ ▼	▼ ▼
The Hive	▼ ▼	▼ ▼	▲ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼
Saurischi	◆ ▼	▼ ▼	▼ ▼	▲ ▼	◆ ◆	◆ ▼	▼ ▼	▼ ◆
Combine	▲ ▼	▼ ◆	▼ ▼	◆ ▼	▲ ◆	▲ ▼	▼ ▼	▼ ◆
Outies	▲ ▼	▼ ◆	▼ ▼	◆ ▼	▲ ◆	▲ ▼	▼ ▼	▼ ◆
Trogarchs	▼ ▼	▼ ◆	▼ ▼	▼ ▼	▼ ▼	▼ ◆	▲ ▼	◆ ▼
Klaa-Keen	▼ ▼	▼ ◆	▼ ▼	▼ ▼	▼ ▼	▼ ◆	◆ ▼	▲ ▼
Sprnadoi	▼ ▲	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼
Lsls	◆ ▼	▼ ▲	▼ ▼	▼ ▼	◆ ▼	◆ ◆	◆ ▼	◆ ▼
Arimechs	▼ ▼	▼ ▼	▼ ▲	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼
Cambri	▼ ▼	◆ ▼	▼ ▼	▼ ▲	▼ ▼	▼ ▼	▼ ▼	▼ ▼
Myrmodi	◆ ▼	▼ ▼	▼ ▼	◆ ▼	◆ ▲	◆ ▼	▼ ▼	▼ ◆
Polyphim	▼ ▼	▼ ◆	▼ ▼	▼ ▼	▼ ▼	▼ ▲	◆ ▼	◆ ▼
Crypholites	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▼	▼ ▲	▼ ▼
Cetaci	◆ ▼	▼ ▼	▼ ▼	◆ ▼	◆ ◆	◆ ▼	▼ ▼	▼ ▲

## SPECIES INFORMATION

The following sections give details on each of the sixteen species in REACH FOR THE STARS. For even more information on a particular species, see the in-game Species Report, accessible from the Reports button on the Game Key, and described on page 13.

**War Affinity:** The general diplomatic policy of the species.

**Defense Ferocity:** A numerical representation of the species' need to defend their colonies.

**Base Rate of Fire:** A number used to determine the speed of the species' attack in ship to ship combat. See *How Weapons Work* on page 41 for more details.

**Environmental Tolerances:** The compatibility of that species with different planetary environments. An up arrow ▲ means that environment is ideal for the species, a diamond ♦ means that environment is tolerable, and a down arrow ▼ means that environment is intolerable to the species. Planets with atmosphere, temperature and gravity all ideal are perfect for the species, a colony there could reach maximum potential. If a planet has one or more tolerable conditions, the population will be limited by each diamond, according to the Population chart. If a planet has an atmosphere, temperature or gravity that is intolerable to the species, a colony cannot be built there, and the planet cannot be invaded either. For more information, see *The System Wing* on page 15.

**Population Limitations:** The maximum population a colony of that species can maintain, depending on planet size, and how that maximum is affected by tolerable instead of ideal environmental conditions.

**Population Growth Rate:** The number of population that each colony of that species gains every turn, until they reach their maximum.

**Base Trading Percentage:** A number used in calculating the amount of RPs that species gains in trade with other species, when applicable. For details see *Trade* on page 36.

**Species Description:** A summary of the species main strengths, weaknesses, attitudes and relationships with other species.

### Arimechs

**War Affinity:** Neutral

**Defense Ferocity:** 15%

**Base Rate of Fire:** 25

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
▲ None	♦ Frozen	▲ Zero
▲ Oxygen	▲ Cold	▲ Low
♦ Chlorine	▲ Temperate	♦ Standard
♦ Methane	♦ Hot	▼ High
▲ Hydrogen	▲ Boiling	▼ Crushing
▲ Helium	-	-



**Population Limitation:**

Planet Size	Population Maximum	Reduction For Each ♦
Asteroid	24	5
Pygmy	40	8
Standard	64	12
Giant	88	16

**Population Growth Rate:** 4

**Base Trading Percentage:** 8%

**Species Description:**

The Arimechs are highly intelligent creatures possessing only crude tentacles with which to manipulate their environment. By trading ideas with other species they have acquired the necessary technology to conquer their surroundings and to venture into space. Almost never seen outside a protective exoskeleton, the Arimechs can live almost anywhere, simply creating the appropriate travel suit for any environment. Everything about the Arimechs is flexible: ship design, technology and diplomacy. They are the greatest traders in the galaxy. They prefer peace but understand war and have no qualms about prosecuting it vigorously. The Arimechs are the implacable foes of the Polyphim.

