

072dc600-0

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Chapter 1

072dc600-0

1.1 Contents

Galactic Empires
version 1.5
by
Mark Anthony Tierno

THE FOLLOWING CONTAINS ALL THE DOCUMENTATION NEEDED TO PLAY THIS GAME.

_____Amigaguide-style DOCS_____

CONTENTS

- Starting~The~Game
- Ship~Types~And~Planet~Stats
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- AI--Making~The~Computer~Take~A~Player's~Turns
- Strategy,~Tips,~And~Hints
- Last~Minute~Notes,~Pleas,~And~Farewells

History~of~Changes

1.2 Starting The Game

Starting The Game

First, turn it on! After the Gee-Wiz-Bang opening credits go by (A left Mouse

click will bypass the opening picture; holding down the left mouse button while the title is printing out whill then bypass the forth-coming verbal part of the creditds),

you will be presented with a game start-up screen, GUI style. Here you can choose from 2 to 8 players, the size of the star map in terms of the number of parsecs across

(from 2 to 4), if you want there to be more than the usual number of aliens, and

how tough you want the aliens to be (on a scale of 1 to 10, 10 being REALLY tough). After setting these options, you then press START to start the game. If you have a past game that you want to load, then there is a button for doing so (which will then ignore any other settings).

The next requester that you're presented with sets the INITIAL agressiveness of any computer-run players; if you loaded a game, you won't see this requester since it controls only the initial setting. See the section on AI for details about these settings. Select the initial setting and then press 'GO!'.

Next, after a brief pause (it's initializing some rather nasty arrays), it'll

start asking for player names (of civilizations or home systems, be inventive!)

and then pause again. If you want a player to be run by the computer then just start off the first 4 letters of the name with 'comp', capitalization doesn't matter).

It'll then make the star map right in front of your very eyes, it's size depending on the inital value that you gave in the start-up screen; the map is three-dimensional of a size of N by N by N, where N is the number (from 2 to 4) previously set. After it's made, you're given the option of using that star map, or generatiing a new one, until you find one that you like.

After this, it's time to choose tech levels. Everyone is given the same number of points to spend to divide up between three different tech fields. The default is 10 points, but you're given the option of allotting a different value for everyone to spend. Then each person in turn gets to spend his points. The computer will spend the points for any players that are being run by the computer,

The three fields are PHYSICAL, ELECTRICAL, and MEDICAL. PHYSICAL tech affects movement time of ships, and offensive and defensive values of ships and such. ELECTRICAL affects chances of probes sucessfully reporting, a sector's sensors for detecting approaching ships, and ships' defensive electronics to keeps from getting detected. If an incoming attack fleet (or missiles, pirates, etc.) isn't detected, then the defenders will, be surprised, resulting in the defense value of the defenders being cut in half!. MEDICAL tech determines the starting value of one's home planet's population, as well as how much it increases by each turn for every planet. MEDICAL determines both how potent a plague virus set on a planet will be, and how much that planet can defend against it. It also lessens the radiation damage caused by

impacting missiles that kills population and lowers the biosphere rating of a planet, and permits one to live on normally inhospitable planets. In all cases, a tech level of 3 is the average against which all factors are compared. Remember, any natives have their own tech level ratings; perhaps better than your own....

After tech levels are boughten (you get a chance to change your mind on your choices), it comes around to player turns. Each player gets to take his turn (build ships, give orders, etc.) in PRIVATE, and then after a full round of this, the results are then displayed for everyone to see (a verbal alert will sound to let everyone know that this is about to happen). After this the (private) player turns begin again, and so on until you decide to quite (option available at end of results phase), save the game, someone wins, or EVERYONE loses (if you manage it, let me know HOW!).

The player-turn options are all MENU driven (so what else on an Amiga?!) and fairly straight-forward and easy to use, but I'll explain them anyway below.

At the end of each round of turns you have the option to save the game, and

then are asked if you want to continue, quite the game, or change the names of any of the players; this is a convenient way to toggle players between computer-run or people-run (just alter the first 4 letters of the player's name).

1.3 Ship types And Planet Stats

Ship Types And Planet Stats

Planet~Stats

Ship~Types

1.4 Planet Stats

Planet Stats

Every planet has a couple of ratings. Mineral wealth is a relative indication of how rich a planet's mineral resources are, on a scale of 1 to 20, player home planets having a rating of 15 to start out with.

Biosphere is a percent indicating how hospitable the planet is to life, 100% being completely habitable, 0% being death. Player home planets start out with a rating of 100%. The lower the percent, the less population increases and, if low enough, decreases. A high enough medical tech level can off-set some or all of a planet's inhabitability, depending on how bad it is. This rating can be lowered through excessive planetary bombardment by missiles (radiation and such), although this can be limited by one's medical tech level.

The last planet stat is, of course, it's population; both player and native planets have populations. It takes a certain minimum population to run a planet, the minimum decreasing with one's higher physical tech level. Once this minimum is reached factories will begin shutting down, infantry units disbanding, etc.. A population will increase or decrease each turn both due to medical tech level (new births and clones) and imigrants or emigrants,

depending on one's morale, the higher it is, the more people want to live there, the lower the more they want to leave it, etc..

A stat that each player has, that applies to all of his planets, is morale. This is a measure of how happy and efficient one's people are, all players start out with a morale of 100%. Morale can be increased with espionage (see later), and lowered by other's espionage, missiles impacting the surface of one's planet, and other results of invasions and such.

A planet's number of build points per turn are calculated on the basis of number of factories complexes present, the mineral wealth of that planet, and one's morale score, although you always get at least 10 build points (well, it's SOMETHING at least!), assuming that you have at least any sort of population present.

