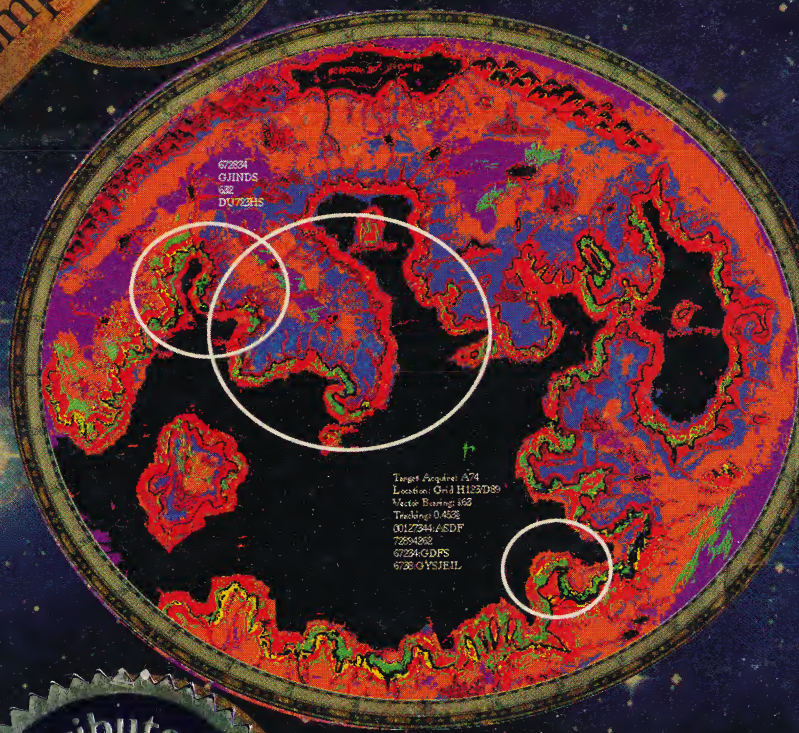
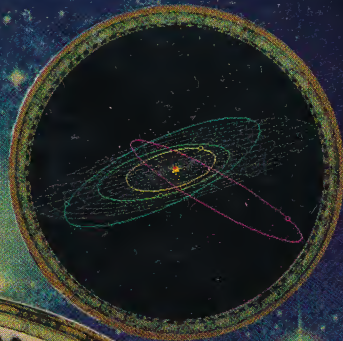


"The Galactic
Empire Simulator"

PAX



Target Angles: 674
Location: Grid H123D99
Vector Bearing: 162
Trading: 0.833
012734/6SDP
7234/62
67234/6DPS
6736 OYSJEIL



Distributed by:



IMPERIA

Changeling
Software

PAX IMPERIA



Changeling
Software

PAX IMPERIA

Macintosh

Changeling
Schmied

PAX IMPERIA



Award Winning Products from Inline Software!

WHAT'S NEW



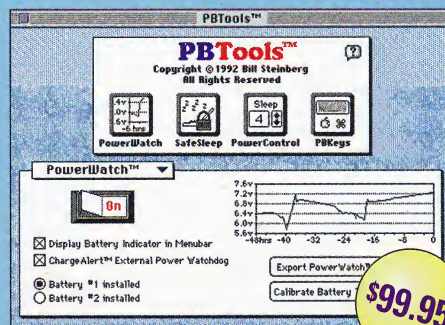
PBTools

Keep the Power in Your PowerBook!

Extend battery life...Use customized sleep setting to save power...Track battery power and 12 power parameters in real time...Secure your data...Find the elusive cursor...Extend your keyboard...Turn AppleTalk on and off instantly. When it comes to getting the most from your PowerBook, PBTools is the real stuff, without the fluff.

"You can't do better than PBTools. Billy Steinberg's killer PowerBook package blows away all the competition - combined!"

— Steve Bobker



\$99.95



SCOUT for Mac & Dos

A challenge for arcade and strategy fans alike. An abandoned moon base is about to be reactivated. But the base has been invaded by aliens, who now control its 101 levels. You must seek them out and destroy them. Your arsenal includes bombs, missiles, and cannon. You'll need them all: the aliens have set up a host of nasty obstacles and surprises. Dazzling sound and artwork add to the fun.

"A truly challenging mental puzzle combined with...arcade skills...a think, run, and shoot adventure." — MacWeek

"Your battle with the opposing forces will be quick and furious. Great graphics and sound...addicting". — Computer Game Review



\$59.95



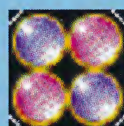
Tinies for Mac & Dos

The cutest (and most uncooperative) aliens in the universe are about to invade Earth. To stop them, you must send them to their sleepers. But beware: the Tinies are stubborn, and strange devices lurk in their bizarre ship. To beat the clock, you must think ahead, and carefully maneuver these cute but unruly creatures around walls, arrow chutes, traps, and each other while they turn cartwheels, make faces, and tap on the glass, trying to get out. Continuous challenges await you in over 100 levels and 11 different landscapes! A great arcade/strategy game.

"The Tinies is big fun. ...bright animation, appealing music...a happy look and feel...complex enough to keep you puzzled well into the night." — MacWeek



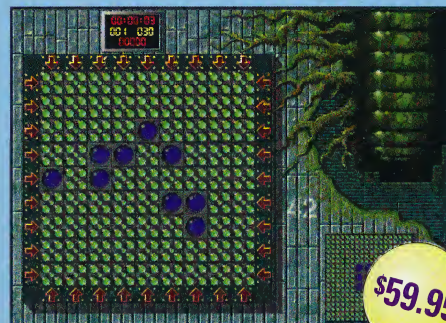
\$59.95



Cogito for Mac & Windows

Restore order from chaos in this award winning strategy game. A shape made of marbles is randomly mixed by the computer and you must restore it by moving rows and columns. At each level the moves and shapes become more complex, and you must plan many moves ahead. With 120 levels Cogito will challenge the novice and the master strategist. *"It suddenly opens a whole new realm of puzzlement...wonderful depth and complexity...If you are looking for a challenge, this is it."* — MacWeek

Winner of the Best Mac Game of the Year trophy from Apple France. Requires Windows 3.1



\$59.95

PBTools
Powerful PowerBook Synchronization

SCOUT
Action/Strategy Game

Tinies
Arcade/Strategy Game

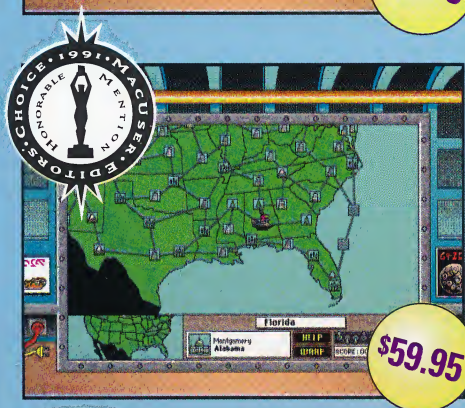
Cogito
Puzzle/Strategy Game

Games

Swamp Gas Visits Europe
Explore Geography the Fun Way



Swamp Gas Visits the USA
Explore Geography the Fun Way



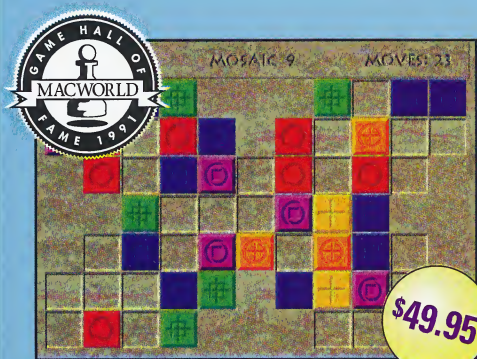
3 in Three
Thinking Game



Mutant Beach
Adventure



Tesserae
Board Game



Games



Swamp Gas Visits Europe

The fun way to learn European Geography!

Help Swamp Gas, the lovable alien, explore the geography of Europe. Visit all the countries, capitals and points of interest. Discover interesting facts during "close encounters." When your mission is complete, relax in the Alien Arcade and enjoy one of three wacky arcade games. Swamp Gas is appropriate for ages 6 and up. You determine the length of play by choosing a mission of 5 to 50 locations. Every mission is unique. Three levels of difficulty will challenge every age, while on-line help provides hints to geography novices. And up to 4 can play at once, making this the ideal family entertainment. Lively color, clever sounds, and humor add to the fun.

"Swamp Gas is the way to travel" — MacWeek



Swamp Gas USA

Explore the geography of the United States as an alien in a flying saucer in Swamp Gas. Visit all the states, cities, and landmarks on your itinerary and discover interesting facts during "close encounters." When your mission is complete, relax in the Alien Arcade, where you can play one of three zany arcade-style games. With three levels of difficulty, four player capability, and a choice of four levels of detail, Swamp Gas is designed to appeal to adults and children of all ages who will love the digitized sound and wacky color graphics. **Awarded the Honorable Mention for Best Children's Program of the Year by MacUser 1992.**



3 in Three

takes you on a madcap journey inside your Macintosh when a freak power surge zaps the number 3 off a petty cash report and abandons her in a land where numbers don't count and the letters spell disaster!

A tour de force of animation and sound, 3 in Three is an interactive treasure hunt, an unfolding trail of word puzzles, logic dilemmas, and sinister brain twisters, over eighty in all. When all the pieces fall into place, an animated grand finale awaits those who help the 3 find true happiness! Designed to challenge adult game players, 3 in Three also appeals to young children who enjoy watching the colorful animation. **Awarded the overall Best Game of the Year by MacUser.**

4 mice, MacUser



Mutant Beach

Stunning 256 color animation and 4 channel digital sound await you in the story of Native Nick, a totally laid back tropical islander. Nick, while on a fishing trip finds a note in a bottle telling him that the nose of the stone idol, guardian of the volcano has been stolen. Angered at the loss of his nose, the stone idol releases a cursed cloud from the volcano which, unless Native Nick can replace the nose, will mutate the island and all of its inhabitants. If adventure, intrigue, comedy, and a cast of characters beyond belief are for you, then sign on for a trip with Nick to Mutant Beach. Where fun is the name of the game and no one dies.

4 mice, MacUser



Tesserae

is a Latin term for a type of ancient Roman mosaic of brightly colored glass tiles. It's also a puzzle game in which the player eliminates tiles from a 'board' according to color and texture. When only one tile remains a different, more difficult arrangement appears.

For the beginner, the object of the game is to remove as many tiles as possible. The more advanced player tries to improve their score by clearing the board in the fewest possible moves. A series of nine boards makes a game. It includes extensive animated on-line help illustrating possible moves. **Elected "Best Brain Game" in the MacWorld awards.** 4 1/2 mice, MacUser

Utilities

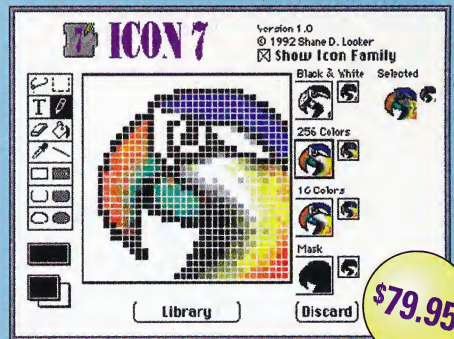
Utilities

Utilities



Icon 7 The Ultimate Finder Icon Editor

Create custom icons for applications, files, and disks for instant recognition, and add some fun to your Mac. Icon 7 is the only program that lets you customize any System 7 icon right in the Finder. Just double click an icon in the Get Info box to enter the editor. Color, Tool, and Pattern palettes make icon editing a snap. Drag and drop family editing clones your icon into B/W, small, color, and mask versions instantly. Libraries capture and store icons for later use. Icon 7 is the fast, full-featured way to create custom icons.



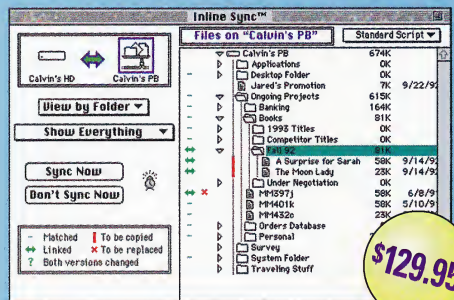
\$79.95



Inline Sync Powerful Powerbook synchronization

Inline Sync is the full-featured Powerbook synchronizing application. It updates vital files between Powerbooks, desktop Macs, and hard drives, no matter where the files are stored. It synchronizes automatically or on command. Use Inline Sync's browser interface to select ANY file or folder, or script selections by name, folder, type, and date. For safety, Inline Sync alerts you to identical files that have both been modified. Works through file sharing, a network, SCSI port, or floppy disk.

"Inline Sync is a fine solution for the vexing problem of keeping the latest versions of your work on both your portable machine and your desktop Mac. With such needless complexity in many programs, it's a relief to find a program that does one thing, and does it so well." — MacWorld



\$129.95

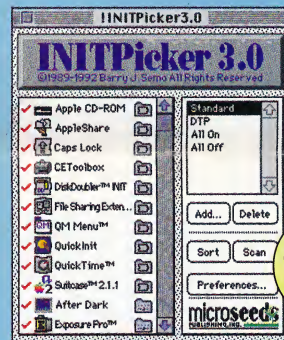


INITPicker 3

Stop INIT conflicts in their tracks

INITPicker shows you all the INITs on your system, lets you choose which to run and the order in which they load. You can even create multiple sets of INITs tailored for the particular work you plan to do. New network features let system administrators control which INITs are run on all networked Macs. New Startup Picker™ lets you launch multiple sets of applications and documents at startup too! INITPicker's BombGuard™ Incompatibility Detection prevents INIT conflicts from crashing your Mac at startup.

"Among utilities that manage Startup documents (INITs) for the Apple Macintosh, INITPicker is by far the best." — MacWEEK



\$79.95

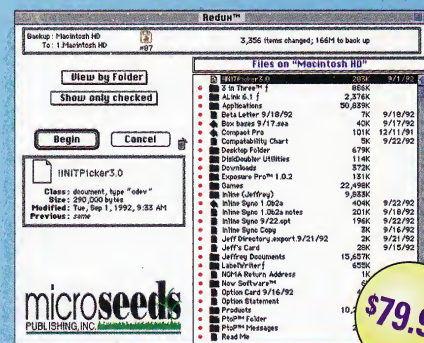


Redux Simple, flawless backup

Redux brings you painless backup, because anybody can trash a file or crash a hard disk. Redux lets you determine what gets backed up: your whole disk; several folders; only certain files; everything or everything except applications — you decide. It has all the features you expect in a great backup utility: it's fast, and efficient, it re-uses backup disks (saving you money), and will verify backup disks. Redux features a built-in scripting language that lets you customize your backup — for instance, you can direct it to back up all Word documents in your correspondence folder less than two weeks old.

"Redux strikes an excellent balance between power and simplicity." — MacWorld

3 1/2, 4 1/2 mice, MacUser



\$79.95

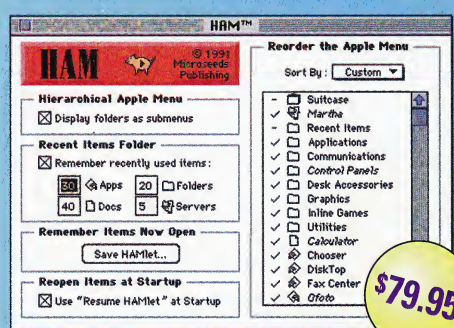


HAM The fast, easy way to find and open your files

HAM lets you display Apple Menu folders as hierarchical menus, so you can open items within them directly. HAM automatically adds your most recently used files, folders, and applications to the Apple menu — so the information you need most is at your fingertips.

Save common worksets as "HAMlets" — collections of multiple documents or applications that can be launched at any time. In addition, HAM knows to startup exactly where you left off the last time you used the Macintosh; if you choose, HAM will automatically reopen the applications and documents that were open when you last shut down.