Nobody knows the home planet of the Arimechs. It is thought that this knowledge would give away too many secrets about the origins of the species and their biological weaknesses.

**Cambri** 

**War Affinity:** Peaceful  
**Defense Ferocity:** 40%  
**Base Rate of Fire:** 35  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
▼ None	▼ Frozen	▼ Zero
▼ Oxygen	▼ Cold	▼ Low
▼ Chlorine	◆ Temperate	▼ Standard
▼ Methane	▲ Hot	◆ High
▲ Hydrogen	▲ Boiling	▲ Crushing
▲ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	0	0
Pygmy	10	10
Standard	50	15
Giant	100	10

**Population Growth Rate:** 4  
**Base Trading Percentage:** 3%

**Species Description:**

The Cambri are small armored creatures that evolved on the solid surface of the gas giant Thagrack. They thrive under the most hostile conditions imaginable. Their ships have massive armor and stupendously powerful engines, but armaments are a weak point, particularly missiles. The Cambri are curious about other species and do not really understand war or trade. However, surviving as they have has made them incredibly tough and well suited to an adverse situation. They are learning both arts very quickly.

**Cetaci** 

**War Affinity:** Peaceful  
**Defense Ferocity:** 5%  
**Base Rate of Fire:** 20  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
▼ None	▼ Frozen	▼ Zero
▲ Oxygen	▼ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▼ Methane	▼ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
▼ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	15	10
Pygmy	40	10
Standard	60	10
Giant	65	10

**Population Growth Rate:** 6  
**Base Trading Percentage:** 5%

**Species Description:**

The Cetaci are the closest species to Humans in external form. They are a peaceful matriarchal species with little interest in space flight and expansion. The Cetaci have never started a war and will end one under almost any conditions. They have a natural ally in Humanity who regard the Cetaci as politically naive, but entirely admirable cousins. Humans are regarded as useful but barbarous primitives by the Cetaci who are of course far too polite to let their true feelings be known. The Cetaci are efficient traders but lack the killer instinct needed to allow them to excel. Some early Cetaci ships lacked offensive weapons and it was only reluctantly that the latter were developed. The Cetaci have never expanded beyond their own planet, Cetacia and for several generations they have been holding out against the Hive.

**Combine** 

**War Affinity:** Warlike

**Defense Ferocity:** 45%

**Base Rate of Fire:** 40

**Environmental Tolerances:**

ATMOSPHERE	TEMPERATURE	GRAVITY
◆ None	▼ Frozen	◆ Zero
▲ Oxygen	◆ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▼ Methane	◆ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
◆ Helium	-	-



**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	40	5
Pygmy	65	9
Standard	90	12
Giant	100	18

**Population Growth Rate:** 8

**Base Trading Percentage:** 6%

**Species Description:**

The Combine is a totalitarian Human state, utterly ruthless and militaristic. Despite being Human the Empire of the Combine is totally isolated from that of mainstream Humanity and the two are ignorant of each-other's existence. How this occurred has yet to be revealed. The Combine is far more geared for war than mainstream Humanity but lacks flexibility and ingenuity. They are master diplomats but don't place much emphasis on honoring their treaties. Good traders, the Combine find that it suits their flexible morality. They prefer to interact with other species by annihilating them.

**Crypholites** 

**War Affinity:** Peaceful

**Defense Ferocity:** 22%

**Base Rate of Fire:** 35

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
▲ None	▼ Frozen	▼ Zero
▼ Oxygen	▼ Cold	▼ Low
▲ Chlorine	◆ Temperate	◆ Standard
▼ Methane	▲ Hot	▲ High
▼ Hydrogen	◆ Boiling	◆ Crushing
▼ Helium	-	-



**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	27	6
Pygmy	46	13
Standard	70	17
Giant	95	20

**Population Growth Rate:** 9

**Base Trading Percentage:** 4%

**Species Description:**

The Crypholites are the masters of bio-construction. Not surprising, since they're silica-based lifeforms, and silica is the single most common compound in most planetary crusts. Everything the Crypholites construct is composed of silica and is alive. Their ships, their buildings, their weapons all are living silica. Even their missiles are living silicates. This means that the Crypholites can set up colonies very quickly indeed. They are a peaceful species but dislike carbon based lifeforms. The Crypholites are reasonable traders, but their unique makeup limits what they can trade to other species. The home planet of the Crypholites is Lithos, a world where it is almost impossible to determine what is alive and what is inanimate rock.