Some planets may have ALIENS (the toughness of which you set at the game's start-up). Aliens don't move from their system, but just stay where they are, waiting for someone to come along and try to make a deal with them. Successful diplomacy results in the alien joining you're empire, else they may grow to dislike you. It's not usually a good idea to stay in an unfriendly elien's system for too long, since they may get annoyed and attack you after a while. The chance of them trying to kick intruders out of their system is proportional to how tough that you set the aliens at game start-up- so at a toughness of 10, they'll almost always attack you if diplomacy didn't work (and at a toughness of 10, they'll almost always beat you until much later in the game). It should also be noted, that the tougher the aliens are set at, the more espionage points that you'll need to successfully use diplomacy against them (and at a setting of 10, we're usually talking about a couple of THOUSAND here!).

1.5 Ship Types

Ship Types

For ship stats and what-not, the best way is to list them in a tabular format. Given is it's movement rate (if any) in number of parsecs per month, and it's relative offensive and defensive ratings, their costs being given in the program whenever you use the build phase to build something on your player turn. All values given below are base values, they are altered (up or down) by one's physical tech level, a tech level of 3 being taken as average for these purposes.

ship type	movement	offense	defence
gravity mines	-	10	-
probes	instant	-	-
dreadnot	3	25	25
battleship	3	10	5
carrier	2	8	10
cruiser	4	5	3
destroyer	4	2	2
cargo fleet	2	1	2
system defence station	\$ 0	-	1000
planetary shield	\$ 0	-	200
planetary defence cannon	\$ 0	-	15
anti-missile platform (AMP)	0	vs ISBM only	5
Inter-Stellar Ballistic			

Missiles (ISBM)	instant	10	2- on ground
tactical (tac) missiles *	-	1	1
armor *	-	2	1
marines *	-	5	7
infantry *	-	1	5
factories	-	-	1
pirates	6	1	1

* = offensive and defensive stats on ground combats only; need carriers or cargo fleets to transport. \$ = defensive only; built in a sector and made to stay there permanently.

Carriers and Cargo Fleets can carry a variety of different types of cargo and units, up to their cargo limits, as listed in the program when you try and load some.

Carriers have 150 cargo points, cargo fleets 250. The following table gives what can be carried as cargo by which types of ships, and how much cargo space (in cargo points per unit) that they take up. A Cargo Fleet can carry everything on the list, a "C" indicates that a carrier can also carry it.

cargo type	carry	cargo space
infantry	C	1
marines	C	1
armor	C	4
tac missiles	C	2
gravity mines	C	2
potential	-	1 per 100 build points
population	-	10 per 10,000 people

1.6 The Project Menu

The Project Menu

View

Choose~Planet

Copyright~Notice

Sound~and~Pictures~are~ON/OFF

Quit

1.7 View

View

This option pops up the star map, complete with lines marking off a X and Y grid, the Z components being in the upper and lower halves of each box

drawn. This not only gives you a view of the universe, but, after it's drawn, the program will then indicate that you can proceed to point and click. For any sector or area that you point the mouse at and click once on, you will get a read-out in the lower window.

First, the sector coordinates are given. Then, if there's a system in that sector, it's present owner (if any), and, if the player has successfully probed or explored the sector, that system's Mineral Wealth, Biosphere, and population values. To exit VIEW, just click and hold with both mouse buttons and you'll exit, the screen cleared and ready for you to choose the next menu option.

1.8 Choose Planet

Choose Planet

This is used to switch from one planet or fleet to another. By default, Each Player starts his turn at his home world; he may only build and give orders for that world. This option will pop up the standard View map, with the planets that you own circled in white, and other sectors where you have fleets circled in red. All you do is click on the sector that you want to work with and you're there. You are then activated for that sector and may then build and give orders to all that you own in that sector (although, you can only build in a sector that you own; only systems make build points, although you can import build points to an empty sector via Cargo shipments (see later)). Thus, this option allows you to CHOOSE WHICH SECTOR THAT YOU'RE BUILDING AND GIVING ORDERS FOR.

1.9 Copyright Notice

Copyright Notice

The required legal safety valve.

1.10 Sound And Pictures

Sound and Pictures are ON/OFF

Some people just might get a bit tired, sometimes, of the pictures and sound sequences that appear at the beginning of each of the parts of the resolution phase (pirate res, missile attacks, attack res, etc.). If so, then this toggles those sound and pictures ON and OFF. The menu item gives the present ON or OFF status of these pics and sound. Don't turn it off too often though; I worked hard on those things.

1.11 Quit

Quit

Quits the player's turn and moves on to the next player (or the resolutions phase if no one else left to go that turn).

1.12 The Construct Menu

The Construct Menu

Build

Espionage

Communications

1.13 Build

Build

This pops up a 2-column display of the different ships, item, and what-not, that you can build, their cost per unit, and how many of them that you have. To choose an item to build, just enter (in the lower window) the number of the item to build (displayed in front of each item), and then, when prompted, the number of that item to build. If you don't have enough build points it will tell you, not build the requested item, and then ask you for the next item. When asking for how many that you wish to build, it'll even tell you how many of that chosen item that you can build with your remaining build points (a feature added by popular demand and several threats of bodily harm). After an item is built (the display updates for the amount built), you'll again be asked for which item to build. This continues until you enter item number 20 (quit), which then clears out the screen and awaits your next menu selection.

When the Build display first pops up, the lower window will display planet name, sector coordinates, population, morale, Biosphere, Mineral Wealth, and potential (number of build points; updated each time that some are spent). The top of the top screen will also display your chosen tech levels in case you've forgotten. To build for a different sector that you must use the Choose Planet Menu option to select a different sector in which to work.