"HAM is a remarkable and well-designed product. . . For maximum control over the Apple menu, HAM is the package of choice..." — MacWEEK



\$79.95

Icon 7
The Ultimate Finder Icon Editor

Inline Sync
Powerful PowerBook Synchronization

INITPicker 3
Stop INIT Conflicts in Their Tracks

Redux
Simple, Flawless Backup

HAM
The Fast, and Easy Way to Find and Open Your Files

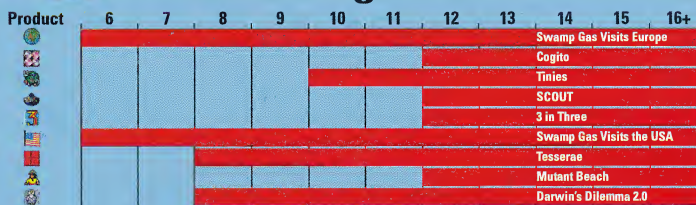


\$49.95



Darwin's Dilemma 2.0 is a color strategy game loosely based on the ideas of evolution. The player must move through the 24 levels of this game by positioning, colliding, and merging icons that represent increasingly complex life forms. Each level brings a new puzzle to solve along with varied Rules of Evolution. But beware, like a classic board game, Darwin's Dilemma is easy to learn but difficult to master... and extremely addictive. Now you can create your own evolution rules with the level and icon editors in Darwin's Dilemma 2.0. **4 1/2 mice, — MacUser**

Game Age Chart



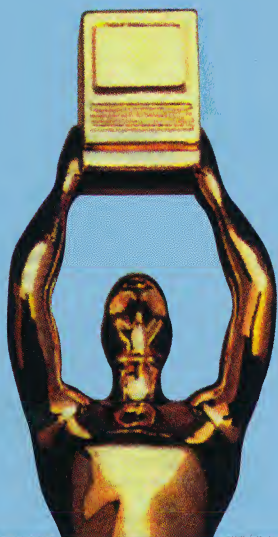
Software and Hardware Compatibility Chart

MAC											PC			
	Plus, SE, Classic, Classic II, Performa 200	SE/30	LC, LCII, Color Classic, Performa 400	II, IIsi, IIfx, IIfx, LCII, IIfx, IIfx, LCIII, Performa 600	PowerBook, PowerBook Duo	Centris, Quadra	Free RAM ¹ B/W Color		Min. System	DOS/Windows	VGA	EGA	Min. RAM	
Games														
3 in Three	✗	✗	✗	✗	✗	✗	700K	1.5 Meg	6.0.5					
Cogito	✗ ²	✗	✗	✗	✗	✗	600K	1.3 Meg	6.0.5	Windows	✗		2 Meg	
Darwin's Dilemma	✗	✗	✗	✗	✗	✗	600K	600K	6.0.7					
Mutant Beach	✗		✗ ³	✗	✗ ²	✗	768K	2.1 Meg	6.0.7 ⁴					
SCOUT		✗ ⁵	✗	✗	✗ ⁵	✗	n/a	2 Meg	6.0.7	DOS	✗	✗	640 K	
Swamp Gas Europe	✗	✗	✗	✗	✗	✗	384K	768K	6.0.5					
Swamp Gas USA	✗	✗	✗	✗	✗	✗	384K	768K	6.0.5	Windows	✗		2 Meg	
Tesseract	✗	✗	✗	✗	✗	✗	800K	800K	6.0.5					
Tinies	✗	✗	✗	✗		✗	1 Meg	2 Meg	6.0.7	DOS	✗		640 K	

- This is how much available memory you need to run the software.
- Plus, SE, Classic, and PowerBook 100 do not play background music.
- If you are using the 12" RGB Monitor, you only need 1750K available memory.
- You need System 7.0 or greater to support background music. Plus, SE, Classic, and PowerBook 100 can't support background music.
- 256 color (8-bit) required.
- All utilities can run on a Mac Plus or higher and require System 7.0. Redux requires System 7.0 or 6.0.5.

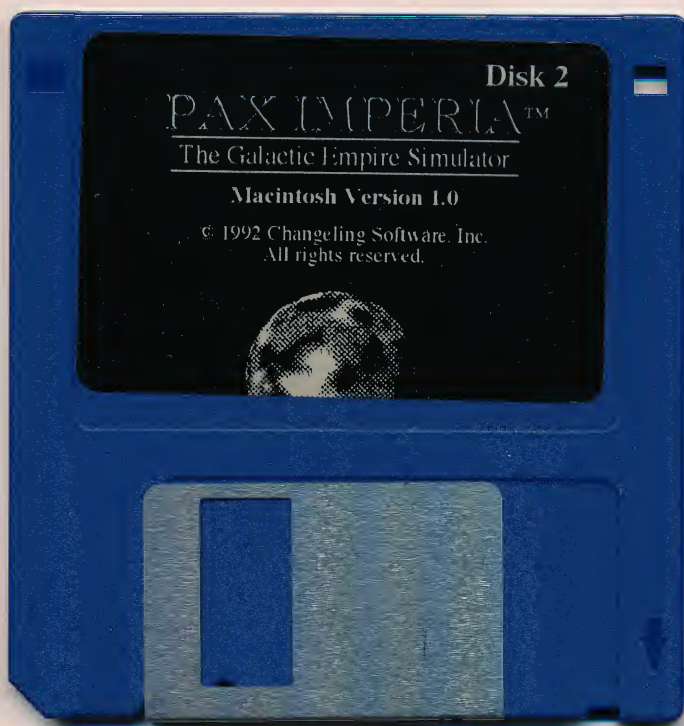


308 Main Street
Lakeville, CT 06039
1-800-453-7671









The background of the entire image is a dark, heavily textured surface, possibly representing a planetary or lunar landscape. On the left side, a portion of a globe is visible, showing the continents of North and South America. The globe is rendered in a lighter, grainy texture compared to the dark background. Overlaid on the right side of the globe is a large, dark, semi-transparent circular shape. The text is positioned over this circular shape and the textured background.

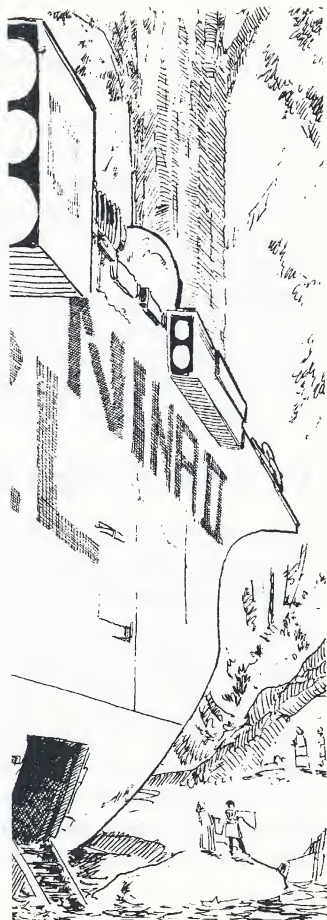
Rules
of
Protocol

PAX
IMPERIA

PAX IMPERIA

*"The whole theory of the universe is directed unerringly to
one single individual – namely to you."*

—Walt Whitman



This software package is protected by federal copyright law and international treaty.

By law, you, the end user, may do the following:

- a) make a copy of the software **solely** for backup or archival purposes; or
- b) transfer the software to a **single** hard disk, provided you keep the original **solely** for backup or archival purposes.

Federal copyright law prohibits you from making any other copy of the software for any other reason without our permission. Federal copyright law also prohibits you from copying the written materials accompanying the software without first obtaining our permission.

Use Limited to a Single Terminal

This software can only be used on a single terminal connected with a single computer at any one time. This means that the software should be loaded on only one hard drive at a time. If you wish to use this software on more than one computer, you must either erase the software from the first hard drive when you move the software to a second hard drive, or else purchase two copies of the software. You may not under any circumstances have this program loaded onto the hard drives of two or more computers at the same time. You also may not copy this software onto a hard drive and then use the disks on another computer.

Program Performance Warranty

Changeling Software, Inc. warrants that this program will perform in substantial compliance with the published specifications and documentation supplied in this package, provided it is used on the computer hardware and with the operating system for which it was designed. This warranty is limited to a period of 90 days from the date of the original purchase.

If you report a significant defect in performance, in writing within 90 days of purchase, Changeling Software, Inc. will attempt to correct it or, at its option, authorize a refund of your license fee.

Disk and Documentation

Changeling Software, Inc. warrants that the original disks and documentation are free from defects in material and workmanship, assuming normal use, for a period of 90 days from the date of the original purchase.

Software © Copyright 1992, Changeling Software Inc.
All rights reserved worldwide.
Manual © Copyright 1992, Changeling Software Inc.
All rights reserved worldwide.
Package Art © Copyright 1992,
Changeling Software Inc.
All rights reserved worldwide.

Concept: Andrew Sispoidis and Pete Sispoidis

Programming: Pete Sipoidis

Design: Pete Sispoidis, Andrew Sispoidis, and Jeanine DeSocio

Graphics: Andrew Sispoidis and Richard Longmore and Tannis Longmore of Bear & Bogel Studios

Voices: POOH and BM

Sound Engineering: Jeanine DeSocio, Andrew Sispoidis, and Pete Sispoidis

Music Composed By: Elliot Jacobowitz at 14 Skelton Rd. Burlington, MA 01803

Documentation Written by: Karen Sperling at The Write Design Studio and Jeanine DeSocio

Documentation Layout by Jeanine DeSocio

Special Thanks to: Mom & Dad
Without them, we wouldn't be here...at all.

Also Thanks to: The Dudist, Nan, Jeff Pandolfo, Red Longmore, Brenda Nashawaty, Michael Paparella, Science Fiction, Visible Light, Shuz, and Darryl and Anne Peck

Beta Testers:

David Acosta, John Bailey, Eric Bates, Kyle Berman, Igor Biles, David Brake, Bob Brands, Scott Campbell, John Chapman, Dan Cutter, Dirk DeJons, John DeWeese, Daniel Eckert, Jason Ehrlich, Scott Ellsworth, Daniel Ericson, Ed Fernandez, Steve Fransen, Ray Gans, Daniel Goodwin, Seth Grenald, Daniel Hagerty, George Harris, Douglas Hicks, Deon Hill, Bruce Hoffman, Doug Houseman, Kevin Jagh, Jeff Kessler, EdselKlemz, Eric Klein, Rob Koch, Michael Langlois, Jeff Laws, Dale Lee, Mark Leslie, Glen Lightsey, David Maffucci, Chris Mark, Milton Moskowitz, Patrick Ng, Jon Norton, Pieter Paulson, Scott Romig, Michael Rutman, Regie Seagraves, Neil Shapiro, Rodney Somerstein, Chris Stehlik, Pamela Stephens, Steve Strassman, Webb Sussman, Steven Szymanski, Peter Szymonik, Dave Valmus, Guy Vardaman, Mike Wellman, Rich Wildey, Andy Williams, and Kyle Zaidain

Pierre 'Just fix It' Menard and Ken Wilkens

Table of Contents

Chapter 1. Introduction

System Requirements	3
Installing Pax Imperia.....	3
A Fleeting Glance at Pax	3
A Look at the Book	5
Registration	5
Technical Support.....	5

Chapter 2. Game Overview

Chapter 3. Game Setup

Selecting Players	12
Selecting Play Level	12
Selecting Stars	15
Sound	16
Turn Mode.....	16
Naming Your Empire and Selecting Play Style.....	17
Game Speed	18

Chapter 4. Game Action

What Are You Doing Here?	20
Universe Window	21
Star Window	22
Planet Window	26
Surface Window	26

Table of Contents

Getting Around	29
Interstellar Travel	30
Interplanetary Travel	31
Landing.....	33
Migration Wars	36
Building Infrastructure.....	39
Building Ships.....	43
Controlling Fleets.....	45
Repairing Ships	48
War and Peace	49
Diplomatic Status.....	50
Trading with the Enemy	51
Bribing and Assassinating Opponents	53
Combat.....	55
Responding to Warning Signals.....	58
Taking Turns	60

Chapter 5. Taking Control of Your Empire

Selecting and Designing Species	62
Naming Advisors	66
Tech Levels	69
Designing Technology	70
Designing Ships	75
Money Matters	77

Appendix

CHAPTER 1.

INTRODUCTION

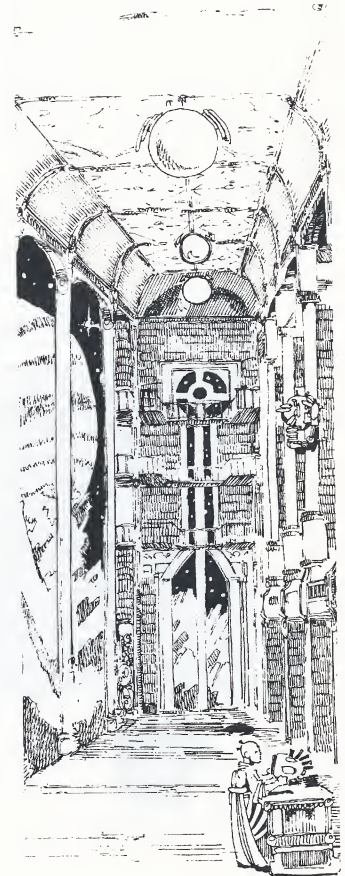
It's sunrise on Canopus Three. You as emperor realize that you're running low on ferrites, pyrrites and the other resources that make your star system tick. Since ferrites don't grow on trees, the time has come for you to venture out into deep, dark space in search of new, unexplored reservoirs of these precious materials if your species is to survive.

It's also sunrise on the fifth planet in the Topaz star system, a mere hop, skip and a warp drive away from Canopus Three. The emperor on that planet hasn't conquered any worlds lately and just the thought of hearing an opponent plead for mercy has him up, dressed, fed and already meeting with his Protocol advisor to plot his next diabolical takeover.

Welcome to Pax Imperia.

In Pax, you are an emperor who, for any number of reasons, has planet hopping in your future. You'll mine for the materials you need to build ships, colonize other planets and, if you're like our friend at Topaz five, add notches to your phaser belt.

Up to 16 humans can play Pax with you, and if everyone's busy that day, you can setup 16 computer opponents. Or you can play with some humans and some computer players. Future versions of Pax will allow you to play on a network.



Introduction



System Requirements

- Mac Plus or better.
- Hard disk with at least 5 megabytes of free space.
- 1 megabyte of available random-access memory (RAM).
- Apple® system software version 6.0.4 or later. 6.0.7 is recommended. Pax Imperia supports System 7.0 and 7.1.
- A color monitor is recommended, but you can run Pax Imperia with a grayscale monitor as well. The game will run automatically in color and black & white mode. Pax Imperia™ supports multiple monitors of varying pixel depths.

Installing Pax Imperia

Insert Disk 1 and double click on the Installing Pax icon.

A Fleeting Glance at Pax

There are many aspects to playing Pax Imperia as you'll see in the following chapters. But if you want to just get a quick look at the game, try the following:

1. Run Pax by double-clicking on its icon.
2. Listen to the music. Click on the splash screen to continue.

3. You can ignore all the settings in the Setup window for now. Click **Done** or press **Return**.

4. Name your empire. We like the Evil Carnivores of Pflog, but any name will do. Click **OK**.

5. Name your opponent's empire. Click **OK**.

6. Ignore the Imperial Status box for now and click **OK**.

Welcome to the Universe! Before you are a couple of star systems. The one with the crown on it is your home base. You'll also see Fleet 1 is stationed at your star system.

Let's take a trip. We'll send the fleet to another star system.

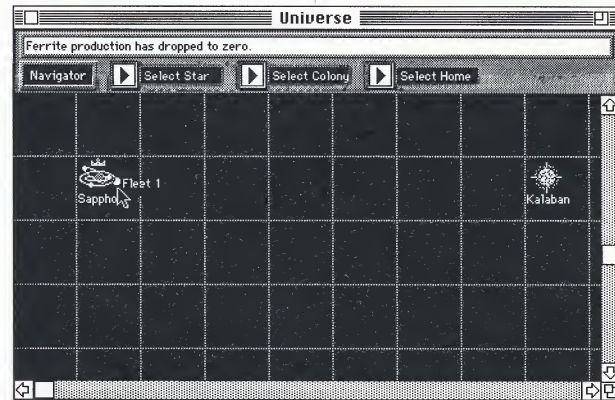
1. Click and hold on Fleet 1.

2. Drag to the words Fleet 1 and let go. Your cursor turns into the Send cursor.

3. Double click on the nearest star system. Your fleet is now on its way.

You've just embarked on your first mission in Pax Imperia.

Bon Voyage!



In the above example, Sappho is your home star. Send Fleet 1 to Kalaban.

Introduction

A Look at the Book

You may know how to launch a fleet in Pax, but there's a whole lot more to playing the game, and this manual will explain it to you. Here's what awaits you:

Chapter 2 is an overview of Pax Imperia and explains what the game is all about.

Chapter 3 covers how to setup Pax.

Chapter 4 details the action of the game.

Chapter 5 goes over Pax's advanced features.

Throughout this manual we refer to menu choices by listing the name of the menu followed by a colon and the name of the command. For example, if you are to choose the Copy command from the Edit menu, it will be noted in boldface as **Edit: Copy**.

Registration

Please register your copy of Pax Imperia. By doing so, you will receive the latest information on Pax Imperia updates and unlimited Technical Support. All you have to do is fill out the self-addressed Registration Card and mail it.

Technical Support

If you need any assistance with Pax Imperia, please contact us via:

Phone (203) 623-1963
Monday to Friday, 10am to 5pm

Fax (203) 654-1661

E-mail AOL: ChangelinS
AppleLink: Changeling
Internet: Changeling@applelink.apple.com

Mail Changeling Software Inc.
596 Elm Street
Windsor Locks, CT 06096-1603

CHAPTER 2.

GAME OVERVIEW

Game Overview

Before we get into the procedures for playing Pax, let's take a look at the general scheme of things.