**Hive** 

**War Affinity:** Warlike

**Defense Ferocity:** 100%

**Base Rate of Fire:** 20

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
◆ None	◆ Frozen	◆ Zero
◆ Oxygen	◆ Cold	◆ Low
▲ Chlorine	▲ Temperate	▲ Standard
▲ Methane	▲ Hot	▲ High
◆ Hydrogen	◆ Boiling	◆ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	60	2
Pygmy	80	4
Standard	100	9
Giant	100	8

**Population Growth Rate:** 16

**Base Trading Percentage:** 0%

**Species Description:**

The Hive is a colonial species of insects that can adapt to practically any planetary conditions. Nobody knows where their home planet is, possibly not even the Hive themselves. They cannot be reasoned with, and will attack any species that hinders their expansion. The Hive are unimaginative and technologically backward, but they breed like wildfire and are the most savage species man will encounter. Diplomacy and trade are both alien concepts to the Hive. The last people who tried got eaten. It is almost impossible to destroy the Hive. A few surviving individuals are enough to start a new colony, and a new Hive War erupts.



**Humanity** 

**War Affinity:** Neutral

**Defense Ferocity:** 40%

**Base Rate of Fire:** 35

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
◆ None	Frozen	◆ Zero
▲ Oxygen	◆ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▼ Methane	◆ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	25	5
Pygmy	50	9
Standard	90	12
Giant	100	18

**Population Growth Rate:** 16

**Base Trading Percentage:** 5%

**Species Description:**

Humanity has just invented an interstellar drive and is poised to break out into the Galaxy. We have a flexible technology that should allow us to adapt to most potential threats. Human diplomacy is also flexible: we like to think of ourselves as a peaceful species, but war is an old friend we embrace quickly if circumstances dictate. We are good traders but not the best among the aliens we will encounter.



**Klaa-Keen** 

**War Affinity:** Warlike  
**Defense Ferocity:** 30%  
**Base Rate of Fire:** 50



**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
◆ None	◆ Frozen	▼ Zero
▼ Oxygen	▲ Cold	▼ Low
▼ Chlorine	◆ Temperate	◆ Standard
▲ Methane	▼ Hot	▲ High
▼ Hydrogen	▼ Boiling	◆ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	40	6
Pygmy	50	6
Standard	90	10
Giant	100	18

**Population Growth Rate:** 6

**Base Trading Percentage:** 6%

**Species Description:**

Hailing from the cold, methane shrouded planet of Var'Klaag, the Klaa-Keen are in many ways the most fearsome race in the Galaxy. They are utterly alien, enormously intelligent and technologically far ahead of most other species. The Klaa-Keen are difficult to deal with diplomatically, as their motivations are so unlike those of Humans. Their actions display an alien logic, which thus far other species have been unable to decipher. Klaa-Keen ships are small and fast, but have deceptively powerful shields and devastating long-range weapons. Their battle-tactics are based on the precise application of overwhelming firepower. It is rumored that the Klaa-Keen use tiny suicide ships rather than defensive missiles because they are more resource efficient. The Klaa-Keen prefer war, seeing it more as cleansing space of less advanced species. On the odd occasion that they choose peace with other species, the Klaa-Keen are vigorous traders.

**Lsls** 

**War Affinity:** Neutral  
**Defense Ferocity:** 50%  
**Base Rate of Fire:** 55



**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
◆ None	▼ Frozen	▼ Zero
▼ Oxygen	◆ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▲ Methane	◆ Hot	◆ High
▼ Hydrogen	▼ Boiling	▼ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	40	8
Pygmy	60	15
Standard	80	20
Giant	100	20

**Population Growth Rate:** 8

**Base Trading Percentage:** 7%

**Species Description:**

The Lsls were once a humanoid species that slowly replaced body parts with mechanical aids and prosthetics. They have become machine-like in behavior as well as appearance and strive for ruthless efficiency in everything. Their diplomacy is logical but without any moral scruples. The Lsls are very good traders, and despite having no qualms about destroying other species, they often regard trade and coexistence to be more efficient than armed conflict. Lsls ships are highly variable, each class being designed for a specific role. This makes individual ships vulnerable, if you're lucky enough to only encounter one. The Lsls homeworld VI'hon is a solid mechanical structure after millennia of industrialization.