Any unspent build points are saved (accumulated) for future use on successive turns.

1.14 Espionage

Espionage

Displays all the possible espionage options in the upper window, and asks for which espionage option that you want in the lower window. Just enter the number of the option desired (given next to each option). If that option

requires coordinates of a target sector then the usual point-and-click star map will pop up, else it might ask you to enter the player number of proposed victim. Then you'll be asked for the number of espionage points (displayed in lower window when this option first displays and after every time that some are spent) that you want to spend for that option (if it's to an unexplored sector, you'll be warned that it'll costly (read as: the number of points that you spend for it gets cut in half)), the more points the better chance of success. Remember though, that a player's espionage defense, is the number of espionage points unspent PLUS, the number of points left over after a given chosen espionage option has been resolved (on the resolutions phase; extra points immediately dumped back into reserve after use). Note that the very first option resolved is the Propaganda Self, for everyone, so that everyone has at least the points that they put into that option as a defense before ANY other options are resolved. Also, some options are more difficult than others, so each option has a certain weighting factor affecting it's chance of success (the most difficult is the Revolt option, with a weighting factor of 30, Propaganda Self has a weighting factor of 1, the rest are some place in between).

The various Sabotage options, aim to destroy a number of ships (depending on the number if espionage points that got through, and how expensive a ship it is) of the type specified. If it has the word Control after it, that means instead of destroying a number of that type, it's control system is knocked out so that given type CAN'T BE USED AT ALL THAT TURN FROM THAT SECTOR.

Sabotage Economy zeros out and stops all production for the given sector for the next turn.

Sabotage sensors, affects a sector's sensors so that one is ALWAYS AUTOMATICALLY surprised for any combat for the rest of that turn.

Propogand Self seeks to up one's morale. Propaganda Other- Raise, raises another player's morale, while done for to Lower, seeks to lower another's morale (and watching their population leaving as well, some of it over the offending player).

Spy recruitment, recruits spies from another player.

Spy combat just battles your spies vs someone else's.

Civil revolt/Revolt, on a planet, seeks to overthrow it's government in favor of your own (the native infantry still gets a chance to supress it though; if it's someone's HOME planet, then their forces get cut in half instead of a new government).

Plant plague virus, does just that on a specified planet. It wipes out an amount of population depending on the defender's Medical tech level and the virus planter's Medical tech level.

Assasinate planetary leader, does just that; it tends to decrease the victim player's morale a bit if sucessfull.

Steal information, on a specified sector, displays, on one's Espionage Reports at the begining of one's turn, everything that would be displayed for that sector on a player's Build option, and flags it as having been probed (for the star map, if it's explored, etc.).

Option 25 exits.

1.15 Communications

Communications

Allows you to send a secret message (including whatever special symbols, punctuation, numbers, etc., that you want) to any players desired, the message appearing on the recieving player's first available turn. If you want to add

to the message after you enter it, don't worry as further messages are concatenated onto the end of the existing message and not erased until after the designated player receives the message (up to the natural limit of 255 characters for a string variable of course).

You can even send communications to any computer-controlled players and get responses from them. Details for this are noted in the AI section.

1.16 The Orders Menu

The Orders Menu

Attack/Travel

Privateering

Anti-Pirating

Missile~Launch

Mine~Sweeping

1.17 Attack/Travel

Attack/Travel

This is where you give the orders, for the sector that you presently have active via Choose Planets, that move your fleets all around the known cosmos. You are first given a choice between regular movement or cargo fleet movement. The latter is where you load up a designated number of cargo fleets with whatever specify; even population and build points, as this is how you start your colonies on other planets (remember, how they need a population to run things?). After loading up, you give the destination coordinates and then they move out.

Regular movement has a variety of options. First, you can set gravity mines in that sector; if you own that sector, then they're set against all incoming strangers; if you don't own that sector, then they work against the sector owner. The more mines and more ships all in the same sector, the bigger the chance of them detonating and the more that will detonate (piece of advice: try at least about 50 mines or so in a sector if you want to see any real effects).

The next option is the Probe option. This sends out probes to other sectors to bring back instant information on that sector, the more probes you send out in a single bunch (and the higher your Electronics tech level) the better your chance of success. If done against a player-owned sector, if unsuccessful, then there's a chance (depending what his Electronics is compared to yours) of the probe being discovered and reported to him on his Fleet Resolutions report at the beginning of his turn. Note that espionage options requiring a sector coordinates input are harder if that sector hasn't been explored, so keep this option in mind!

The final option is what launches a fleet. It pops up the usual map, asking you to click on the desired destination coordinates for the fleet, and

then pops up a menu of ships available for launch. You just keep type in the number for the desired ship type and then the number of that type, and so on until you enter the number for exit.

The possible orders are listed and are all self-explanatory. Note, that if trade is chosen, that the ENTIRE FLEET is given over to the SECTOR OWNER when it arrives at the destination. If attack orders are given, and there are more than three players, then you'll be asked if you want to launch a joint attack with other player(s) against someone. This means that a number of players can gang up on a single hard-to-kill sector; all players to be a part of such a joint attack must each specify the same player as the leader of the attack (even the leading player himself), and of course, send something to the same sector with all participants arriving on the same turn (that of the slowest moving player). And, yes Virginia, you can attack an unowned sector populated only by the natives.

After exiting all of this, if you own the present active sector, you'll be asked if you wish to set standing orders, read as, who to attack on sight should they ever enter that sector. If it's a sector that you don't own, then it'll ask if you wish to change fleet orders or not, ie, to start or stop interdicting in that sector.