Pax Imperia is an empire building game.

And you're an emperor.

At the start of the game, you have your very own home planet in your very own star system, which is part of a wondrous universe.

Your people live on your home planet and they're a busy bunch, building your ships and mining your resources.

Your opponents, be they humans or computers, are emperors, too, and have good qualities—and character flaws—just like you.

You are a greedy little emperor and you want a lot of things. High on your list is replenishing your natural resources. Exploring and colonizing uninhabited planets are two more favorite pastimes. You might be an aggressive emperor, and not one to avoid a good battle now and again, you'll maraud the universe, shooting down enemy vessels, invading inhabited planets and pillaging civilizations for your own gain.

As you become more experienced you'll venture into the more advanced game levels, where emperors play a more cerebral, dignified game, taking marauding and pillaging to new intellectual heights. For you, sending fleets out into the night just isn't what it used to be. You now want to design the weapons, sensors, drives and shields that go into your ships. And being the egotist that you are, now you will also design entire species. "Shall my people be more curious or more efficient?" is not an uncommon



question that you'll be asking yourself these days.

No matter what level you play in, you'll want to amass vast numbers of star systems in your continually expanding empire. Or not. You might be a homebody after all, staying on your nice, safe planet, pouring money into research, raising your tech levels, developing systems. You'll run out of resources just like the rest of us, but instead of launching fleets in search of treasures, you'll nudge a little scout ship out past the ozone and, when you bump into someone, you'll trade resources.

Explorer or home-world potato, friendly trader or diabolical destroyer, beginner or advanced player, money makes your world go 'round and you always have your eye on the bottom line. Exploring new planets, mining for resources, building ships and infrastructure and designing technology all cost money. Raising taxes and turning foreign planets into home worlds produce income.

You're a very busy emperor and you have a lot to do, so you need to rely on cabinet ministers to sweat the day-to-day details of your empire like setting research budgets. At the start of the game, everybody gets a cabinet of six advisors, including:



Protocol—You'll establish contact with your interplanetary neighbors through this advisor.

Defense—Ship building comes under this minister's jurisdiction.

Science—Move over Scotty, the Science minister has some technology to design.

Economy—We like the Economy advisor. He has all our money.

Exploration—Where in the universe are you? This minister keeps you informed.

At the beginner levels ministers will be assigned to you. In more advanced play levels you'll be able to name your own cabinet.

These advisors are here to serve you, even in your more nefarious dealings. Are you an evil emperor? Maybe. Spying is not beyond you and your Espionage advisor is close by, ready to assist. You might sabotage an enemy or two, bribing or even assassinating their cabinet ministers. Meanwhile, through Protocol you'll renege or out and out lie in trade dealings with others. Then again, you might be a kind, benevolent ruler, working amicably with your alien neighbors, trading precious resources in an ever-shrinking universal village with your friendly advisors by your side.

No matter how you choose to play Pax Imperia, there's one thing you can be sure of—it'll be amazing!

CHAPTER 3.

GAME SETUP

When you start to play Pax Imperia and throughout the course of the game, there are various setup choices to make that will affect how the game is played out. These include factors like how many stars you'll put into your universe, how close together they'll be, and how to budget decisions.

When you first launch Pax Imperia, after the splash screen is a window that you'll have to make some choices in.

Selecting Players

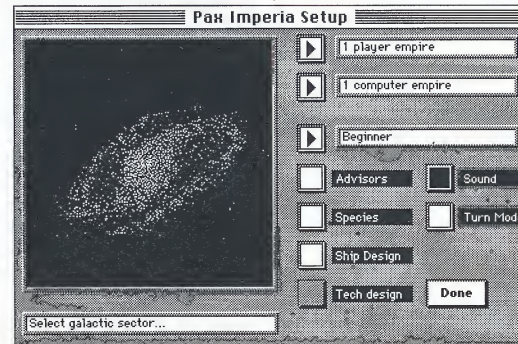
You can have 1 to 16 human or computer players in any combination. To select the number of players:

1. Click and hold on the first arrow and drag to the number of human players that you'd like.
2. Click and hold on the second arrow and drag to the number of computer players that you'd like.

Selecting Play Level

Next you'll pick the play level. To do so, click and hold on the arrow and drag to the play level you prefer.

There are four levels: Beginner, Intermediate, Advanced and Expert. The level you pick will determine how much control you have over your empire and how many resources you start out with. In the lower levels, decisions like ship and technology design are made for you, and you have a fleet as soon as you begin. The more advanced the play



You can select several different game options in the Setup window.

Game Setup

level, the more you'll have to figure things out for yourself and the fewer the resources you'll start out with. Also, the more advanced you are, the fewer the planets you'll have in your home-star system and the smaller your home star system will be. There is good news, however. The more advanced you are, the more regions you start out with on your home world. The more regions you have, the more opportunities you have for mining resources and building ships without ever leaving your planet. If yours is a small world after all, you'll have to look elsewhere sooner for natural resources.

In the Beginner level, you're given more to start out with. Your advisors are already in place, your species is already set and you're given pre-designed ships and technology. As a beginner you also get more resources and your population is bigger on your home-star system. Three fleets are ready and waiting to be sent out when you start the game. Fleet 1 contains a sensor scout and Fleet 2 and Fleet 3 contain large transport ships. Beginners get home worlds that have one region.

The next step up is Intermediate. Life for Intermediate emperors is a little tougher, but much more interesting. You as a knowledgeable emperor will select your advisors from a pool of candidates with varying capabilities, suiting each to a different office. You'll also select or design a species that will represent you in the game. The intermediate level provides you with two starting fleets; Fleet 1 consists of a sensor scout and Fleet 2 consists of a large transport.

Then there's the Advanced level. There's no rest for the weary Advanced Emperor, nor do you want any. The Advanced Emperor is no goldbrick. Not only do you have all the same decisions as the Intermediate Emperor, but you will also design your own ships for use in exploring the stars and battling enemy players. At the beginning of the game you only get one sensor scout. Advanced players get up to four regions on their home planet.

Last, there's the Expert level. Take a deep breath—your work is cut out for you, but it is challenging and rewarding. You'll make all the decisions of the other three levels, plus you'll design individual technological systems including weapons and sensors that you'll use when you design your ships. Also, your star system is definitely lacking in the things you hold dear, like pyrrites. There's no starting fleet, either. But you do get up to nine regions on your home planet.

The more you play Pax Imperia the more you'll want to advance in the levels so that you can have control over all aspects of your empire. While you're just learning the game, though, it's probably better to stick to the beginner game.

The Advisors, Species, Ship Design and Tech Design buttons control whether you will name advisors and make design decisions. They are automatically selected and de-selected based on the play level you choose, although you can select them manually, too. You can, for instance, decide to design technology as a beginner. It's up to you. But you can ignore them, too. These categories are described in detail in Chapter 5 — Taking Control of Your Empire.

Advisors

Clicking Advisors means you'll be able to name your six cabinet ministers yourself.

Species

Clicking Species means you'll be able to design your own species.

Ship design

Game Setup

Clicking Ship Design lets you design ships.

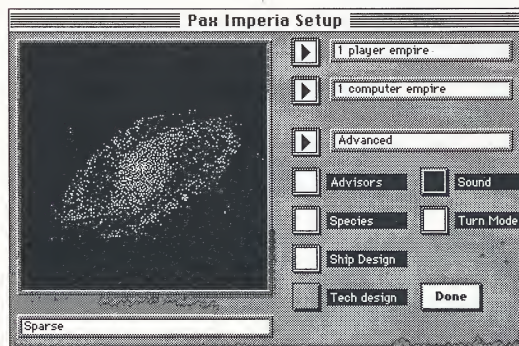
Tech design

Clicking Tech Design lets you create custom technological systems.

If all players are playing with stock equipment, then you know each other's weaknesses. If you're both designing everything, then everything in the game will be variable.

Selecting Stars

The galaxy map is displayed in the left portion of the Setup window. In this map you'll choose how close together the stars in your universe will be.



The box selector is over a sparse area.

Move your cursor over the galaxy. It changes into a box selector and you see below the words rift, intergalactic, sparse, normal, dense and core. Intergalactic means the stars will be the farthest apart and core will put them the closest together, with the rest being somewhere in between. Choosing stars that are closer together means it will take less time to reach them, and therefore the action will move more quickly. Also, you'll spend less money on ships to get you from star to star the closer they are to one another. The faster drives cost more to build.

Click when you see the density you want. The density is

calculated and, once it's complete, you'll see a chunk of universe with the density you chose. Now you can designate the number of stars that will make up your universe. To select a group of stars, click and drag in the sector map. The number you select is listed below. You can choose up to 50 stars depending on the amount of memory you have.

The fewer the stars you select for your Universe, the more competitive the game will be because everyone will be conquering the same worlds and there will be fewer resources to go around. The more stars there are, the more friendly the game can be because there's more territory to cover. But emperor beware—the more stars you select for your universe, the slower the game will run.

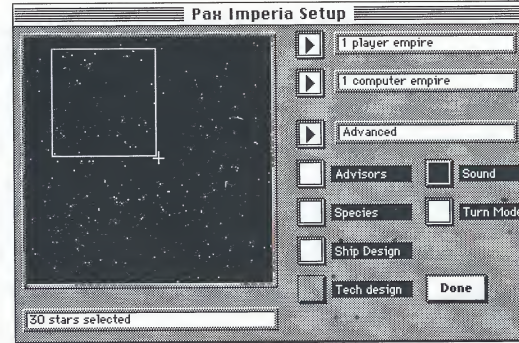
If you do not select individual stars during setup, the universe will consist of only home stars (i.e. a three-empire game will equal three stars).

Sound

Click on the sound button if you would like to hear sounds during the game. Click **Done** once you have made all your choices in the Setup window.

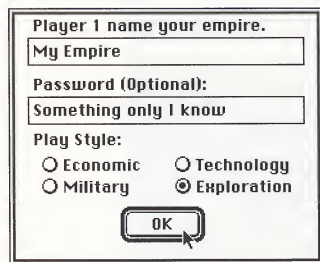
Turn Mode

If you want to force the game to play in turn mode rather than in real time, click on the Turn Mode button.



Thirty stars have been selected.

Game Setup



Player 1 name your empire.
My Empire

Password (Optional):
Something only I know

Play Style:
☐ Economic ☐ Technology
☐ Military ☒ Exploration

OK

An Exploration play style has been chosen. This emperor prefers to expand his empire.

Naming your Empire and Selecting Play Style

Now you can name your empire, choose a password and select a play style.

First type in your empire's name, then type in a password. The password is an option that will prevent other players from sabotaging your turns. This may or not be necessary—you know your friends better than we do. Those emperors who choose to use a password will be asked to type it each turn.

Next choose a play style that will determine how to score points, although it isn't crucial to playing Pax. Each player can choose a different style. The style that you choose will be your main objective. During the game, you can review your points under Imperial Status.

Here's a list of how you score points in the various play styles:

Economic—you'll make points based on the number of cities, factories, ports, dollars and resources you've accumulated.

Military—looks at the present size of your fleet including how high the tech level is of specific systems.

Technology—accumulate points based on your average tech level in abstract sciences.

Exploration—decides points based on how far you've expanded in terms of controlling regions.

After everyone types in their name, password and play style, the Imperial Status dialog box appears.

Victory Points break down the scores of each play style. Values located under Base are the raw scores of each category. Modified scores reflect bonus points that you get in the category that you chose as your play style.

Empire Data is the current status of your empire.

By choosing **Player: Imperial Status**, you may access this window at any time.

IMPERIAL STATUS				
Human Empire Player 1				
Victory Points			Empire Data	
	Base	Modified	Rank	
Economy	96	192	2	Dollars \$32,264,588
Military	40	40	1	Population 11,245
Technology	100	100	2	Ferrites 10,000
Exploration	100	100	2	Pyrrites 10,000
				Silicates 10,000
				Crystals 10,000
				Radiants 10,000
				Regions Controlled 1
				Tech Level 1
Total	336	432	2	
OK				

Game Speed

Choose the Game menu to select game speed. Pax can run at one of five speeds: Pause, Crawl, Normal, Fast, and Real Fast. The speeds will affect updates, movements and population growth.

Imperial Status can be accessed at any time so that you may compare your status with that of other emperors.

CHAPTER 4.

GAME ACTION

Welcome to the Universe!

You should follow the setup procedures in the last chapter and you should see the Universe in front of you before you read this chapter.

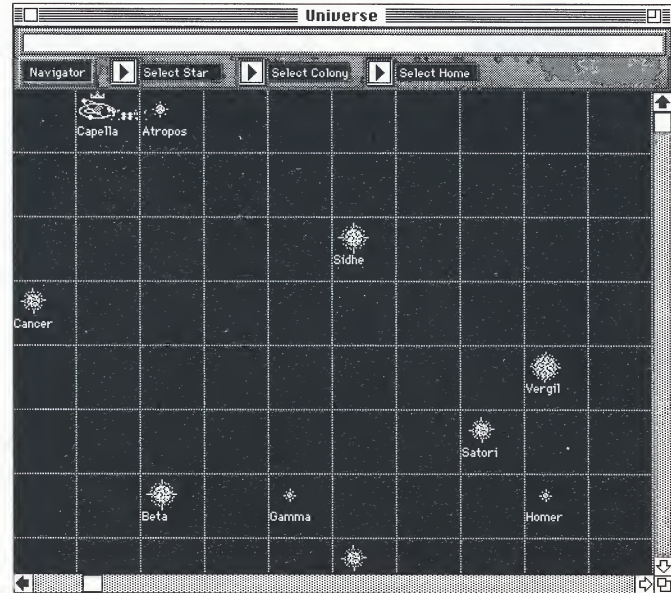
What Are You Doing Here?

Exploring the Universe is a main occupation of able-bodied emperors, and you'll need to know how to navigate among Pax Imperia's various views if you are to make all those years at the academy pay off.

You explore the universe by sending fleets between star systems, then planets, then landing them on planet surfaces. Each of these levels of the galaxy—universe, star, planet and surface—has its own window with a view.

The main reason you want to explore the universe is that you need to replenish your supply of the natural resources ferrites, pyrrites, silicates, crystals and radiants. You need these resources to propel your fleets and to construct your infrastructure, which includes shipyards, factories, cities, bases and ports. Where you will find resources is on the planets within either your home-star system or around the galaxy.

In your travels you will come across both inhabited and uninhabited planets—both are fair game for mining resources.



Game Action



First we'll go over what you can do in each view, then we'll discuss moving and landing fleets.

Universe Window

The Universe view is where you'll do interstellar travel. It displays all the stars that you selected during game setup. Each star has its own name and icon. As you play Pax Imperia, star systems will fall into one of four categories: Home, Unexplored, Explored and Colonized.

Home Star

When you start the game, you get a home-star system and, within it, a home planet. You can tell your home star from all the other stars because it looks like a star system topped by a crown.

As you play Pax you'll be taking over other star systems and turning them into home stars, too. A star becomes a home-star system when you have developed a planet within it into a home planet, which we'll go over later in this chapter. To mark its transition into home-star system status, the icon in the Universe view will have a crown on it, just like your original home star.

Unexplored Star

The other stars in the universe are unexplored stars which means you haven't visited them yet. An unexplored star is just a simple icon twinkling brightly in the distance.

There are planets and moons circling it, but you can't see them yet.

Explored Star

When a fleet arrives at a star, a prompt appears telling you that you have explored the star system. Your arrival turns the star icon into a star-system icon.

Colony Star

You have to land colonists on a planet to mine its resources. When your people arrive, a star system becomes a colony and its icon gets a stick figure on top.

The universe window is resizeable and scrollable. Clicking in the grow box in the upper right-hand corner will expand the window to either the full size of the universe or, if the universe is larger than the monitor, to fill the screen. In the Game menu, you can Zoom Out and Zoom In within the Universe window. Zoom Out will make the dimensions of the universe map smaller, Zoom In will make them larger.

Star Window

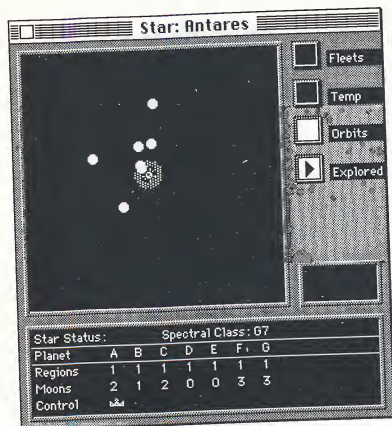
Each explored star has its own star window.

To see your home-star window, double click on your home-star system. The Star window opens and shows the star's name in the title bar.

Whether you are within your home-star system or a new one, you'll use the Star window to see if any planet or moon's atmosphere and climate are suitable for your



Game Action



people so that they can mine a planet's resources efficiently. When you find a suitable planet you will land on it.