**Meridi** 



**War Affinity:** Peaceful

**Defense Ferocity:** 30%

**Base Rate of Fire:** 30

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
▼ None	▼ Frozen	▼ Zero
▼ Oxygen	▲ Cold	▼ Low
▼ Chlorine	▲ Temperate	▼ Standard
◆ Methane	▲ Hot	◆ High
▲ Hydrogen	◆ Boiling	▲ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each 
Asteroid	0	0
Pygmy	0	0
Standard	50	10
Giant	100	10

**Population Growth Rate:** 5

**Base Trading Percentage:** 2%

**Species Description:**

The Meridi are giant floating gas-filled jellyfish who evolved in the atmosphere of the gas giant Kalestron. They are essentially peaceful but began to learn war when attacked by the Combine. The Meridi excel at force-field technology, a force-field being the only thing that can keep their huge ships pressurized in a vacuum. They had no concept of missiles until struck by the first one fired by a Combine Cruiser. Like many aspects of interspecies behavior, trade is new to the Meridi and they aren't very good at it.

**Myrmodi** 



**War Affinity:** Warlike

**Defense Ferocity:** 66%

**Base Rate of Fire:** 50

**Environmental Tolerances:**

Atmosphere	Temperature	Gravity
◆ None	▼ Frozen	◆ Zero
▲ Oxygen	▼ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▼ Methane	▲ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
▼ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each 
Asteroid	12	2
Pygmy	26	6
Standard	44	10
Giant	64	12

**Population Growth Rate:** 9

**Base Trading Percentage:** 0%

**Species Description:**

The Myrmodi are similar to humans physically but there the similarity ends. All Myrmodi are fanatical followers of the god Kas' Kadelaaga. They believe it is their holy duty to cleanse the Galaxy of all lesser species (this means you). Therefore they are almost constantly at war with all their neighbors. Myrmodi ships are geared for all-out offense, packing an enormous punch. They believe beam weapons to be the work of Kas' Kadelaaga's implacable foe Bowgggs and refuse to use them. Trade with "lesser" species is also forbidden under Myrmodi religious law. The only reason the Myrmodi still survive is the inability of their galactic neighbors to form a useful coalition against them.

**Outies** 

**War Affinity:** Neutral  
**Defense Ferocity:** 44%  
**Base Rate of Fire:** 35  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
◆ None	▼ Frozen	◆ Zero
▲ Oxygen	◆ Cold	◆ Low
▼ Chlorine	▲ Temperate	▲ Standard
▼ Methane	◆ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	30	5
Pygmy	60	8
Standard	90	11
Giant	100	15

**Population Growth Rate:** 5  
**Base Trading Percentage:** 7%

**Species Description:**

The Outies are a separatist group of humans that split from Earth, appropriating one of the very first interstellar drives and dangerously overloading it to escape from Human controlled space. They are technologically innovative but weak. Their small ships are extremely advanced to make up for their lack of resources and consequent inability to build large ships. The Outies are highly principled, which makes them difficult to deal with but predictable and trustworthy. Although preferring peace, the Outies will prosecute war vigorously and have no particular qualms about it. They are better traders than other Humans, of necessity due to their habitual lack of resources.

**Polyphim** 

**War Affinity:** Peaceful  
**Defense Ferocity:** 30%  
**Base Rate of Fire:** 30  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
◆ None	◆ Frozen	▼ Zero
▼ Oxygen	▲ Cold	▼ Low
▼ Chlorine	◆ Temperate	◆ Standard
▲ Methane	▼ Hot	▲ High
▼ Hydrogen	▼ Boiling	▼ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	0	0
Pygmy	15	5
Standard	80	10
Giant	85	10

**Population Growth Rate:** 7  
**Base Trading Percentage:** 6%

**Species Description:**

Unlike their implacable foes, the Arimechs, the Polyphim's tentacles are extremely sensitive and capable of fine manipulation. Possibly this is the reason the two species hate each other with a vengeance. Despite their horrid appearance, the Polyphim are not warlike, preferring development to war. They are frequently caught with their proverbial pants down by warlike species. However, the large investment the Polyphim make into R&D always makes it possible for them to recover from initial military setbacks by producing fleets of highly advanced ships. They are good traders, always having plenty of technology that other species want.