Note: even if an attack is unsuccessful, the remainder of your fleet will still be in that sector and accessible via Choose Planets.

1.18 Privateering

Privateering

Launches pirates at the specified sector. These first engage any resident fleets and, if they get through, then proceed to kill off any factory complexes (cuts down their production, don't 'ya know). Pirates have the advantage of remaining completely anonymous as to who sent them.

1.19 Anti-Pirating

Anti-Pirating

The opposite of the above, launched to a specified sector, it hunts down any pirates there (on arrival, for each set of pirates it finds, it asks you to confirm orders to kill them or not).

1.20 Missile Launch

Missile Launch

Launches hyper-missiles at the designated sector; they arrive on the same turn launched and hit just about everything. AMP's attempt to shoot down all incoming missiles.

1.21 Mine Sweeping

Mine Sweeping

Mine Sweeping Sends out designated available destroyers to do mine sweeping duty in that same active sector. Barring any accidents, it reports how many opposing mines were found and disposed of (but NOT how many MORE might be out there...). It also asks you if you wish to deactivate and collect any of your own mines in this sector (no hazards here).

1.22 Combat Results Phase

Combat Results Phase

New~Planets~Declared

Population~Updates

Natural~Disasters

InterStellar~Enquirer

Espionage~Results

Mine~Results

Anti~Pirating~Results

Pirating~Results

Missile~Results

Attack~Resolutions

End~Of~Turn~Conditions

1.23 New Planets Declared

New Planets Declared

Lets everyonw know if any new planets have been claimed, who claimed them, and what they were named.

1.24 Population Updates

Population Updates

Gives that month's population updateds for each player owned home planets

colony worlds (phosae with a population. The population adjustments are given as two types; the number (plus or minus) due to increased (or decreased) births and clone production, and the number of people immigrating to (or emmigrating from) each planet. the first is based on Medical tech level and the planet's biosphere rating, the second on one's morale score.

1.25 Natural Disasters

Natural Disasters

Gives the (often amusing) results, if any, for each player, incurred due to any of a number of natural (or not so natural) disasters and twists of Fate. Nothing so overly devistating, a very few even beneficial, but watch out for the Trader's Guild. By the way, any time it says that your production has been raised or lowered, the program does this by appropriately altering your morale (just so you don't wonder what happened to your morale score). Keep your eye on these, some can be a little entertaining.

1.26 InterStellar Enquirer

InterStellar Enquirer

Every galaxy needs it's own trash newspaper, and this one's no exception. The headlines printed are made for amusement's sake only (any resemblance between names mentioned and real one's isn't EXACTLY coincidental). A few of the headlines about various players are actually TRUE, but a lot aren't. However, I'm not telling which are which; you get to figure that one out for yourselves (that ought to add at least a LITTLE paranoia between players).

1.27 Espionage Results

Espionage Results

Gives the results of all of the espionage options that people allotted points for; telling the outcome of spy battles as the goals are attempted, if any of the attempts are sucessfull, and what the results are. The propaganda self for morale raising is done first for all of the players (so at the very least, left over points from this will be available for defence), and then the other options that each of the players attempted. The reports are self explanatory.

1.28 Mine Results

Mine Results

Tells which mines went boom where, against whom, and what died.

1.29 Anti-Pirating Results

Anti-Pirating Results

Notifies of any arriving anti-pirating fleets, in which sectors, and then resolves the pirate searches. If a group of pirates are found, the owning player will be named, and then the owner of the anti-pirate fleet will be asked if he wishes to press the attack against that particular pirate fleet; if so, the battle results will be displayed. This continues until no more pirate fleets are found by the destroyers.

1.30 Pirating Results

Pirating Results

Gives the arriving pirate fleets which then commence to engage any that sector owner's defence fleet and then, if they may make it through, proceeds to start killing off any factory complexes in the area.

1.31 Missile Results

Missile Results

Totals up all, for a given sector, all missiles incoming from all sources, figures out how many of them can be shot down via the local AMPs, how many left stay on course to their target (a function of their Electronics tech levels), and then gives the results of what died. Missiles against a sector only strike the sector owner (even if they're just the natives).

1.32 Attack Resolutions

Attack Resolutions

Gives the results of all fleet movements that don't appear in one's Fleet Resolutions phase of their turn. Incoming attack fleets are given the option of who they want to attack in that sector (multi-player joint attack fleets aren't given the choice to attack their coalition members). The arrival of interdiction fleets is announced, along with a message of their intentions to interdict. Trade fleets (including cargo fleets) arrive to unload onto the sector owner. If an interdiction fleet is present, the trade fleet owner is asked if he wishes to try and break through, while the owner of the interdicting fleet is asked if he wishes to let it pass or not.. Successful trade fleets deliver the whole fleet as trade, unsuccessful trade fleets are kept in that sector (still owned by their sender) but left undelivered, awaiting further orders.

After the space battle of an attack is fought, if a planet is present, then planetary bombardment is started. This amounts to any of the attacker's surviving dreadnoughts and destroyers present bombarding the planet's surface to try and reduce the ground troops (marines and infantry) and the population

prior to landing. At this point, the only defense against planetary bombardment is for the defender to have Planetary Shields.

After any planetary bombardment of a planet, ground forces are then landed as the ground battle then proceeds. Marines try to establish a beachhead, and then the rest rest of the ground forces are landed. If the planet is taken, ownership then changes to the conquerer. In the case of a joint attack, you are asked who the new owner is to be, and then how you wish to divy up some of the loot (ships and stuff), equally or all to the new sector owner.

By the way, the space battles on an attack have one segment where it figures if anyone CAPTURED some of the other guys ships! For this to happen however, marines must be present. Also, if a trade fleet is interdicted, the one who interdicted it gets any build points, cargo ships and carriers, and any colonists shipped home as slaves (and added population).