See, you're a benevolent ruler, after all, and you want to find good working conditions for your miners as they pull natural resources from a planet's reserves. Not really, in fact, the problem is, if you land everybody on a planet that has air that's hard for them to breathe or that is too hot or too cold for them, it will take them longer to do their work, which will cost you more money and will also mean what reserves you do have will run out while these poor people try their best to keep their strength up.

As a beginner, your default species is very Earthling-like. Therefore your colonizers are oxygen-breathers and like the weather to be a spring-like 160° Kelvin (this is serious scientific stuff). So you'll be first of all looking for planets that have an atmosphere and temperature that are conducive to life as your people know it. You can, however, land on non-oxygen planets that are hotter or colder than your people would like. But doing so will mean stretching the time it takes to mine resources, making it more expensive to develop the planet. Choosing worlds that satisfy both your species' temperature and atmosphere requirements are the most desirable worlds. Those worlds which satisfy one requirement are less desirable, and worlds which fail to support your species' temperature and atmosphere are nearly worthless.

You'll be checking out planets all over the galaxy, but sometimes there's no place like your home-star system, and there may be planets right next door to your home planet that are just as juicy as any you'll find elsewhere.

When you find a planet that looks tempting, your first goal is to land on it. Next you will build a factory on it. Then you can start scooping up raw materials. Your ultimate goal is to turn a planet into a Home World by building a port on it. Then it will

contribute income to your empire through taxes in addition to resources. Last you'll build a shipyard on it to build ships there. You can only build ships on home worlds..

The panel that runs across the bottom of the Star window displays information about planets in the star system from planet A, which is the closest to the star, to the last letter, which is the planet farthest away. What that letter is will depend on how many planets there are in the star system—each one has a different number. Hit tab and Planet A is selected. You can also select a planet by clicking on it in the map, clicking on its letter, or by typing its letter. A selected planet will be outlined by a white square.

Star Status:		Spectral Class: G7					
Planet	A	B	C	D	E	F	G
Regions	1	1	1	1	1	1	1
Moons	2	1	2	0	0	3	3
Control							

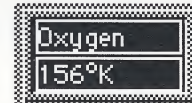
In the lower right portion of the window you'll see the selected planet's atmosphere and temperature. If the planet is habitable, the atmosphere and temperature will be in green type on color monitors and highlighted by a rectangle on black and white displays. If the temperature is too hot for your species it will be in red type and blue if it's too cold. If the atmosphere is bad, it will also be in red. On black and white screens, these areas will be plain if they don't look too good for your species.

Spectral Class is an astronomical term that labels the star according to size, color and temperature, but it doesn't really affect your game. We needed it to figure out planet temperatures.

Regions is the number of regions on the planet. The more regions there are the more resources there will be to mine.

Moons is the number of moons each planet has.

This star system contains 7 planets. Planet A is your Home world and it has 2 moons.



Both the atmosphere and temperature of this planet are hospitable.

Game Action

Control identifies the empire or empires that occupy a planet. If it's your home planet, you'll see a crown and, if it's your colony, you'll see the people icon. Planets controlled by other emperors are marked by squares and circles; squares indicate foreign colonies, and circles indicate foreign homes. The letters that are enclosed in the squares and/or the circles identify the empire. Select **Player: Next Player** to find out which letter represents each of the emperors playing with you.

Here's what the buttons mean:

Clicking on Fleets displays all the fleets in the star system. The fleets appear as little white dots.

Clicking Temp displays the temperature band. The planets within this band are suitable for your species.

Clicking Orbits shows the planets' paths as they orbit the star.

Click and hold on Explored to call up an explored Star's menu.

Hit tab to proceed through the planets. Hit the left arrow key to go back to a planet.

If a planet looks particularly interesting in terms of atmosphere, temperature and number of regions, double click on it or on its letter, or with the planet selected in the bottom panel, hit return or Enter. For now, double click on your home planet—the one with the crown below it. This will take you to the planet view, which will tell you more about the planet's moons, which are also mineable.

Planet Window

The Planet window shows the planet you selected and its orbiting moon(s). The planet is highlighted with a square around it. The box in the bottom of the window shows the planet or moon's atmosphere, depending on which is selected. It also lists the moons by number and shows the number of regions each moon has and who controls it. When the window first opens, it shows the planet's atmosphere. To check out a moon's atmosphere, click on the moon in the map, on its number at the bottom of the window, press tab or type its number. To re-select the planet, click on it in the window or press Tab again when the last moon is selected.

The Fleets and Orbits buttons serve the same purposes as in the Star Window.

Double clicking on a moon or planet, double clicking within the information panel or pressing Return will open the Surface window. Double-click on your home planet for now.

Surface Window

The Surface window gives you an aerial view of a planet or moon. It's in this window that all the surface action takes place.

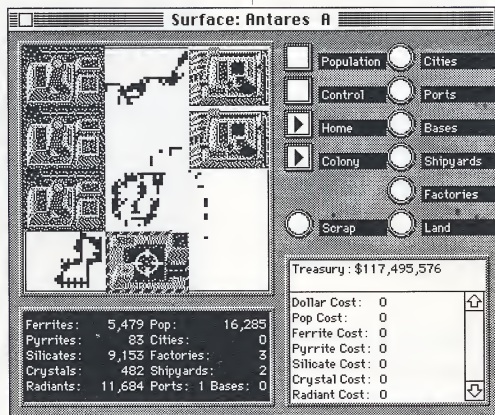
On your home world, use this window to build infrastructure and possibly to land colonists to combat a migration war—both are discussed later in this chapter. On foreign-inhabited planets, you'll bomb your opponents, you warmonger, and possibly land colonists. And in the case of uninhabited worlds, you'll land colonists and build infrastructure. The Surface window also keeps you posted about what's happening on



Notice that the orbits of Antares A and its two moons are visible.

Game Action

the surface in terms of available resources, population, money and the status of your infrastructure.



This planet has three factories, two shipyards, and one port.

The Surface window has a map of the planet surface with a grid overlay separating out regions on planets that have more than one region. If there's only one region you won't see the grid.

If the planet is inhabited, as is the case with your home planet that you're currently viewing, you'll see pictures of cities, shipyards, factories, bases or ports in the surface map. If the planet is uninhabited, you'll just see terra firma, unless it's a gas giant whose surface can't be viewed.

On multi-region surfaces, click in a region to select it. You can use the arrow keys to go from one region to another. Double clicking on a region in a multi-region surface map will zoom it up.

Look in the information panel in the lower left for the latest about a region's resources and infrastructure. Some planets have more resources than others and you might want to check this section first to see if a planet's reservoirs are plentiful enough to justify landing there.

Population is measured in population units. Each unit is equal to 1000 people. If a planet has a population of 77,615, the number of people is actually 7,761,500.

To the right of the surface map are four buttons: Population, Control, Home and Colony. We'll talk about the other buttons later.

When selected, Population indicates the current population density of the surface's regions. As population density increases, shades become darker and as population density decreases, shades become lighter. The colors also tell you when you can afford to build certain kinds of infrastructure, which is covered more in depth later in this chapter.

<u>Population</u>	<u>Region Shade</u>	<u>Purchase</u>
0-1,000	clear	factory
1,001- 2,500	yellow	
2,501- 5,000	green	ports
5,001- 20,000	blue	city
20,001- 25,000	red*	
25,001- up	black**	

* Red regions are in danger of being over-populated.

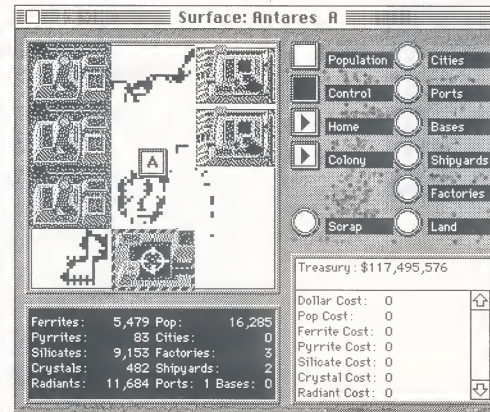
**Black regions are over-populated.

For black and white monitors, shades of gray will indicate population ranges.

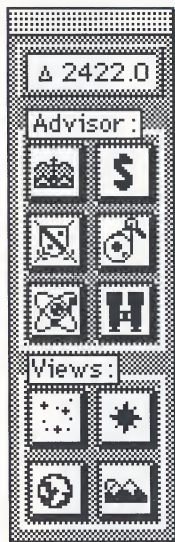
Control will inform you if a region is controlled by an emperor. When the Control button is selected, lettered-button icons will appear in all controlled regions. The letter corresponds to the region's rightful owner. Select **Player: Next Player** for determining your own letter.

Click on the Home arrow and drag to go to another Home world.

This single-region planet is controlled by player A.



Game Action



Click on the Colony arrow and drag to go to another Colony.

Getting Around

As you play Pax Imperia you'll be going in and out of views all the time. You'll be checking out planet surfaces and then zooming back out to the Universe again. It will help if you know how to get around.

There are several ways to maneuver among the Universe, Star, Planet and Surface views.

First there's the Control Panel. The Control Panel summons up your first home star and planet. Once you investigate a different star or planet, the panel will bring the windows of the last star or planet you viewed to the front. Click on a button to summon its corresponding view:



Universe



Star



Planet



Surface

Another handy way to zoom around your Universe is by using the View menu item or the command keys listed next to each view. Meanwhile, you can click and hold on one of the three Navigator arrows at the top of the Universe window and drag to your desired destination.

If you click and hold on the Navigator, a miniature map of your universe will appear. Dots represent the stars and the rectangle is a scaled representation of the window.

Dragging the rectangle to another part of the scaled universe map and letting go of the mouse button will take you to that part of the universe. This feature makes getting around easier for players with smaller monitors who have selected large playing areas.

Interstellar Travel

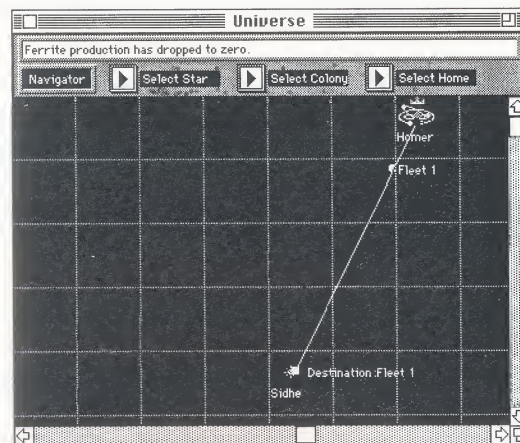
Now that you have the Universe in perspective, you probably want to go out and look around. The way you travel to a new star system is to send a fleet to it. A fleet is a collection of one or more ships. Later in this chapter you'll find out about building ships, and building and managing fleets.

To send a fleet to a star in the Universe view:

1. Click and hold the cursor anywhere within the sector where your fleet is. A pop-up menu appears. At the top will be Fleet Control and just below will be a list of all the fleets located at that star, which in the beginning of the game will probably be one.
2. Drag to the fleet you want to launch and let go. The cursor changes into the Send cursor. If you make a mistake and want to cancel the send, select the fleet again or open any non-destination window and the Send cursor will change back to the original arrow.
3. Next double click the Send cursor on a star that you want to explore. The nearest one is usually a good choice. A line will connect your current location with the new star and the words "Destination Fleet X" will appear. The departure point is marked by a circle and the destination point is marked by a square. Your fleet will travel along this route until it reaches this new star system. When it does, the line will disappear. If you

Game Action

go back and click and hold on the fleet while it's in transit, you'll see a diamond next to the fleet's name that also shows it's on its way.



You can only give orders to one fleet at a time. However, you can designate multiple fleets to merge with other fleets. This function is particularly useful for organizing defense plans. Merge is covered more in depth near the end of this chapter.

Interplanetary Travel

After awhile, you'll get a message saying that your fleet has arrived at its destination. This turns the star into an Explored Star.

The next step is choose a planet within the star system to send the fleet to in preparation to land.

Check out which planet you want to go to as described earlier in this chapter. Then, if it looks like a planet is a good lode, send a fleet there. Here's how:

1. Click and hold on the white dot in the Star window.
2. Click and drag to Fleet 1. The cursor becomes the Send cursor.
3. Double-click on the planet you want to eventually land on.
4. The fleet is now on its way there.

You can move fleets across different windows. For example, you can select a fleet in the Planet view and then double click in the Universe view.

If you have selected the Send function and need to open up additional windows without designating a destination, hold down the command key and double click on the star system, star, planet and/or moon.

You can send fleets anywhere within the Universe, Star and Planet views. You can also send ships to barren space if the mood hits you. You're an emperor—who's going to stop you?

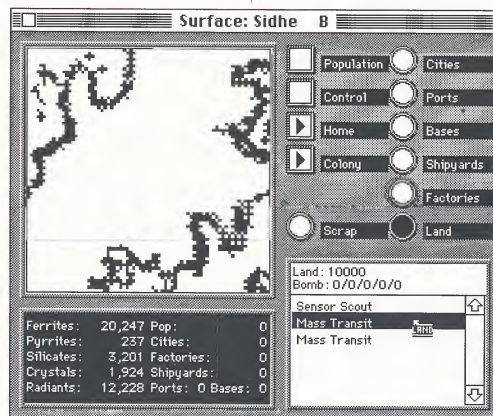
Note: If you have a hard time finding your fleet, you should toggle the Fleet button on and off.

Game Action

Landing

Once the fleet has arrived at the planet, you have the choice of flying one of three missions. The choice will be based on whether the planet is inhabited, how aggressive you want to be and what's happening in the region you want to land in.

To land a ship:



After clicking the Land button, a Mass Transit is being selected. Once the ship is highlighted in the list, drag the land cursor over the surface map.

1. Go to the Surface window of the planet you sent the fleet to.
2. Click the Land button. The cursor turns into the Land cursor.
3. In the scrolling list in the lower right portion of the Surface window, click on the ship you want to send to the planet's surface. To select more than one ship, click and drag through the list or click on each ship. To de-select, command click. To select a range of ships, click on one and shift click on the last.
4. Click and hold in the surface map. You'll see a pop-up menu from which you can select one of three missions.

Assault

If you want to land on an inhabited planet that has bases in a region you want to land in, you'll fly an Assault mission to destroy the bases or else you'll be shot down on

your way in. You'll know if there are bases by checking the information panel in the lower left portion of the Surface window. Besides annihilating bases, Assault will also blow up a factory here and there and kill an inhabitant or two, but these aren't the primary assault goals. Assault is only available after you have ships with weapons on them, which you won't have until after you design ships with them yourself or until your tech levels rise and you're automatically given the choice to build ships that are supplied with them. See Chapter 5 — Taking Control of Your Empire for instructions about designing ships with weapons.

Once the bases are destroyed, then the planet is opened to colonist-carrying transports—see the Land section below.

Raid

Whereas Assault blows up military bases, Raid destroys infrastructure, so you can eliminate an enemy's factories, thereby cutting off his ability to tap a region's resources. As in the Assault mission, watch out for bases—you'll get blown to smithereens if you try to Raid a region protected by bases because Raid targets shipyards, factories, cities and ports, not bases. And forget it if you don't have any weapons yet. As with Assault, you'll need a warship to Raid. If there are no bases, then the planet is fair game. You would fly a Raid mission if you want to mess up an opponent's economy. You can go in, raid and destroy infrastructure, then later land colonists, create your own infrastructure, and mine resources for your own empire. Raid will also reduce enemy population a tad, but not as effectively as land will (see below).

Ships can Raid and Assault indefinitely unless the ship is damaged—you don't use up weapons. But ships make only one attack per turn.



Game Action



Land

When you choose a Land mission, you're opting to send your colonists to a surface. You can Land ships on any planets or moons except for gas giants.

You'll choose Land if you want to send colonists to an uninhabited planet. In the beginner game, Landing one of your large transports places 10,000k people on the planet's surface. Then you'll develop your infrastructure, mine for resources and eventually turn the planet into a colony and ultimately into a home world.

You'll also choose Land if you want to Land on a planet that's inhabited, that doesn't have any bases to protect it and that you want to develop eventually into an income-producing home world. You'll be killing off inhabitants when you Land.

In either case, once you Land colonists, the world becomes a colony and the people icon appears next to the planet.

If you try to Land in an enemy region protected by bases, you'll be bombarded and you'll lose your transport and all 10,000 people aboard. You'll know it's all over when you see that there is no population increase even though you've Landed colonists.

Even if you send warships in with transports by Landing, you'll still lose the transports if there are bases in the region where you'd like to Land. A good strategy if there are bases is to first Assault with a warship and to then Land a transport, which will kill off part of the population. Assault and Raid will also reduce population, but not as effectively as Land will.

5. Drag to the mission you want and let go.

After you've chosen the mission the Surface-Approach window will open. It is divided into four sections. In the upper left-hand corner is the Region Defense Status panel. This panel centers the main target in the selected region. The icons that are displayed are the targets in the surrounding regions. If you choose an assault mission, during the approach the bases will go away in the upper-left hand corner showing the damage the assault is doing.