**Saurischi** 

**War Affinity:** Warlike  
**Defense Ferocity:** 58%  
**Rate of Fire:** 45  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
▼ None	▼ Frozen	◆ Zero
▲ Oxygen	▼ Cold	▲ Low
◆ Chlorine	◆ Temperate	▲ Standard
◆ Methane	▲ Hot	▼ High
▼ Hydrogen	▼ Boiling	▼ Crushing
▼ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each 
Asteroid	25	12
Pygmy	60	8
Standard	80	8
Giant	100	20

**Population Growth Rate:** 6  
**Base Trading Percentage:** 3%

**Species Description:**

The Saurischi were the first species encountered by Humanity in its Reach For the Stars. They have an aggressive and highly structured society but are warriors rather than soldiers. The Saurischi are honorable, and will keep a treaty even if it places them at a disadvantage to do so. They value speed and finesse far more than raw power. Saurischi ships are sleek and have effective weapons, but lack strong shields. In diplomacy, the Saurischi are quick to anger and tend to shoot first and ask questions later. They also hold a grudge against species they believe have acted dishonorably towards them. However, the Saurischi are highly intelligent and will conduct diplomacy shrewdly if a little too honestly. They regard trade as a menial pursuit and therefore don't exploit trade opportunities to their fullest. The Saurischi quickly gained the respect of many people on Earth. They are honored foes and will make valuable allies if they ever agree to peace.

**Sprnadoi** 

**War Affinity:** Neutral  
**Defense Ferocity:** 33%  
**Base Rate of Fire:** 50  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
▲ None	▲ Frozen	▲ Zero
▼ Oxygen	▲ Cold	◆ Low
▼ Chlorine	▲ Temperate	▼ Standard
▼ Methane	▲ Hot<	▼ High
▼ Hydrogen	▲ Boiling	▼ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each 
Asteroid	30	2
Pygmy	35	7
Standard	40	14
Giant	45	16

**Population Growth Rate:** 11  
**Base Trading Percentage:** 3%

**Species Description:**

The Sprnadoi live on airless asteroids and photosynthesize nutrients from elements within the framework of minerals. Each individual Sprnadoi is tiny. This and the limited resources of asteroids has limited the species to tiny ships. Much Sprnadoi technology is biological. They have created several task-specific sub-species. The difficulty of communicating with the Sprnadoi makes diplomacy and trade a problem but they are not a particularly warlike species.

**Trogarchs** 

**War Affinity:** Warlike  
**Defense Ferocity:** 77%  
**Base Rate of Fire:** 35  
**Environmental Tolerances:**



Atmosphere	Temperature	Gravity
◆ None	▼ Frozen	▼ Zero
▼ Oxygen	▲ Cold	▼ Low
▼ Chlorine	▲ Temperate	◆ Standard
▲ Methane	▼ Hot	▲ High
▼ Hydrogen	▼ Boiling	◆ Crushing
◆ Helium	-	-

**Population Limitations:**

Planet Size	Population Maximum	Reduction For Each ◆
Asteroid	22	2
Pygmy	38	4
Standard	73	9
Giant	89	15

**Population Growth Rate:** 6  
**Base Trading Percentage:** 3%

**Species Description:**

It is a wonder that the Trogarchs ever got into space. They have a certain intelligence but are highly unimaginative and painfully slow on the uptake. This is made up for by their enormous strength and dogged persistence. The Trogarchs are convinced that big is better and have the largest ships of any species. These ships have massive armor but are slow, and generally lack long-range weapons. The Trogarchs let their love of hand-to-hand combat affect their starship design and choice of battle-tactics. They dislike diplomacy, and truly enjoy war! Most Trogarch commanders encountering a new species will shoot first out of principle. They can be easily duped in diplomacy but will hold a grudge. The Trogarchs are not very good traders, because it doesn't involve hitting people. The Trogarch homeworld has a name unpronounceable to Humans, but it translates as "Mudball".

The Trogarchs pursued a vigorous war with Humanity before being swept aside by the KlaaKeen. The latter see the Trogarchs as mindless primitives, not even suitable as slaves.