1.33 End Of Turn Conditions

End Of Turn Conditions

Displays all players' conditions in the form of a three-part one-line sentence. The first part depends on one's home planet infantry, the second on one's home planet number of factories, and the last upon the number of colonies that one has. Each indicates a certain range of values for that given stat, a different statement for each value. You can probably figure out what statement corresponds to what range of values after a short amount of observation. This will give everyone a very general idea of how the others are doing relative to each other.

At the end of this, you'll be asked if you wish to save the game; if not, then just press RETURN.

You will then be asked if you wish to quit the game or change any players' names; just hit 'Return' if you wish to continue playing, enter 'Y' if you wish to quit (at which point you'll get my rather terse opinion of such a decision), or enter 'C' if you wish to Change any of the players' names (self-explanatory interface for this one). If you don't quit, then the next turn will start with each player's private turns again.

1.34 Saving A Game

Saving A Game

Selecting to save, or load a game, pops up a fairly straight-forward requester for such. File lengths are reasonably short (although a bit longer than files for v1.1, due to additional matrices for the AI). It saves the game in 2 files, one of which is actually the star map; both of these files must be in the same directory for that game to be loaded.

NOTE: Games saved under v1.1 of this program won't load properly into v1.2 of this game. This is because that the new AI features required the addition of 3 new arrays and the increase of the size (by 1 element) of one of the attack arrays. As such, the computer will be looking for these new additions when loading any saved game. Since these additions won't be present in a version 1.1 game, you're likely to get EOF error messages if you try. This shouldn't be too much of a problem though, since I don't think that V1.1 ever got all that much distribution anyhow.

1.35 AI

AI- Making The Computer Take A Player's Turns

This is the big new feature of v1.2 of this game. You can now set the computer to take the turns for any number of the players. It will then play each player independent of the others, attack and trade with any other computer opponents about as often as it will with the human players (even on the hardest setting, it doesn't arbitrarily single out the poor humans), and have the full capability to do everything that the people-players could do. It can engage in trade, decide on it's own orders for attacking, keeps track of who it like and who it doesn't (so be nice to it), adjust it's decision-making based on on-going circumstances, and even send and recieve messages and react to their contents (with a fair ampount of freedom on how they can even be worded)! It plays a reasonably intelligent game, adjusting what it builds as needed, making alliances (including the ability to engage in multi-player attacks on a single opponent), even back-stabbing allies from time to time. Every option the players can do, the computer can do also (except for accessing the cheat mode... although I was rather tempted; hmmm, a computer that cheats... :)).

The code is written as efficiently as I could, so it doesn't take it all that long to take the turns for a given computer-player, so you won't have to wait for the computer. As a matter of fact, when I put a little timer routine in the program to find out just how long, it averaged out to 0.9 sec for a given player (on my stock A4000/040). The only reason why it seems to take about a half a second longer is because I put in an intentional pause of 0.6 sec so that it's actually possible for one to read the message that indicates when the computer is taking it's turns (otherwise it would flash by to quickly).

Activating~Computer~Control

What~The~Computer~Does

Initial~Aggressiveness~Setting

Communicating~With~The~Computer

1.36 Activating Computer Control

Activating Computer Control

To make the computer take the turns for a given player, when entering player names, just make sure that the first 4 letters of the player's name are 'comp' (capitalization doesn't matter), the rest of the name being as you so wish. The computer will then take the turns for that player, until such time as you may change it's name (via the new name-change option at the end of each full turn) to something not starting with 'comp'.

1.37 What The Computer Does

What The Computer Does

The computer takes care of all building, attack orders, trade, communication with otherplayers, deciding whose a threat and whose a friend, makes and breaks treaties, sends reinforcements to poorly defended planets in it's empire, colonizes and pillages planets, performs espionage, and everything else a player can do. It also has to play within the same restrictions as normal players: it doesn't know anything about any planet that it either hasn't been to or hasn't probed. As such, it's decision-making process is affectedby if it knows what to expect at a given planet or not, and all of the normal limits imposed on normal people-players (so you WILL have the ame chance of finding out if the computer had to send probes into your system, just like for other players.

The computer also keeps track of who it hates, who it likes, who was nice to it and who wasn't. How it does this is summed up in a single number for vs each player: the Threat Level. The Threat Level is a number (usually from 0 to 100, although it can go higher or lower given incentive) that is treated as a percentage chance when it's deciding on if it should do something like invade or trade. All decision-making processesvs other players are based on this Threat Level. A high Threat Level value means that the computer increasingly dislikes a given player, while a lower value means that it likes you better. Thus, a value of '0' means that it REALLY like you, and a value of '100' means that it REALLY hates you; values can go above '100' or below '0'.

The Threat Level starts at a base setting at the start of the game, this setting beingcontrolled by the Agressiveness Setting requester that pops up after the Game Start-Up requester (starting values given next). From then on, the Threat Level, for a given playervs any other given player, is altered up or down based on who invades it, who trades with it, who does espionage tactics on it (assuming that it finds out who the perpetrator was),and anything else involving player interaction. Thus, if you start the game out with rather high initial Threat Level settings, it'll take a lot of trading and being nice before the computer will even CONSIDER being nice to you. It keeps track of these Threat Level values for all players vs all players, if a player is computer-controlled or not (so there's never any problem when switching back and forth between computer or player controlled). It even uses the Threat Level to Know when NOT to attack a stronger opponent; If it looses an attack by a substantial margin, the threat level vs that player is lowered to account for it's desire to not want to waste additional resources vs such a stronger opponent (so, if you're really strong, then it might be nicer to you).