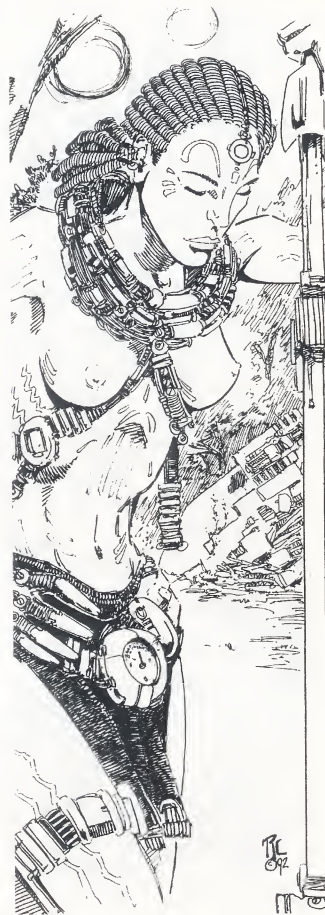
Below Region Defense Status is the Approach Indicator, which is like a graph of the approach, and in the upper right you'll see a map of the approach. Each of the five approaching views shown in the Approach Indicator corresponds to the five views in the upper-right panel.

The upper-right panel includes a bar graph called Target Region Status. This graph indicates the damage occurring to population, resources, cities, factories and shipyards in each of the five approaches, giving you an indication of how much damage you're doing to a region. If you have three factories in a region, when one blows up, the bar graph will get shorter. This indicator will come in handy when you Assault or Raid, but is less significant when you Land.

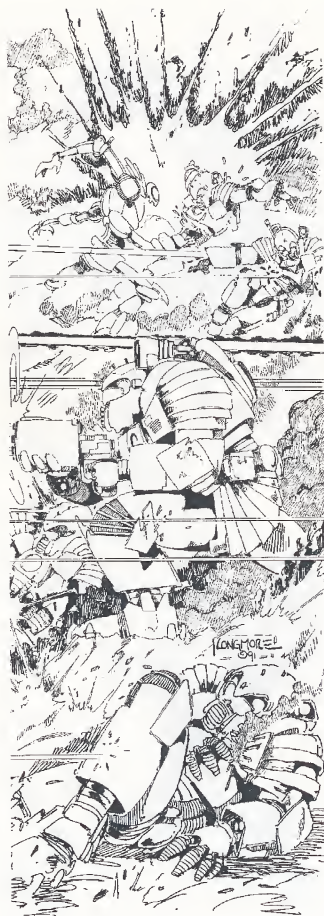
The bottom-right panel indicates the types of military vessels and transports involved in the land. The number to the right of each indicates number.

Migration Wars

We've been talking about when you personally go around doing your own Raid,



Game Action



Assault and Land missions on unsuspecting extra-terrestrials, but what if you, luckless emperor, are invaded yourself! There's no use in denying it—any day now, an enemy could come along to your home world and overpower you! You might as well plan now, because it will happen.

If an enemy Raids or Assaults your planet, and you didn't have any bases to protect yourself, you'll lose infrastructure—cities, shipyards, ports and factories. Losing factories means that you lose access to the planet's resources and losing a port means an end to whatever income the planet might have been providing.

If an opponent does a Land mission, there are different outcomes, depending on the size of your planet.

On a one-region planet, your people may die, which will turn control of the planet over to the enemy.

On a multi-region planet, it may be all over for the population just in the region. The people in the other regions are safe for the time being, but they're doomed because eventually you'll lose population in those regions in that bañe to modern society, the Migration War.

If you have a faint heart, we suggest that you don't read this section and proceed to building infrastructure.

But if you can handle it, we'll tell you about the awful truth.

Migration Wars will occur because as populations grow, they spread out. So enemies may be far away in distant regions, but eventually they'll infiltrate into what were safe

regions on the planet, killing everyone in their path.

There are several things you can do if you're invaded by a Land mission.

On a single-region planet, you can do a Land mission yourself, Landing one of your own transports, which brings in reinforcement colonists and kills off enemy invaders. Don't say we didn't warn you about the horrors of war.

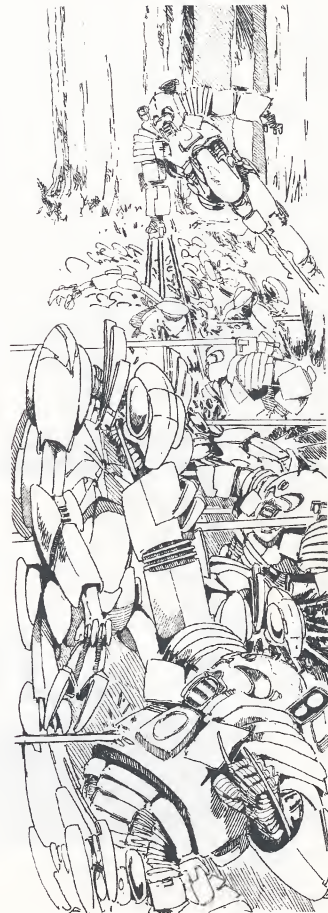
You can also build a base—we'll tell you how in a minute. A base will help you defend the region against migrating forces. Unfortunately, it's just a temporary measure. When the migrating population gets big enough it will ultimately be able to penetrate the region despite the base.

On a multi-region planet, there are several options.

For instance, as on a single-region planet, you can Land additional colonists in the region. Meanwhile, just like your enemy's population will migrate, so will yours. So another alternative is to simply wait for the gradual migration of your colonists from surrounding regions to the jeopardized region.

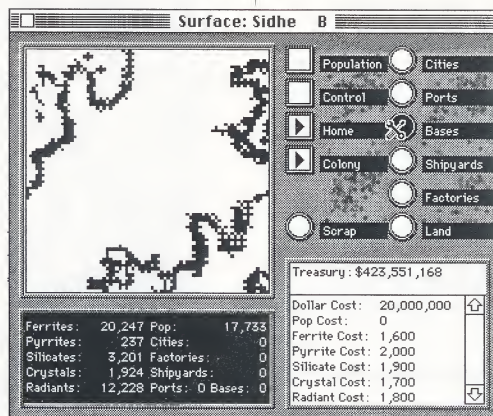
In the advanced levels of play, when you design your species, you can give it a high reproduction rate. Then during the game if a Migration War occurs, your people will reproduce more quickly into neighboring regions, overpowering any enemy infiltrators.

Another option is to increase the colony spending in the Economic advisor's window and to decrease social spending in the Economic advisor's window—both are covered in Chapter 5 — Taking Control of Your Empire. Both will increase population growth.



Game Action

A base has been selected and the cursor has changed. The lower right window displays the requirements needed to construct the base.



Another possibility is to do nothing—a sort of peaceful co-existence on a planet with another player where you have control of some regions and he has control of others. As populations spread, someone is going to be overpowered on the planet eventually, but, in the meantime, you can mine resources and even collect taxes if you've built a port. It might cost you more to save the planet than you think it's worth—you may prefer to spend money to explore other planets rather than squabble with an enemy over control of this one. It will depend on its atmosphere, climate and resources. But just think of those colonists who are about to die! Oh, the inhumanity!

Building Infrastructure

Infrastructure in Pax Imperia includes Factories, Shipyards, Bases, Cities and Ports.

Building infrastructure expands your Empire's economy, you tycoon.

You'll build infrastructure in the surface view.

To build:

1. Select a type of infrastructure by clicking once on its button. The cursor becomes a wrench and a screwdriver.
2. In the bottom right, check in the window in the lower right portion to see if you have the money, resources and population to build the selected infrastructure. Don't worry about looking too closely at this chart. If you try to build something you can't afford

or that you don't have enough resources for, Pax will tell you with a dialog box that lists what you're missing to go through with the construction.

3. Single click on the region in the map where you wish to build. If you have met the proper requirements, the infrastructure is constructed. The listing in the bottom left will reflect the addition and a little graphic will appear in the region.

You can build infrastructure on home planets or on planets in explored star systems that you've landed on.

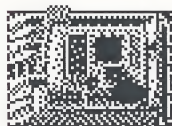
When you start the game, you should make sure that your home planet has every kind of infrastructure by checking the listing in the lower-left portion of the Surface window. For instance, if there's a zero next to factories on your home world, it means that you aren't mining any resources, which means you aren't producing any fuel for your ships or any of the materials you need to build either infrastructure or equipment. A good strategy, then, is to make sure your own world is taken care of before going off where no being has gone before.

Also, before you venture out into the galaxy, keep in mind that there are other planets and moons in your home-star system that may have desirable climates and atmospheres and abundant resources that make developing infrastructure desirable.

Regardless of whether you're building in your home-star system or in a colonized one, you can only build so much infrastructure in a given region. A dialog box will inform you that a region has reached its limit of a certain kind of infrastructure when you try to build it.



Game Action



Here's what each kind of infrastructure does for you:

Factories—Your primary interest in building factories is that they mine the resources that you can't get enough of. They also build all the systems that go on the ships, so without them, you'd be a sedentary little emperor.

Shipyards—Here's where you'll build the hulls of your ships and assemble all the components that are built in the factories. You can only build ships on home planets.

Cities—These great metropolises house your people. Cities increase their region's efficiency by making the locals happy. Your cities are very modern and go beyond just plain housing. You offer all the modern conveniences, creature comforts and culture any group of hard-working subjects could ever want. And you're an emperor with a social conscience—you provide social services like shelters for the homeless. We know you do all this so your people will work harder, but we forgive you, because they really do benefit from it. By the way, all you'll see is a Cities icon when you build a city—you won't be able to see all these other features we just described. You'll just have to trust us that they're there.

Bases—protect your people from enemy invasion during air raids and migration wars. Bases also give you sensor range in the universe to spot enemy fleets. How far away you can detect your enemies is based on sensor-technology level, which rises as the game progresses and as you spend money on technology. See Chapter 5 — Taking Control of Your Empire to see how. Meanwhile, you might need a base if you're taxing your people too highly and they rebel. If you have a base in the region, it reduces the chances of a rebellion occurring.

Ports—Building a port turns a planet into a home planet, which means that you'll start

making an income from it. Also you'll be able to build ships on a home planet.

When you Land on a planet, you might build a factory to mine resources, a city to increase your people's productivity and a base to protect them. At this stage, the colony costs you money to maintain.

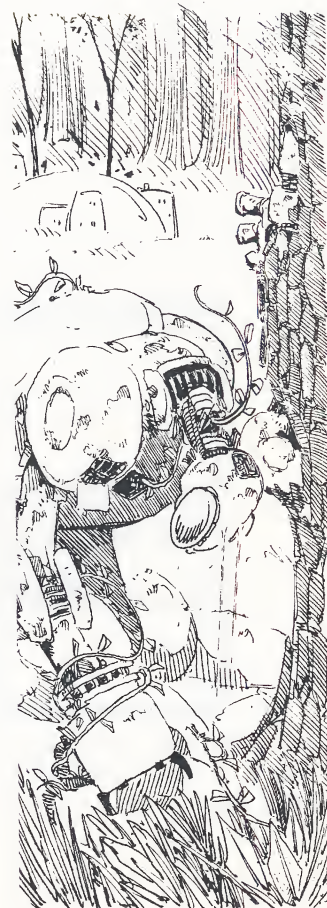
After a few turns and after the population expands, you'll be able to afford to build a port. As soon as you do, the colony becomes a home planet and instead of costing you money, it now produces income through taxes. Every time you build a city on a home world you add to your tax base. Finally, once it's a home planet, you'll build a shipyard to build ships there.

You can make the colony population grow more quickly, and therefore turn it into an income-producing home planet sooner, by increasing colony spending in the Economic advisor's window. However, raising social spending slows down population growth, although it does raise efficiency.

Also, it isn't required that you turn a planet into a home world. You can just build factories, mine all the planet's resources, and then move on.

On home worlds, building infrastructure helps your tax base because the population that it takes to build it is still taxed.

Here's what we mean. Once a population goes over 20,000 in a region, income drops off. It costs a certain population to build any infrastructure. Take cities, for instance. When you build a city, a region's population decreases by 5,000. Therefore, if you build a city, you take 5,000 away from the 20,000, leaving 15,000. The population then grows back to 20,000. Those 20,000 people are taxed, but so are the 5,000 that it



Game Action

cost to build the city, for a total tax base of 25,000.

Put another way, although your population decreases when you build infrastructure, your tax base does not. The population required for each infrastructure will continue to contribute taxes.

Scrapping infrastructure will recycle half of that infrastructure's resource cost and will return its population to the region.

To scrap infrastructure:

1. Select Scrap.
2. Click on the infrastructure you want to scrap.

If you want to scrap on multi-region worlds, you must zoom into one region before you select Scrap

Building Ships

As you've seen, you send fleets across the Universe and to planets, where you land them. Players at the beginner, intermediate and advanced levels get a fleet to start out with, but soon you'll want to build more fleets so that you have several moving through the galaxy simultaneously. And experts get no starting fleet at all so you'll have to build fleets from the beginning.

Fleets are made up of ships, and you build ships by summoning either the Exploration,

or Defense advisor. The kind of ship you can build will be based on the play level you're at. Beginner and intermediate players will build ships from a stock of pre-designed choices. Advanced and expert players will design ships before they build them. Designing ships is discussed in Chapter 5 — Taking Control of Your Empire. Whether you build a stock or a custom-designed ship, you'll do it the same way, as described below.

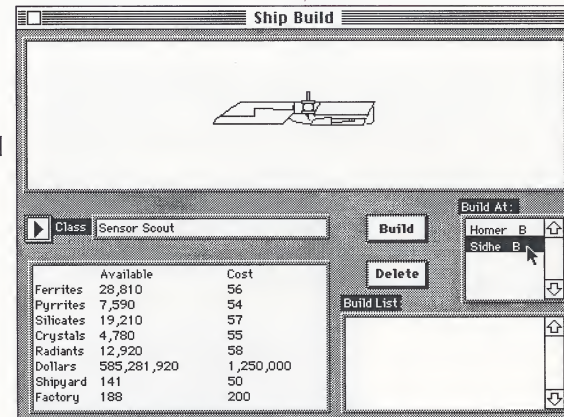
To build a ship:

1. Summon the Exploration or Defense advisor windows by clicking in the Control Panel or by choosing the advisor in the Report menu. Click on the ship button in either of these advisor's windows. The Ship Build window appears. You can also get the Ship Build window by choosing **Action: Ship Build** (Command-K).

2. Click on the planet where you want to build the ship in the Build At window. You can build ships only on home worlds that have shipyards.

3. Click and hold on the Class arrow and drag to the ship you want to build. Below the ship will be a list of your available resources, dollars and infrastructure on the planet you selected. Next to it is the Cost of the ship you selected. If you need more money, raise taxes. If you need factories or shipyards, build them. If you're low in resources, build a factory.

4. Click Build. Regardless of whether you can afford the ship, it will appear in the Build List to the right. But it won't be built until the building prerequisites are met. Ships built



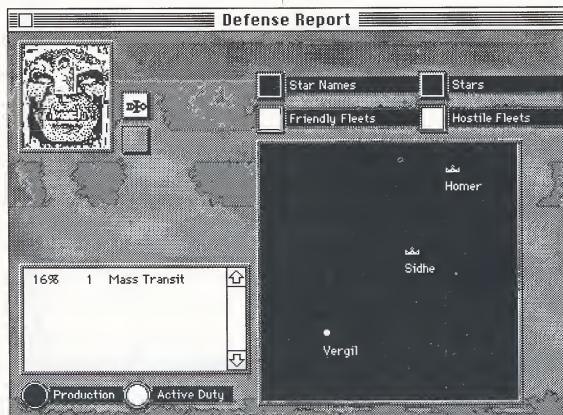
A Sensor Scout is being built at Sidhe. Since the Factory capacity is not sufficient, it will take longer to build.

Game Action

Note: Raising taxes too high may lower your empire's factory and shipyard capacity.

at the same time and at the same location will be grouped as a fleet. For example, if you build three ships simultaneously on Vega A, then all three ships will make up one fleet. If these same ships do not leave this surface and an additional ship is constructed there at a later time, the fleet will now contain four ships. If the three original ships leave the place of construction and then a fourth ship is constructed at Vega A, this ship will become a member of a new fleet.

If a fleet leaves the surface and returns at a later time, then any ships built after that fleet's return will be added to that fleet. If two fleets are at a surface and a new ship is constructed, the new ship will be added to the first fleet listed.



Currently there is a Mass Transit in production that is 16% complete.

If you decide not to build a ship, highlight it in the Build List and click Delete.

There are several ways to find out the stages of ship production. First of all, the Build List in the Ship Build window will show the percentage of construction for each ship. You can also check in the Economy, Defense or Exploration Advisor windows. In any of these windows, click the Production button. The portion right above lists the ships you chose and the percentage of construction that's been completed. Click on Active Duty. The ships that are already constructed are listed.