**SCENARIO EDITOR**

It is not intended to discuss the Editor in great detail in this manual. A more detailed document discussing the Editor can be found on the game CD. However, this broad overview should be enough to get you started on using the Editor.

When you open the Editor you have the option of making edits in four sections, represented by the four buttons on the Game Key: **Species**, **Tech Trees**, **Scenarios** and **Campaigns**. Note that the Species, Tech Trees, Scenarios and Campaigns, which shipped with the game, can be used as templates but cannot be altered.

**Species**

The first screen in the **Species Editor** allows you to select an existing species or create a new one. To create a new species, click on the **New Species** button.

There are four main areas that must be defined to create a new species. These are accessed through the four buttons at the top of the screen. **General** features are the graphics that will be used for the species. These may be selected from the existing species graphic sets. **Population** features include the maximum population possible on planets of different sizes, the reduction in maximum population for each tolerable environmental condition (yellow diamond), the rate of population growth, the diplomatic tendency of the Species, its ferocity and finally the range of environmental conditions under which it can survive. Most of these elements may be modified by clicking on the existing number or state, and dragging to get the desired value.

**Production** features include the population thresholds required to build facilities of a particular level, trade rating, resource exploitation, looting and jackbooting (all ways of squeezing extra RPs from planets you have colonized or conquered) and the cost and output of various facilities. Again click and drag sliders are used.

**Military** features include the cost and output of Shipyards, Colonist Recruitment Facilities and Marine Training Facilities as well as the base ROF. Note that colonist and marine facilities are optional. To allow a species to create them click in the appropriate checkboxes.

**Tech Trees**

Each species must have one or more **Tech Trees**. Most Tech Trees in the game have ten Eras but the Tech Tree for Humanity (used in the campaign) has twenty Eras. Creating a Tech Tree is simple but time-consuming. Look at the existing examples. What is required is a good spread of technologies in each Era and steady improvement.

The large array of buttons on the left side of the screen display technologies already entered for a particular Era or of a particular type. The + and - buttons add and remove technologies. Technologies can also be copied and pasted into other Tech Trees. Each technology is entered in the center of the screen. Within each entry there are white boxes (menus) and greenish ones (text fields). Most of the terms should be familiar to

anyone who has played the game. Likelihood is the percentage chance of the technology appearing. Tech Priority is an indication to the computer AI of the order to research the technologies in. The higher the number, the lower the research priority.

It is strongly recommended that destroyer weapons not be given a planetary attack capability and that cruiser weapons only have a very low capability. It is also suggested that destroyers' weapons slots plus shields total no more than ten, cruisers 30 and dreadnoughts 60.

## Scenarios

Creating a Scenario is dealt with in greater detail in the manual on the CD. A few key points are noted here. There are seven buttons on the **Game Key**, Tech Trees, Info, Map, Empires, Scripts, Species, and Save. The **Tech Tree** button allows you to create or modify a **Tech Tree** as described above. Note that Tech Trees and Species can be created or modified within scenarios as well as standing alone.

**Info** contains general details such as the scenario name, description and victory conditions. The **Map** button allows a map to be created. The size of the map is controlled by sliders and may vary between 35x40 grid squares and 60x100. Stars are added and removed with the + and - buttons and up to ten planets can be created for each star. It is normally sufficient in creating a map to tailor a few key star systems and make the remainder of the stars random. As well as being easier, this has the additional bonus of increasing the replay value of the scenario.

The **Empires** button accesses a series of screens in which details of Empires may be specified. There are five screens represented by buttons: general, colonies, tech trees, starships, fleets. Note that the tech tree can be modified here as well.

As mentioned above, the **Species** button allows you to edit or create a species. It is recommended that if you modify an existing species or create a new one, you save it in the scenario itself to reduce the number of files needed when you distribute your scenario to others.

The **Save** button saves the work you have done on your scenario to date. It is strongly suggested that you save regularly.

## Campaigns

Campaigns are a series of linked scenarios. Campaign editing is very similar to scenario editing, but links must be placed between scenarios and limits must be placed on development so that the Species being played in the campaign does not develop too rapidly and unbalance scenarios.

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### Our Strength

We thank God for giving us the ability and strength to complete this project and follow our dream. We also like to thank our families and friends for giving us their non-stop love and support during this project.

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