1.38 Initial Agressiveness Setting

Initial Agressiveness Setting

The opening Agressiveness Setting requester gives the initial settings in terms of quasi-amusing descriptive phrases, that each correspond to an initial Threat Level setting that is given to all players vs all other players. These settings correspond to the Threat Level values as given in the table below.

Initial Threat Level Value	Setting
25	Daddy can I play?

50 (default setting)		The Executioner
75		The Great War
95		Show NO mercy!
150		Can't we all just get along?
0 - 100, randomly		Random
determined separately for each		
player vs the other players		

1.39 Communicating With The Computer

Communicating With The Computer

Yes, you can send communications to the computer-players and no it isn't by way of a menu of limited selections. Just use the normal method of sending messages to other players (via the Communications option in the menu), select the player number to send it to, and then type away. On it's turn, the computer will then scan the message string for certain key words or phrases and react to them accordingly, often sending back responses as to it's decisions. You can even concat multiple message strings right after another (order of the messages doesn't matter, just make sure that you have a given message in it's correct entirety before you add on the next one). Similarly, it can also send you messages for pretty much the same types of requests, asking you to respond in kind (again, using set formats for the responses). It will use the results of these communications as part of it's decision-making process. Keep in mind though, that the computer may also be sending it's own messages to other computer-run players, even to making up their own plans against the other players (computer or player run).

In brief (or is it too late for that?), a message can be worded any way that you want to (ypou can even insult the computer), the only stipulation being that you include specific sets of words or phrases, in a required order, depending on what it is that you are asking for. The following table gives a summary list of the phrases that the computer will recognise and respond to. Required words are given in all CAPITALS (although you need not type them in in capitals yourself), three dots (...) between words mean that you can have any words of you choice separating those KEY words (if no dots are given between words, then don't insert any other words, no more than a single space then separating the given KEY words), and anything given in a triangular bracket indicates a value or name that you have to insert.

For example: <Sector number> means to type in the desired sector coordinates (in terms of (x,y,z) coordinates); the sector numbers can be separated by a comma, a space, any symbol that you like, or nothing separating them at all (as long as you have the numbers in the correct order).

<Player Name> means to insert the actual name of the desired player (not the player number).

The table is now given below.

KEY word phrase		meaning
HELP....IN <Sector Coordinates>		request to have military aide sent to help you in the sector with the given coordinates.
...ALLIANCE AGAINST <target player's name> IN SECTOR <Sector Coordinates> WITH LEADER <player		requesting for a multi-player attack vs the target player at the given sector with the second player as

name of attack leader> as attack leader		the attack leader.
...TRADE WITH ME...		request from the computer player to
...SEND ME SOMETHING...		have you send some trade to it;
		either of the two ways of wording
		it will do.
...DON'T ATTACK ME...		asking the computer to leave you alone,
		and have a MUTUAL non-aggression
		pact (at least for a while)
...ALLIANCE WITH ME...		asking for mutual protection treaty:
		if someone attacks you then your
		allies forces will then attack the
		one that wronged you, but be fore-
		warned, there's a chance it may not
		avenge you vs a given attack, and it
		may even attack you itself if you're
		too weak.
...BREAK YOUR TREATY WITH <Player's name>		asking the computer to break any mutual
		protection treaties that it has with
		the given Player. If it decides to do
		so, then it will send back the message
		"Breaking my treaty".

The following are responses to some of the above that the computer will recognize when waiting for confirmation of such communications.

Response KEY word phrase		meaning
...GROUP ATTACK ACCEPTED...		indicates acceptance of the proposed
		multi-player attack, asked for in
		the above ALLIANCE AGAINST message.
...GROUP ATTACK REJECTED...		indicates rejection of the proposed
		multi-player attack, asked for in
		the above ALLIANCE AGAINST message.
...TREATY SIGNED...		indicates acceptance of the proposed
		mutual protection pact proposed for
		in the above ALLIANCE WITH ME message.
...TREATY REJECTED...		indicates rejection of the proposed
		mutual protection pact proposed for
		in the above ALLIANCE WITH ME message.

1.40 Strategy

Strategy, Tips, And Hints

A quick source of build points is unclaimed planets. Explore planets EARLY (like, turn one would be nice); if there's natives there then deal with them with as many espionage points as you can muster. If no one lives there and there's a good atmosphere and mineral wealth, then claim and colonize it. If, however, it's a planet with a very low biosphere (your Medical tech level can compensate for some of it, but there ARE limits), and a more than reasonable mineral wealth, then leave it unclaimed, and just plunder the planet for some quick build points. You can continue to do this by just

launching that same fleet that arrived in that system back to it again. It'll arrive next turn, with the option of plundering it again. But remember, each time a planet gets plundered, it's mineral wealth rating gets permanently lowered by one point (but never below a value of one, of course). This ought to be good for some quick build points. Plundered build points still have to be shipped somewhere (via Cargo Fleets) in order to be used; just ship them as a normal trade fleet, but for this option though, when you send the Cargo Fleets to the plundered planet in preparation of moving the build points, send the empty Cargo Fleets via normal Fleet movements and not via Load Cargo Fleets (otherwise you'll just end up giving the empty fleet to the Native, which would defeat the whole point of ending the fleet there for the build points). If you later decide to claim that planet, any build points not yet shipped away will just be rolled over to your stored build points for that planet (so you won't lose any in the transition).