Controlling Fleets

Once you get going in Pax, you'll have a lot of fleets in various stages of flight, some

that are waiting to be dispatched, and some, frankly, that aren't in very good shape.

There are several ways to manage your fleets.

The first place to go to inspect your fleets is Fleet Control, which you can call up by either choosing **Action: Fleet Control** (Command-C) or by clicking on a fleet in a view and dragging to Fleet Control.

The top section of the dialog box names the fleet—you can view two fleets at a time. To view other fleets, click and hold on the arrow and drag to the fleet you want to inspect.

Location gives the fleet's XY coordinates.

Relative Distance gives the distance between the two selected fleets.

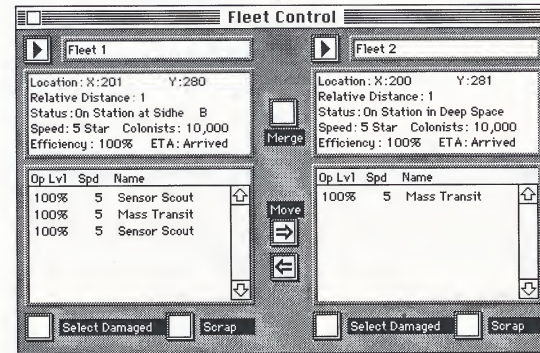
Status indicates where the fleet is stationed or where the fleet is journeying to.

Speed shows how fast the ship can travel.

Colonists shows how many colonists the fleet is carrying.

Efficiency gives the average operational level of the entire fleet. Thus, an efficiency level of 100% means that the fleet is not damaged or deteriorated in any way.

ETA gives the estimated time of arrival for the fleet to reach its destination.



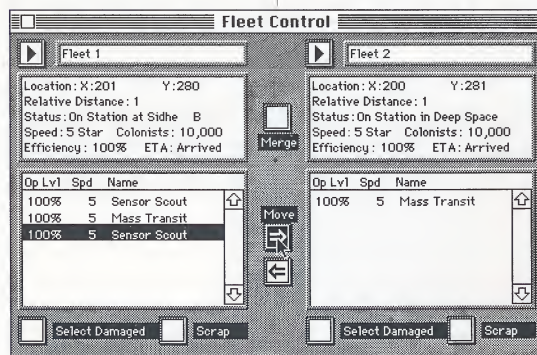
Game Action

The next information panel lists the fleet's individual ships.

Click Select Damaged to select all ships with an operational level of under 100%.

Click Scrap to send unwanted ships out to pasture. Scrapping a ship recoups 10% of its original cost.

You can highlight ships manually by single clicking on a ship. If you select the first ship of the listing and then select the last ship while holding down the shift key, all of the ships in-between will be highlighted. If you hold the command key down, you can select ships intermittently.



The Sensor Scout of Fleet 1 will move to Fleet 2.

Click Merge control to join the fleet on the right side of the window into the fleet on the left side of the window. The Merge function will send one fleet on a mission to join the other fleet. The merge is not an instantaneous event. If you send Fleet 2 to meet Fleet 1 and Fleet 2 is a slow fleet, the merge will take a while. In such a case, you may want to scrap damaged ships and/or slow-moving vessels. A fleet moves only as fast as its slowest ship.

If you do not want to merge an entire fleet but you want to merge an individual ship or a group of ships, use the Move functions.

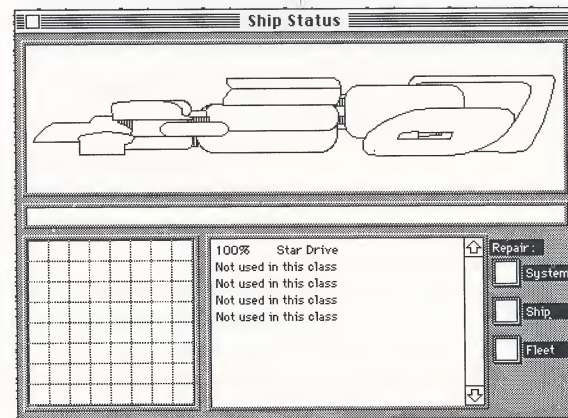
Highlight the ship or ships in one fleet and use the arrow keys to direct the move to the other fleet. Remember to take traveling time into consideration when designating

moves.

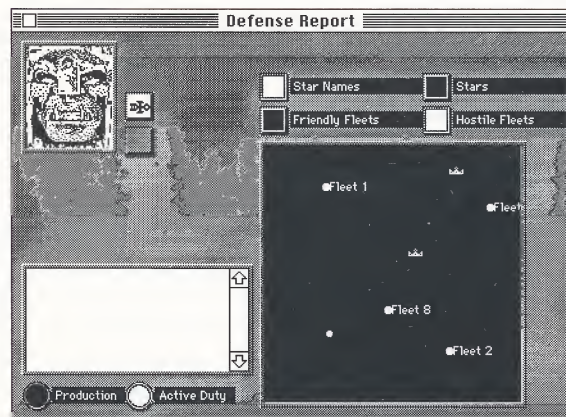
To check out a ship's weapons, sensors, drives, shields and hull, double click on the ship in Fleet Control. The Ship Status window appears. Check Chapter 5 for an explanation of what these systems are all about. The top portion of the window displays the ship hull and its components. The scrollable panel lists all of the components of the ship. If you click on one of the components in this list, the actual component is highlighted in the hull, its specs are displayed in the graph and information appears in the narrow panel directly below the hull.

Repairing Ships

You can fix damaged ships by sending a fleet tender to them once you reach Tech Level 2. You reach new tech levels as the game progresses and if you're spending money on research. More on this in Chapter 5. You build a fleet tender in the Ship Build window and then Merge it with fleets that contain damaged ships. Once the tender arrives, you call up Fleet Control. Then open the Ship Status window by double clicking on the damaged ship. In the Ship Status window, first highlight a damaged system and then click the System button below Repair. If you need to repair all damaged systems of a ship, click the Ship button below Repair. If you need to repair the entire fleet, click Fleet. After selecting either Ship or Fleet Repair, a dialog will inform you of the total repair cost. You can either Repair or Cancel.



Game Action



There are several other places where you can keep tabs on fleets.

In the Defense advisor window click Friendly Fleets to view your fleets' locations in the Universe. Click Hostile Fleets to see where your enemy is lurking. You'll only see opponents you've had contact with.

The Exploration advisor also knows the whereabouts of your fleets. Click Fleets to display them.

War and Peace

Life is very complex for the beleaguered emperor, whose mission it is to keep up ferrite levels, build ships, maintain fleets, explore new worlds, seek out new life and new civilizations, to boldly go where—sorry.

But worrying about how your empire functions is just one aspect of your job description. There are opponents out there to be concerned about, too. You've just seen so far what can happen if you or your opponent lands on each other's inhabited planet. But that's just the tip of the space glacier.

You will have daily dealings with enemy players, and whether they're friendly or hostile is up to you.

Diplomatic Status

First of all, there's your diplomatic status to think about.

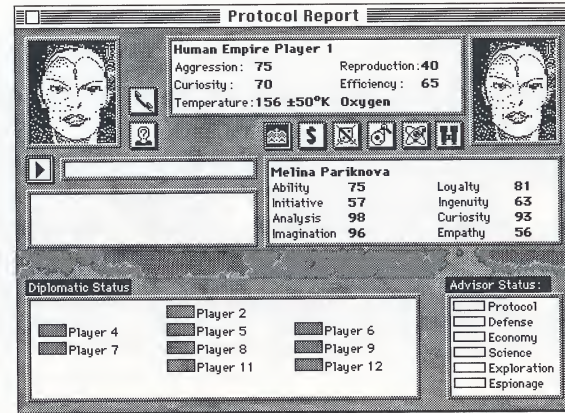
When you meet an alien species, you'll get a prompt. You'll then summon your Protocol Advisor by clicking on his or her button in the Control Panel or by choosing **Report: Protocol**.

The Diplomatic Status panel in the lower left portion of the Protocol Advisor's window will give you updates on the relations between your empire and the others in the game that you've bumped into. Each empire's name will appear with a square next to it showing the status as either friendly (green on color monitors, white on black and white screens), neutral (yellow or gray) or hostile (red or black).

You can check out an empire's people by clicking on the arrow and dragging to the empire. You'll see listed the characteristics of its species. Chapter 5 describes these characteristics in detail in the section about designing species.

To designate diplomatic status with an empire—at war, at peace or neutral—click on the telephone. Click on the arrow and drag to the empire you want to establish a status with.

Click Declare War. Your diplomatic status with that empire will instantly change to hostile and is reflected in the Protocol Report with the rectangle next to it changing to red or black.



Player 1 has neutral relationships with all the Players that are shown in the Diplomatic Status panel.



This button will call up the Ambassador.

Game Action



To establish peaceful relations, click Peace Initiative. (This won't work right after you click Declare War.) Peace initiatives may not always be established on the first try. Each peace-initiative attempt will cost your empire \$1 million. To prevent overspending, you should review your diplomatic status after each peace-initiative attempt.

You can also remain on neutral terms with your opponent.

If you declare war or remain neutral, when your fleet passes an opponent's, a battle will be fought through Tactical Control, described a little later in this chapter. If your relations are peaceful, however, your ships will pass each other and Tactical Control won't appear.

Trading with the Enemy

When you make contact with an empire you can trade with it. Here's how:

1. Select the Protocol Advisor by clicking in the Control Panel or by choosing **Report: Protocol**.
2. Click on the telephone.
3. Click on the arrow and drag to the empire you want to trade with.
4. Click Send Message. You'll get a dialog box listing all of your resources and then

dollars.

The top half of the dialog is for trading and the bottom half is for writing messages.

Across the top it says Promise, Send and Expect. These represent in order what you promise to give to the enemy, let's say, 10,000 ferrites, for example. Next enter what you in fact will send him, say 0 ferrites. Your opponent will never see your Send amounts, so you can send less than you promise, you huckster. In this version of Pax there is no repercussion for doing dirty deals except that no one will call you Mr. Nice Emperor. Finally, type how much you expect to get in return, say \$10,000.

Of course, you can trade fair and square, too, which can be very beneficial if, for instance, you're running out of resources but have tons of money. This is more crucial later in the game than in the beginning when you don't really need anything yet.

In the bottom part of the window you can send a message to your opponent who will really receive it. Each message can be up to 255 characters.

Click Send to proceed.

If you receive a trade proposal from another player, you can enter your Send amounts and click Do Deal or you can click Cancel to thwart the deal.

	Promise	Send	Expect
Ferrites	10000	0	0
Pyrrites	0	0	0
Silicates	0	0	0
Crystals	0	0	0
Radiant	0	0	0
Dollars	0	0	10000

Message

I promise to send you 10,000 Ferrites in exchange for \$10,000.

Send Cancel

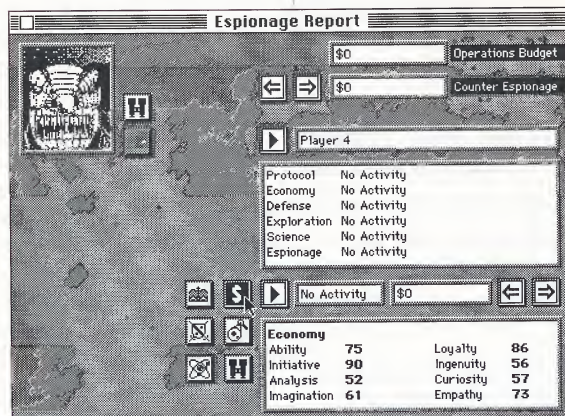
This emperor proposes to trade 10,000 Ferrites for \$10,000. However, he really plans to send nothing. Notice the zero values under Send. If the other emperor accepts the deal, he will not receive any Ferrites.

Game Action

Bribing and Assassinating Opponents

After you make contact with an empire, your Espionage Advisor will bribe or assassinate its ministers. He or she is not a nice person.

Bribing ministers means you can spy on them by opening their report windows. For instance, you can bribe your enemy's Exploration Advisor and by looking in his report window, see how many fleets he has out and where in the Universe they are. Assassinating advisors means your opponent will have to replace an advisor whose shoes may not be that easy to fill.



Player 4's Economic advisor is being selected for an espionage attack; the mission type can be selected next.

1. Summon your Espionage Advisor by clicking in the Control Panel or by choosing **Report: Espionage**.
2. Click on the first arrow and drag to the empire you want to mess with. This reveals a list of your opponent's advisors. The buttons in the lower left correspond to this list.
3. Click on a button to list the advisor's characteristics in the lower right.
4. Click and hold on the second arrow and drag to choose one of the three options: No Activity, Bribe or Assassinate.

5. Don't choose No Activity. It isn't any fun. If you choose Bribe or Assassinate, you then have to allocate funds to do the deed. Click on the arrows on the right to set the budget. You will see the Operations Budget at the top of the window go up, too. If you

don't, you may not be able to afford these treacherous acts just yet and may have to wait a few turns when you have more cash in the till.

Later on, after your bribery has been carried out, you'll get a prompt that your mark took the bait. When that happens, click the binoculars in the Espionage Advisor window. You'll see the bribed advisor's window, for your eyes only.

In order for a Bribe attempt to be successful, your mission's budget has to out-spend your opponent's counter-espionage budget with enough left over to pay your Espionage minister's salary. Random probabilities and advisor loyalty also affect the final outcome of bribe attempts. You can choose ministers with higher loyalty levels than others when you play the more advanced levels of the game. See Chapter 5 for information about naming cabinet ministers. Once you have successfully bribed an advisor, you will continue to receive updated reports as long as you maintain the bribery-budget level.

You'll also get a prompt when a minister you paid to have assassinated gets knocked off.

Assassination attempts are similar to bribe attempts in that the mission budget must exceed the opponent's counter-espionage budget. However, the assassination price is a one-payment deal. A random probability function is also added to alter the outcome of each attempt.

One last thing about spying—setting a Counter Espionage budget in your Espionage Advisor's window is a good idea to protect your ministers against being bribed or assassinated themselves. There are vultures, vultures everywhere.

Game Action

If your own advisors are assassinated, you replace them by clicking on the question mark in the Espionage Advisor window. This Advisor Selection window is discussed in Chapter 5.

So far there is no way for you to punish your advisors who accept bribes. But at least they will have trouble sleeping at night, maybe.

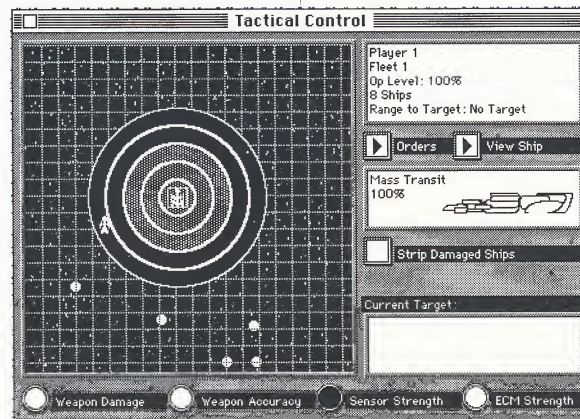
Combat

When you encounter alien fleets in a hostile situation, the Tactical Control window will open. It can appear if you're in intergalactic space or within a star system. In the advanced levels of the game, ships with sensor capabilities will detect alien fleets at a distance. See Chapter 5 for information about designing ships with sensors. If you don't happen to have any sensors on board, the Tactical Control window will open without warning.

Alien contact will always open the Tactical Control window if your empire establishes a hostile reputation. Your empire's reputation is based on its past relationship with the encountered empire as well as your species' aggressive disposition, which you can control if you design your people—see Chapter 5. If you declared a peace initiative with this opponent, the Tactical Control window won't appear unless, unfortunately, your opponent has declared war on you. If neither you nor your opponent are hostile and you wish to engage in combat, you need to declare war. Declaring war will automatically change your currently non-aggressive relationship to hostile, opening Tactical Control when you're within range of each other.

The map on the left of the window shows all fleets and the immediate cosmos. To find out whose fleets are whose, click and hold on the different fleet icons. If more than one fleet is listed in the pop-up menu, it means that various fleets are overlapping. Click and drag to one of your fleets. Notice that the information in the top portion of the window corresponds to the currently selected fleet. Here's what it all means:

- 1st Line - fleet ownership
- 2nd Line - fleet name
- 3rd Line - fleet's current operational level
- 4th Line - number of ships within the fleet
- 5th Line - distance between fleet and its designated target



The View Ship pop-up menu lists the individual ships of the selected fleet. If you select one, a small diagram of the ship and its operational level will appear in the box just below the menu.

The Strip Damaged Ships control places ships that are incapable of movement into a separate fleet.

Current Target indicates the operational level of your target throughout combat.

There are three possible maneuvers during Tactical Control: Target, Move and

The sensor range of Player 1's fleet is shown.

Game Action

Withdraw. Select one of your fleets first and then click on the Orders pop-up menu to access them. Drag to the mission that you desire.

Target

You can only choose target if you have a weapon on board.