It's wise for all players to agree upon the first few turns (five usually) as being that of peace (no attacks upon each other, no missiles, but pirates are always fair as they can't be traced). Use these turns to explore new systems, and build up your production. A good way to increase your production is to put about half of your points into building factories and the other half into espionage-propaganda self, to increase your morale. Then on turn five, you can start to build up your defences. Remember, a premature attack is a sure way to a quick and easy self-defeat, ESPECIALLY in a game involving more than two players.

A good way to launch a decisive attack is to use espionage to sabotage, on the same turn that the attack fleet's due to arrive, as much as you possibly can, especially control systems, as these cancel out ALL use of that system for that entire turn. Then also launch missiles on that same turn. Basically, blitz 'em with as much as you possibly can. And, remember, you can give orders for a fleet to just maintain position and thus arrive someplace in secret (ie, on your Fleet Resolutions phase). You can use this option to build up a force right next to the sector that you want to attack, and then launch from there for the entire force to arrive on a single turn's notice. Don't forget to use the espionage-steal information option to see just what you're getting into before you attack a given sector.

Even sectors without a planet can be used as strategic jumping off points. Also remember, you can transport build points to a sector that you own, EVEN IF THAT SECTOR DOESN'T HAVE A PLANET. In this way, you can build a station right in the middle of nowhere, where it just might serve to annoy everyone the most.

Pirates are a great way to keep someone's production down with raids to his factories, assuming that he's stupid enough not to have a good enough fleet in residence. It's especially useful against new colonies to keep them from becoming bigger colonies.

If you establish a colony, do it with a lot of infantry. The chance of putting down a successful rebellion (from one's espionage-revolt option) depends upon the ratio of local infantry to local population, so be careful.

Be very careful about how you initially choose your tech levels, as these can dictate your entire strategy. Your choice is VERY important, so choose wisely (and don't forget what it was that you choose).

A joint attack is a good way to gang up on a hard-to-kill system or player, and the communication options is a good way to arrange these joint attacks in secret. So, keep your diplomacy skills ready.

When you send a trade fleet, is there's a chance of interdiction, be sure to send some attack ships along in the same trade fleet. These ships will also be traded to the sector owner, but if this is a different player, I'm sure that you can arrange some equitable trade deal (that's what's the Communication option is for). Also, if you're going to set up an

interdiction, do it up nice and proper... with a large fleet, no wimped-out five-ship scout force here.

This ought to be enough hints and what-not to get you started. Any more and I'd be playing the entire game FOR you.

1.41 Last Minute

Last Minute Notes, Pleas, And Farewells

I'm still not too great at animation (yet), so, there still are just some still pictures that pop up every now and then; any animation will come in later versions of this program. Of course, if you have any pictures, sound, or animation files that you think might be appropriate, then just send them to me at the address mentioned in the GE.Read.Me file, and I'll be happy to look them over. Any used in future releases will be given credit for (just make sure that you tell me who you are!). If you find any problems that you'd like fixed, or options that you'd like to see included, then just write and tell me and I'll gladly think it over (although, if it's about spelling- stuff it, it's MY games and I'll spell any BLOODY way that I want too! So there!!! :P).

And remember, shareware means to send money if you like it (as I'm sure that you ALL will), so please don't change the meaning of the word.

Also, thanks to the half-dozen or so people that wrote up the original 20K program, on their LITTLE Applesauce computer, that was SO badly progamed and coded and SO chincy that I vowed to do up a proper version someday. Their lousey programing skills, but entertaining basic idea, inspired me to greatness (or at least better than complete and utter mediocracy).

SPECIAL THANKS:

P. Hillebrand, of Australia- the very first regitered user
James Tam, of Canada- for writing in about the Save/Load Game bug

1.42 History Of Changes

History of Changes

Program changes given by date installed.

v1.0 (written in Amiga Basic):

Circa early to mid April '91:

Added the click-on-destination coordinates interface with the star map for all game functions that require the entry of destination coordinates.

August '91:

I FINALLY figured out WHY the program was taking up so much memory (about 10 times what it should have, for 4 players). Also debugged again, a bit more thoroughly finding some rather sneaky bugs in the process.

September '91:

The compiler I tried to use on the program is turning out to be rather unstable. So, guess what STILL isn't compiled!

Sometime in '91:

Added the options for specifying how tough the aliens are and and if you want more of them than the usual amount. A toughness of '1' is how tough the aliens used to be before I added this option.

Time Passes...

March '94: I got AMOS!!! 4 months later I then found time to open it up, learn it, and then a couple of months after that, actually got around to converting the program over to AMOS.Great language! It needs only a few minor improvements that I can see (which I then wrote Mr. Lionet about). One of the limitations is that, while it can show pictures, it's "Load IFF" DOESN'T support color cycling, which some of you may notice needed for some of the pictures. As such I still need to use SuperView for a few of the pitures. Ow well.

Nov '94: Getting around to compiling it in AMOS and, well, good news and bad news. It DOES compile and DOES run... BUT- while when run in AMOS it has no problem with the size of the arrays that I use, and gives no error messages, and then compiles fine, when run after compiled, when run for a 4-player game, the arrays then get too big for the compiled program to handle, resulting in an error message and the program dying! (I just CAN'T win!) This appears to be a clitch in the way it gets compiled (for any interested programers out there: the AMOS manual says that each DIMENSION of an array can have up to 65,000 elements in it,with any number of dimensions possible, but when compiled, it seems to think that this limit is for a total of 65,000 elements for the WHOLE ENTIRE array! something that the AMOS people need to work on).

Oh, yeah, Amiga Basic can go off and burn someplace now :).

v1.1 (now fully in AMOS):

Early '95 (around Jan. or so): Lots of changes in this version. Unfortunately for this programer's ego a lot of the changes are a bit transparent and hard to appreciate unless you know what to look for. Major changes as follows.