1. Select Target. The cursor becomes the Target cursor.
2. Click and drag on the enemy fleet icon and select its fleet name in the pop-up menu. A thick red line that indicates the line of fire will appear between the two fleets (a thick white line on black-and-white monitors). Weapon-range rings will also appear around your ship. These rings indicate the array of weapon effectiveness. Rings vary according to weapon design. Lighter-shaded rings indicate the areas at which your weapons are most effective.

Maneuver

To reposition your fleet:

1. Choose the Move option from the Orders pop-up menu. The cursor becomes the Send cursor.
2. Click where you want to send your fleet. A thin yellow line will be drawn on the desired path (thin white line on black and white screens). The Target and Move options work well together. You can designate a target and move your fleet on a path to reach your fleet's optimal weapon range.

Withdraw

1. To escape from the region, which you'll want to do if you have no weapons, select withdraw. The computer automatically sends you on the quickest route out of the combat zone.

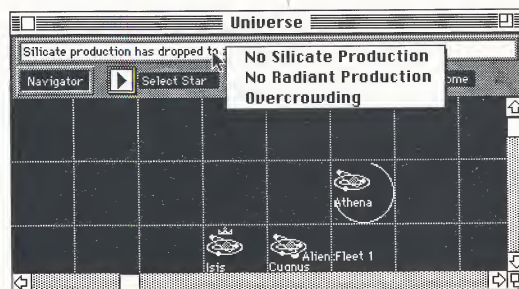
Tactical Control will stay open until you dismiss the window, however closing the window while fleets are engaged will only cause the window to re-open again. In other words, you are in a situation that must be resolved, you can't just ignore it. Fight, withdraw, or make peace.

If you are in turn-mode against other human players you will now take turns issuing orders to your fleets. When the last player is done, fleet combat will be resolved for 10 rounds at which time you can issue new orders. If no human players are involved you will be resolving the combat in real-time. In this mode you can give orders to your fleets at any time.

If you decide things are not going well for you and you want to get away, you must withdraw your fleets; simply choosing to close the window will cause it to reopen again.

Responding to Warning Signals

The message box under the Universe Window's title bar displays urgent messages. These messages will continue unless you do something about them. If you click and hold within



Game Action

this message box, you may review all of the urgent messages simultaneously.

Here's what they say, and what you can do about them:

Warning:

Overcrowding is causing problems on some worlds.

Solution:

Build a city.

Or decrease population growth by increasing social spending. Budgets are discussed in Chapter 5. You can get zero population growth by setting social spending at 200%.

Another solution is to build ships and colonize other planets.

Warning:

Ferrites, pyrrites, silicates, crystals or radiants production has dropped to zero.

Solution:

Build a factory on a home or colonized world if there are resources available in the lower left portion of the Surface window. If not, land elsewhere and build a factory.

Warning:

Migration Wars Are Occurring.

Solution:

Build a base to stave off intruders. Or you can land colonists.

Taking Turns

To end a turn select **Player: Next Player**. This item is used to organize turns among multiple players at one computer. Next a window appears where you click to choose the next player. Players can take turns in any order. However, the game will not update until all players complete their turns. Computer players will appear in the player list but will update automatically after the last human player has completed his or her turn.

A turn can go on indefinitely, but since your income isn't calculated until everybody takes a turn, you'll run out of money if you don't give someone else a chance. One way your turn can go on forever is if you design new ships and new technology. Designing systems doesn't cost money, only building them does. Tech and ship design are covered in Chapter 5.

CHAPTER 5.

TAKING CONTROL OF YOUR EMPIRE

When you reach the more-advanced play levels, or after you've been playing Pax Imperia for awhile, you'll have to make some high-level decisions. Use this chapter as your guide.

Selecting and Designing Species

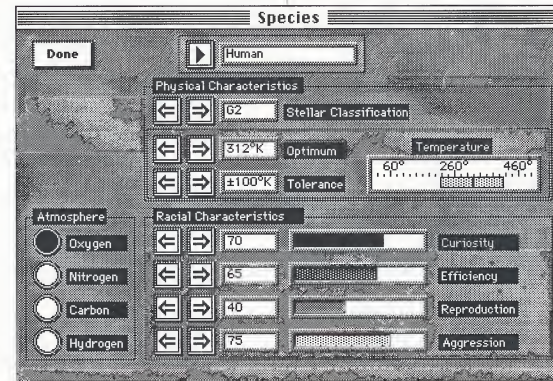
When you choose the Intermediate, Advanced or Expert play levels in the Setup window, you'll see the Species dialog box. You can determine your peoples' characteristics by choosing a stock species or by designing your own custom-made species.

The way you set this window up will affect just about every aspect of Pax Imperia, as described below.

To select a stock species, click on the arrow and drag to the species' name.

You can also use this pop-up menu to delete either a stock species or one you design.

When you choose a different stock species, you'll see that the dialog box's parameters change. Manually changing the parameters yourself is the way to design custom-made species. To adjust the parameters, click on the arrows. If you do adjust these parameters and click on **Done**, you'll be asked to name your new species. If you wish to add your new creation to the pop-up menu for future games, select the Make Stock Species checkbox.



Taking Control of Your Empire



Stellar Classification

This is your species' preferred star type and corresponds to the Spectral Class setting in the Planet window. As we mentioned, we used this astronomical classification to determine planet temperatures. You don't need to adjust it.

Optimum Temperature

The climate your species prefers in degrees Kelvin. This setting will affect whether your species can live on certain planets, as we discussed in Chapter 3 — Action.

Tolerance

The range of temperatures below and above the optimum that your species will tolerate. The tolerance range is limited by the amounts you set in the Curiosity, Efficiency, Reproduction and Aggression controls. The total of these controls plus 1/2 the tolerance range can only be 300. If you want to increase tolerance you have to decrease one of the other four controls.

Curiosity

Curiosity affects tech level, which is how advanced you are technologically.

The more curious your species is, the lower you have to set your research budget for your tech levels to rise. If your opponent has a lower curiosity level than you, you can be at the same tech levels and spend less money on research, or you can spend the same amount on research and be at a higher tech level. You set the research budget in

Taking Control of Your Empire

the Economy Advisor window.

Efficiency

How efficient your species is will determine several things.

The more efficient it is, the more quickly ships will be built.

Your shipyards and factories will also have bigger capacities the higher the efficiency. You'll see the capacity levels in the Ship Build window in the lower left. These numbers show capacity, not number of shipyards and factories.

Last, the more efficient your people are, the faster they'll mine resources.

There are other aspects that affect efficiency in Pax.

Increasing social spending increases efficiency.

The higher you set your tax rate, the lower the efficiency will be. Also, the less hospitable the planet is in terms of climate and atmosphere, the lower the efficiency will be.

Meanwhile, the higher the Economic Advisor's ability is, the less expensive everything will be, and therefore the efficiency will be higher. You can find out your Economic Advisor's ability in the Protocol Advisor window—check the right-hand side of the window.



Taking Control of Your Empire

Reproduction

The higher the reproduction rate, the quicker your population will grow. This is important if your people are to migrate into other regions or if you're going to build cities on home worlds to help the tax base.

What will slow down reproduction is if you raise social spending in the Economic Advisor's window. Think of social spending as improving the standard of living. In cultures where there's a high standard of living, the population's growth rate is slower; in poorer nations where social spending is lower, there's usually overpopulation and a higher reproduction rate.

If your species has a lower reproduction rate, then you can spend less on social spending to reduce population growth. The higher the reproduction rate, the more you have to spend to lower population growth.

Aggression

This is how much initiative your people have. The higher the aggression, the more capable they will be of defending themselves. This will help them defend themselves against invaders during migration wars.

Another way aggression comes into play is in terms of raising income by increasing taxes. If you raise taxes, you lower your population's efficiency. But, if your species has a high aggression rate, it offsets the drop in efficiency allowing you to raise taxes more. Be careful, though. The more aggressive your people are, the more likely they are to riot if you raise the tax rate. There's a chance that a riot will lead to a rebellion, in which case you'll lose control of a region and will no longer be able to mine its

Taking Control of Your Empire

resources or collect taxes on it. You'll know when riots and rebellions are happening from prompts that appear.

Oxygen/Nitrogen/Carbon/Hydrogen

Pick the air your people can breathe. Planets with this atmosphere will be most conducive for you to colonize.

Click Done when you have finished selecting or designing a species.

Naming Advisors

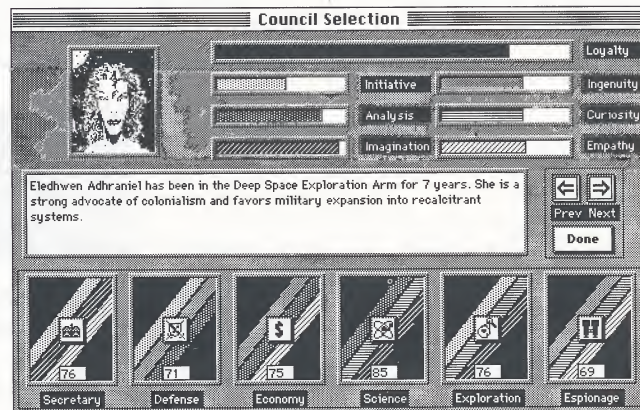
In the Intermediate, Advanced and Expert play levels, you'll select the advisors who will serve you in your administration. After you choose these levels during Setup, you'll see a window where you'll make your selections.

A picture of the candidate appears in the upper-left corner. To the right are status bars indicating personality traits. The categories are:

Loyalty: affects bribe attempts by other players.

Initiative: affects ability to take independent action.

Analysis: affects ability to make decisions based on information.



Taking Control of Your Empire

Imagination: affects the candidate's ability to create new solutions.

Ingenuity: affects the candidate's ability to implement new plans.

Curiosity: affects how deeply the candidate will look into a problem.

Empathy: affects how the candidate is affected by problems in her or his field.

These characteristics, with the exception of Loyalty, determine a candidate's Ability. Ability indicates the candidate's potential performance for each office. An Ability of 75 is average, anything above 75 helps to improve an office's performance and anything below 75 decreases an office's efficiency. What a candidate's potential Ability is for each office is shown in the unfilled offices along the bottom of the window.



Note: Ability ratings are randomized so that each empire is unique.

Beneath each candidate's picture is the candidate's bio.

The Previous and Next buttons will call up the previous or next candidate. These buttons allow you to review the candidates before electing them to office. Notice that the Ability ratings change depending on the currently selected candidate.

Taking Control of Your Empire

You'll name a different candidate for each of the six offices. Notice that the offices contain different combinations of colors. These bars indicate the office's three most important personality traits and are color-coded to the categories at the top of the window. When you find a candidate who you want to name to a particular post, click once in the office at the bottom of the window. The candidate's picture will fill the box.

Clicking in an office that is already filled removes the current office holder and returns him or her to the candidate pool.

When you have filled all your offices, click Done.

You may have to call up this window during the game to replace a minister who is assassinated. To access it, summon the Protocol Advisor by clicking in the Control Panel or by choosing **Report: Protocol**. Then click on the question mark.

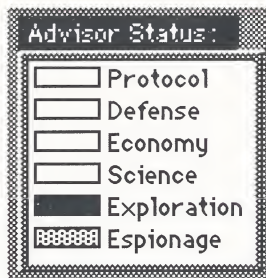
At the top of the Protocol Report window is a panel that states your empire's name and gives information on your species.

Your species' aggression, curiosity, reproduction, and efficiency ratings are listed. Your species' optimal temperature and range as well as preferred atmosphere are also listed.

The six advisor-office buttons located to the right of the function buttons call up information and a picture of that currently appointed advisor for your empire.

The color blocks in front of each office in Advisor Status indicate whether an advisor has been involved in espionage dealings or has died.

Taking Control of Your Empire



Your Exploration advisor has been assassinated and someone has attempted to assassinate your Espionage advisor.

Color monitors

Green
Yellow
Red
Gray
Black

Black and white monitors

White
Light Gray
Gray
Dark Gray
Black

Status

No Attempts Encountered
Intercepted Attempted Bribe
Bribed
Intercepted Assassination
Assassinated

Tech Levels

Before you get into designing technology, you should know about tech levels.

Everyone, regardless of play level, starts the game at tech level 1. The tech level is what your science is capable of doing. The higher your tech level is, the more powerful your systems become. The lower your tech level, the lighter weight they are.

Your rate of tech-level improvement is based on a number of factors. For instance, you can go up in tech levels quicker by increasing your Research Budget, which we'll cover later in this chapter when we talk about money, and your species' curiosity level, which is discussed earlier in this chapter under Designing Species. Screen prompts will let you know when your tech levels are rising. But there are always trade-offs in life and in empires—the higher the tech level, the more expensive your systems will be. You can build technology below your current tech level, however, more cheaply, just as we can build steam engines more cheaply today than 100 years ago.

Designing Technology

Just what you always wanted—your own R&D lab. That's what the Tech Design window is—your own laboratory for developing new ship technology including your offensive and defensive tools. After you design the technology, it will appear as a menu choice in the Ship Design window for inclusion in a custom-designed ship.

Expert level emperors receive the honor of designing technology.

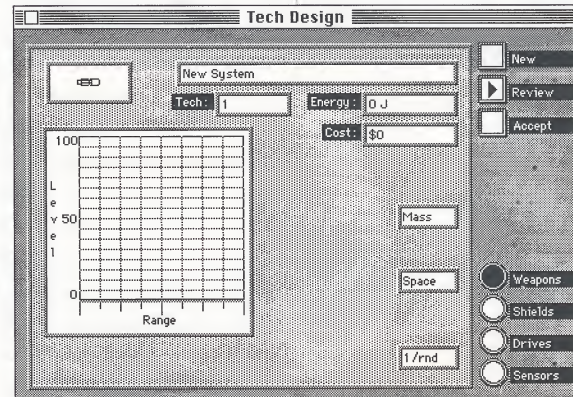
Where they'll do it is with the Science officer. Summon the Science Advisor by clicking in the Control Panel or by choosing **Report: Science**.

Click the microscope. The Tech Design window appears. If you're a Beginner, Intermediate or an Advanced player, you can open this window, too, but you won't be able to design technology, only review it.

This window contains several aspects that are the same for all the systems and some that change depending on the type of tech system you have selected. Select a system by clicking one of the buttons in the lower right—you'll be designing weapons, shields, drives or sensors.

What's next are some of the things you'll see no matter what system you choose.

For instance, in the top left there is a small panel that shows a graphic of the current



Taking Control of Your Empire

tech system.

The panel to the right of the graphic is the name of the system. Below that are three panels: Tech, Energy and Cost.

Tech: The tech level of the given system.

Energy: The amount of energy this particular system requires, except for Drive. For drive it's how much energy it produces.

Cost: The monetary cost of the weapon system.

To review existing systems, click and hold on the Review arrow and drag to the system you want to review.

To design a new tech system, click New in the upper right part of the window.

Click Accept to save a new tech system after you design it. Type the name and click OK.

The following sections will cover the different controls that appear for designing each kind of system. If you don't see the controls listed, make sure you click New in the upper-right and the tech system in the lower right.

Weapon Design

Choose Mass or Energy by clicking on the adjacent button.

Taking Control of Your Empire

A Mass weapon is a missile and an energy weapon is a laser. Energy weapons cost more than mass weapons—in general they double the cost of the weapon. Energy weapons also do double the damage of mass weapons.

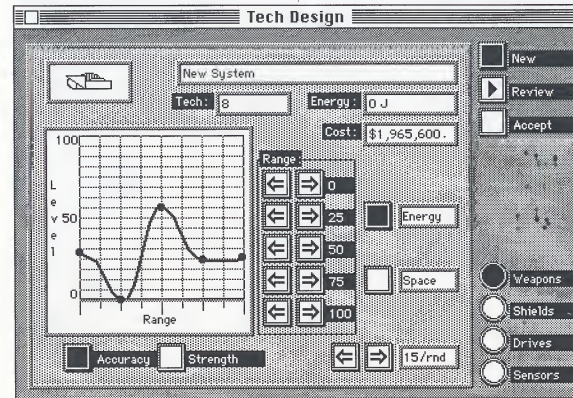
Choose Planet or Space by clicking the adjacent button.

You'll use planetary weapons when you fly Assault and Raid missions. See Chapter 4 — Action for information about flying missions. You'll need space weapons during Tactical Control, also described in Chapter 4. Space weapons are more costly than planetary weapons.

Rnd is the number of rounds or times a weapon will fire, with 15 being the maximum. The higher the number of rounds, the more expensive the weapon will be.

Range is how far you can shoot. Accuracy is the likelihood that a weapon will hit its target at a given range. It's more expensive to build a weapon that's accurate at greater distances. Strength is how hard it will hit. You can design according to your specific needs; make weapons weaker at short ranges so that they can be more powerful at long ranges.