-Remember that little bug AMOS has about arrays and compiling? Well, I got around it, kind of. The big array is now two smaller ones, but at the cost of their being a limit on the number offleets that a given player can have IN FLIGHT simultaneously, the total number of fleets inhabiting sectors, just one's that haven't arrived anywhere yet). This max number is now equal to $(75 + N)$, where 'N' is the value for the map's,sector size (if the map is N by N by N). Okay, so this is still a lot of fleets (PER Player) and should be sufficient for most cases

The upshot of all this is that, as a side benefit, the amount of memory used by the program was more than cut in half as well. Any game will now easily run on a 2-meg machine (and almost on a 1-megmachine.)

-The number of sectors is now INDEPENDENT of the number of players (both used to be. the same). Both are now set separately in the game set-up.

The max number of sectors can be from 2X2X2 up to 4X4X4.

The max number of players is now 8 (used to be 4)!

-added the save and load game functions.

-added game set-up requester.

-the toughness of aliens now has more effects in the game than before.

-changed pillaging for planets; before the new points just appeared at

your home planet, now you have to use a Cargo Fleet to ship them away.

- added the graphical interface to the Choose Planets menu option.

- Cargo fleets can now be included in regular fleet movements, as well as in Trade.

- Added planetary bombardment for Drednots and Battleships.

- added several requesters.

- found and fixed several bugs

BTW, Ctrl-C will halt the game; I left this in as a quick way to end the game in case it's needed.

The cheat mode (oh, did I mention that I've had a cheat mode in this game all this time? Purely for testing purposes I assure you :)) now no longer echoes the cheat code on the screen as you type it in (so no one can look over your shoulder as you type it in).

v1.2

May '95

added AI functions. Computer can now operate some of the players. Also fixed several bugs (most of them found by the AI routines) and did the most thorough testing job that I've ever done. The AI stuff added a bit over 84K to the program and uses about 30K more of Ram when operating.

Also found and added two more sound files (for the Opening and Espionage screens).

Also completely re-did the Docs.

v1.2.1

June '95

a few minor bug fixes, including wrong planet name appearing after Choose Planets menu option used.

v1.3

The GE.Docs are now in Amiga-guide format.

I finally took out the time to work around the color-cycling problem. Any pictures needing color cycling are now cycled from within the program itself, with no need for any external viewers (Yeah!). The actual programming part wasn't the problem, it just was a pain to hunt up which color registers were the one's being cycled, and then having to do that for for EACH individual picture, and some of them had up to 4 different cycles (BLEGH!). <sigh>, tedium. Well, at least it's done.

I also cleaned out a few out-dated pieces of code that I'd found while I was at it.

v1.4 late '95

Several minor fixes, cosmetic fixes, and a couple of spelling fixes.

Anywhere it says to "press any key" or "click to continue", you can now use either mouse or keyboard to continue; this also applies to bypassing the pictures.

-CHANGED INTERFACE- Prompted by a few requests (and now having more confidence in being able to do such a thing) I changed the program from Mouse-driven to more of a GUI menu; now all menu layers are in a series of button bars. each button corresponding to the appropriate old menu item. The names of each of the old menus and menu items have just been put into a corresponding series of buttons. Just press it and that's it.

Trying to think of any other window dressing that I can put around the main windows. Any suggestions?

Got IntOS, hoping to use it to make the game more intuition and AGA -like.

It looked good... except that it didn't work; it seems to run but not communicate with AMOS, which would make it utterly useless. Hopefully I can overcome this problem (or they'll come out with an upgrade that WORKS! hint, hint,...). <sigh>.

Got some (a little) feedback: apparently some of you like my AI, or are loosing sleep trying to beat it. Glad to hear it. :)

v1.5 early '96 (finished up in early April)

Even more minor cosmetic fixes, straightening up the overall appearance and such things as making sure all the print statements look nice and neat, and other unnoticeable things (unless you're the real picky type).

I finished filling out ALL of the required sound files needed for the game (at last!).

Also, I went Requester Happy. There are now a LOT of requester-based Gui-type interfaces for making it easier on taking your turn; as a matter of fact, about the only part that DOESN'T have some sort of point-and-click is the Build screen (and this mainly because putting THAT part in a GUI screen would be a whole lot different from all the neat interfaces that I cooked up for the rest of the program). The color scheme and design of the interfaces is a bit basic (and probably laughable when compared to asl-style types), but it is still functional and really easy to use, as you'll see.

Haven't found any real program bugs anymore, so from here on out it looks like cosmetic changes are the thing.

Oh yeah- IntOS doesn't work at all, apparently because my machine is too fast for it. Now, while I could possibly hack my way around it to get it to work on MY machine, there'd be no guarentee that it's work anywhere else, so scratch THAT idea. I'll keep looking into other GUI extensions though (I don't want to have to get a C-compiler I can't afford, nor learn C good enough so I can port it over to it).

I also switched to the 2.0 icons as the default ones, keeping the old 1.3 ones in a spare directory, although if I ever need room then the old 1.3 icons are going to be the first things to go (the remaining 1.3 users out there can always get them remapped).

v1.5.1 Nov 1996

Bug fix release. Tracked down a couple of bugs that concerned Saving and Loading a game. One was needing to put quotes around the file name when saving and loading a game (to account for names like "RAM DISK:" with a space in there). The other was that it crashed 2 turns after loading up a saved game (thanks James Tam for pointing that one out- enjoy the cheat code)- turns out to have been due to an array that wasn't being saved (because it didn't NEED to be) but that also wouldn't get properly initilized after loading up an old game- a silly oversight but it took me two days to track down. Anyway, you can now Save games and re-load them and not have to worry.