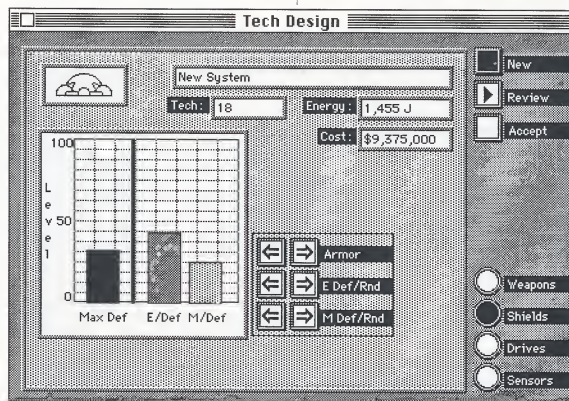
You can increase or decrease the accuracy and strength of a weapon at each of 5 different ranges, namely 0, 25, 50, 75, 100, by clicking on the arrows. Another way to increase or decrease a weapon's stats is to click and drag on any of the points on the curve.



A new energy-space weapon is being designed.

Taking Control of Your Empire

Shield Design



Armor is physical armor that provides maximum defense against mass or energy weapons. Once it's penetrated, it's destroyed.

E Def/Rnd represents power shields that absorb attacks from energy weapons. Energy defense is more expensive than Armor. As long as you have power on the ship, these shields renew themselves after every round of fire.

M Def/Rnd represents power shields that absorb mass weapon damage. Mass defense is also more expensive than Armor and, like energy shields, as long as you have power on the ship, mass weapon shields renew themselves after every round of fire.

Adjust these levels by either clicking on the arrows or by clicking and dragging the top of each bar. If the bar is at the very bottom of the chart, click just below the chart to grab it. Depending on your current technological level, shield levels are limited. Lower the amount of one to raise the amount of another.

Drive

Drives are your ship's engines.

Click the button just under the chart to design a tac engine, which supports combat functions, or a star engine, which travels between stars. Star drives are more expensive. If you are going to have a ship with a star drive, it should probably have a tac drive too; if a ship lacks a tac drive, it will not maneuver sufficiently during combat.

Taking Control of Your Empire

Max Thrust determines how fast the engine travels.

Max Energy determines how much energy the engine produces. This is important to offset the other three tech systems, which expend energy.

Adjust these levels by either clicking and dragging in the graph or by clicking on the arrows.

Sensor Design

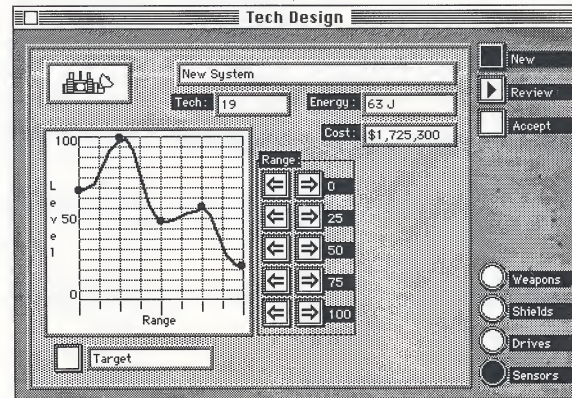
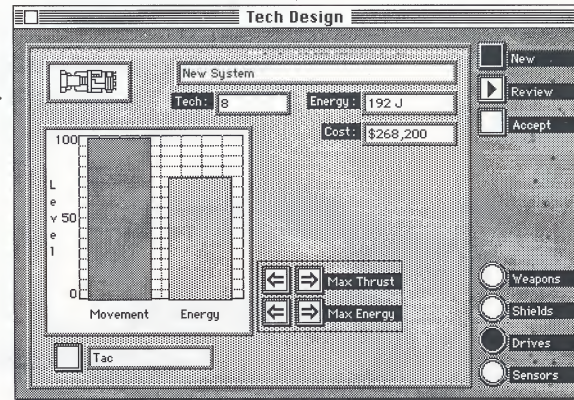
Click the button below the chart to determine sensor type.

Target: Sensors that detect enemy ships.

Electronic Counter Measures (ECM): Sensors that cloak your ships against enemy sensors.

Electronic Counter Counter-Measures (ECCM): Sensors that see through enemy ECM.

Adjust the range of these sensors by either clicking and dragging in the graph or by clicking on the arrows.

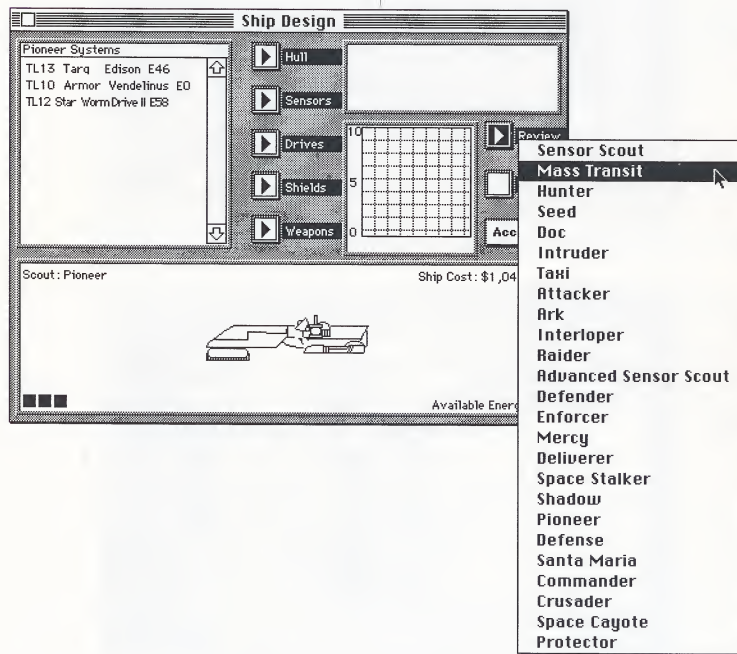


Taking Control of Your Empire

Designing Ships

Advanced and Expert emperors design ships. Here's how.

Summon the Science Advisor by clicking in the Control Panel or by choosing **Report: Science**.



Click the second button. The Ship Design window appears.

This window lets you review stock ships, design new ships and scrap existing ships. Ships designed in the Ship Design window become available in the Ship Build window.

Click and hold on the Review arrow to check out your stock ships. Players at every level are able to review ships.

To illustrate how the window works, choose Mass Transit.

In the bottom of the window is a picture of a Mass Transit ship. In the upper left is the generic hull-style name followed by the actual ship's name. In the upper right of the picture window is the amount it costs to build this ship, in the lower right is the relationship

Taking Control of Your Empire

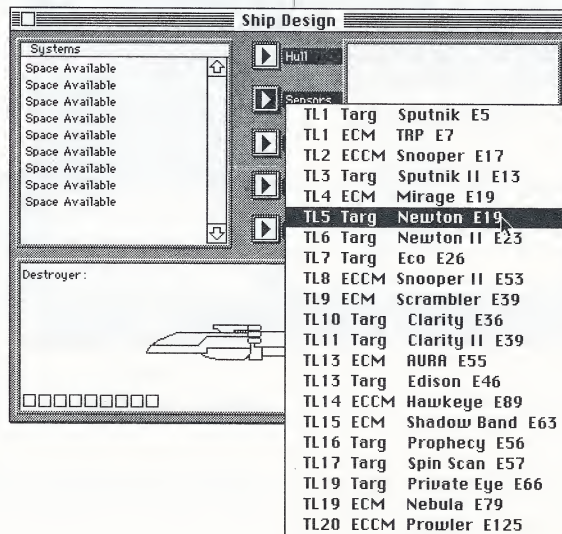
between the designated energy and the available energy. If the energy amount is negative, the ship will use more energy than it can produce. This is not good. Aim for a positive energy level. In the lower left are boxes indicating available slots for individual tech systems. The number of slots depends on the hull. A black box indicates that a slot is filled. In the upper-left hand portion of the Ship Design window is a list of the selected ship's tech systems.

Now let's take a look at designing a ship.

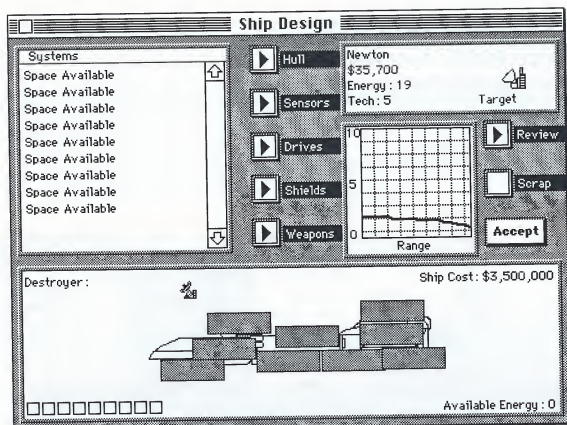
The arrows in the middle of the Ship Design window let you choose a ship hull and all individual ship tech systems. Ship tech systems include: sensors, drives, shields, and weapons.

First choose a hull. You'll see its picture in the bottom of the window and in the top-left portion of the window you'll see many available spaces.

Now choose a sensor. The section on Designing Technology just before this one describes what the different tech systems do and why you would choose one over another. You'll see in the upper-right portion of the window the name of the system, how much it costs, its energy level and the tech level. Tech level is discussed earlier in this chapter. There's also a small illustration of the system and a brief description. The graph illustrates the performance of the selected tech system. It corresponds to the graph in the Tech Design window.



Taking Control of Your Empire



A target sensor called the Newton is being added to a Destroyer hull.

When you choose the system, you'll also see gray rectangles on the picture of the hull and the cursor becomes the tech system. Click the cursor in a rectangle and the system is added to your hull. It's now listed in the upper left, a slot is filled in the lower left, and the ship cost in the upper right-hand corner of the hull picture goes up. If you double-click on a rectangle, the cursor remains that tech system and you can add it to another part of your hull. To replace a system, click on it with another system. Delete a system by clicking on it and pressing Delete. Command-click on the hull picture to view the systems without the hull.

Continue to add systems until all of the slots are filled.

Clicking on the Scrap Button retires unwanted ship designs.

When you are done ship-designing, click **Accept**. If your design is faulty, you'll get a prompt explaining what the snag is. Reading the Designing Technology section will help you design acceptable ships. When you get the prompt, either click **OK**, which will create the ship anyway—your genius for crafting unusual solutions to age-old problems is known throughout the galaxy—or click Redesign for the direct route back to the drawing board.

Money Matters

Everything you do in Pax Imperia eventually is affected by money and you should know how to count yours, you tycoon.

Taking Control of Your Empire

You collect taxes after everyone has a turn. When everyone has gone, a chrono unit passes. The time panel at the top of the Control panel shows time marching on. It displays the year, which at the start of the game is always 2399, followed by the chrono units. Double clicking in the time panel shrinks or expands the Control panel.



Your main financial wizard is your Economic Advisor. Summon him by clicking in the Control Panel or by choosing **Report: Economy**.

In the top-left portion of the window is your total cash on hand.

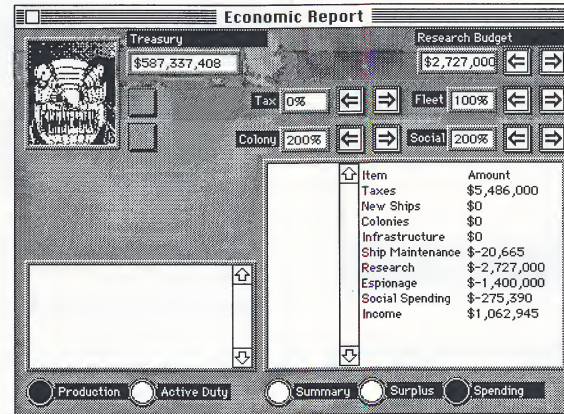
In the upper right you set your budgets. Click on the arrows to adjust the amounts. Check the Designing Species section in this chapter to see how budgetary adjustments affect your people.

Increasing the Research Budget raises your tech levels.

Raising taxes increases income.

Fleet spending tops out at 100%. Reducing this figure means ships will deteriorate from a lack of maintenance spending. However, depending on your race's efficiency, you may be able to safely lower your fleet spending.

Increase Colony spending to develop your colonies toward home-world status more quickly.



Taking Control of Your Empire

Global	Current
Antares A	Population 37 K
Spica B	Income \$383 K
	Resources 50,000
	Cities 0
	Shipyards 2
	Factories 0
	Ports 1
	Regions 2

Summary Surplus Spending

Increasing social spending increases your peoples' efficiency but reduces population growth.

Then there's the list in the lower-right portion of the window.

Click Summary. Now you see a quick rundown of your population, income, resources, infrastructure and controlled regions. Click Global for your total wealth, or you can click individual planets and moons to see how you're doing on each. Except for income and resources, these figures correspond to the ones in the Surface window. Resources is different because in the Surface window you're seeing the planet's total. Here in the Summary you're seeing available resources.

	Available	Production
Ferrites	9,700	0
Pyrrites	9,700	0
Silicates	9,700	0
Crystals	9,700	0
Radiants	9,700	0

Summary Surplus Spending

Click Surplus. This is a summary of your available resources and the units of the resources that are being mined this turn. These Production resource units will be available next turn.

Click Spending. You get a profile of expenditures made on new ships, colonies, infrastructure, ship maintenance, research, espionage and social spending the previous turn. The report also shows tax revenues and income.

Item	Amount
Taxes	\$513,000
New Ships	\$0
Colonies	\$-71,612
Infrastructure	\$0
Ship Maintenance	\$-11,538
Research	\$0
Espionage	\$0
Social Spending	\$-45,867
Income	\$383,983

Summary Surplus Spending

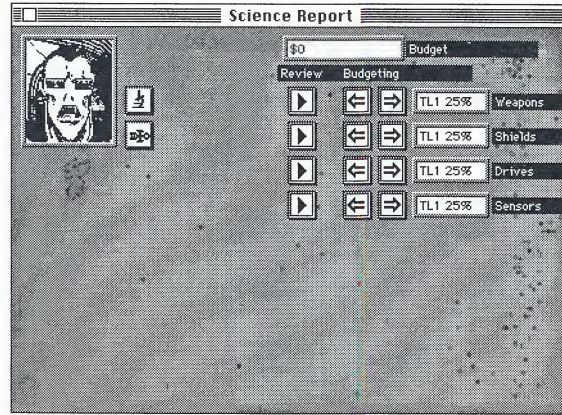
Your Science Advisor oversees your scientific budget. Access his window by clicking in the Control Panel or choosing **Report: Science** when you want to know the state of your tech systems' finances.

The Budget panel shows the Research budget allocated in the Economic Advisor window.

Click under budgeting to fund individual tech systems. The total is 100%, so if you

Taking Control of Your Empire

want to increase one system past 25%, you'll have to decrease another to under 25%.



Click on the Review arrows and drag to view a particular system in Tech Design.

There's one other place where budgets are set, and that's in the Espionage Advisor's window. Check the Bribing and Assassinating Opponents section of Chapter 4 — Game Action for information about your Espionage finances.

APPENDIX

There are a lot of factors working behind the scenes when you do things in Pax like build infrastructure.

Here are several charts that you can use to plot your next caper.

But, if you never looked at any of these charts, you'd still be able to play Pax Imperia.

We include them here for techno-emperors.

Technology Requirement Maxtrix:

	Ferrites	Pyrrites	Silicates	Crystals	Radiants	Factory Cap
Weapons	5	4	3	2	1	100
Shields	1	5	4	3	2	100
Drives	2	1	5	4	3	100
Sensors	4	3	2	1	5	100

Infrastructure Requirement Matrix:

	Pop	Dollar	Ferrites	Pyrrites	Silicates	Crystals	Radiants
City	5,000	2,000,000	800	200	500	200	800
Factory	1,000	1,000,000	100	100	100	100	100
Shipyard	2,000	1,500,000	200	800	300	500	700
Base	0	10,000,000	16,000	2,000	19,000	17,000	18,000
Port	2,500	5,000,000	17,000	13,000	16,000	1900	1000

Appendix

Ship Hull Requirement Maxtrix:

	Ferrites	Pyrrites	Silicates	Crystals	Radiants	Dollars	ShipyardCap
Scout	50	50	50	50	50	500,000	50
Des Escort	100	100	100	100	100	1,000,000	100
Frigate	200	200	200	200	200	2,000,000	200
Destroyer	500	500	500	500	500	3,500,000	400
Light Cruiser	750	750	750	750	750	5,000,000	500
Heavy Cruiser	1,000	1,000	1,000	1,000	1,000	8,000,000	700
Battle Cruiser	2000	2000	2000	2000	2000	12×10^6	900
Dreadnaught	10,000	1,000	500	250	1,000	15×10^6	1000
Transport 1	100	100	100	100	100	250,000	50
Transport 2	200	200	200	200	200	500,000	100
Transport 3	400	400	400	400	400	1,000,000	200
Ship Tender	3,000	3,000	3,000	3,000	3,000	20×10^6	1,500

Changeling Software Inc. 596 Elm Street Windsor Locks, CT 06096 Phone: 203-292-5087 Fax: 203-292-5089