

New Game Creation

When you launch Aurora, you are presented with the Game Detail screen. This screen, by default shows the last game selected (Usually Steve's campaign). To create a new game, click the New button. I'll present the steps as they are shown to you.

1. You are asked for a starting year. Type in the year your campaign starts at and click OK.
2. Next you are asked if you want Aurora to create Sol and create a race on Earth. If you select No, you will need to create your own starting system and race. We'll click Yes for now. See Tutorial 1a for creating a new system/race.
3. Next you need to enter in the number of jump points for the Sol system. We'll enter in 3.
4. Next you are asked if you wish to create the race in stages. If you click No, the race will be created randomly. We'll click Yes.
5. A suggested species name of "Terran" is given. You are asked if you wish to change this. We'll click No.
6. Next is the suggested maximum deviation in oxygen pressure. In this example it is 45%. We'll leave it at that.
7. Next is the suggested maximum atmospheric pressure. In this example it is 2.9. We'll leave this alone too.
8. Next is the suggested maximum temperature deviation. In this example it is 23 degrees (Celsius). We'll tweak this to 30 degrees.
9. Next is the suggested maximum gravity deviation. In this example it is 60%. We'll leave this alone.
10. Next is the suggested race name. The game suggests "Terran Federation", but we'll change that to "Confederation of United Terra" with a short race name of "Confed".
11. Next is the theme. The game has suggested Italia. We'll change that to USA.
12. Next is the government type. The default is Player Race. We'll leave this alone.
13. The default commander name theme is USA. We'll leave this too.
14. Now we are asked if we wish the race to have surveyed the home system for jump points. We'll say yes.
15. Next is the suggested population. In this example it is 265m. We'll change this to 750m.
16. Next we get a warning that it may take a bit for large populations.
17. We get asked if we wish less industry than normal. We'll say no.
18. We get asked if we wish to convert ordnance factories to construction factories. We'll say no.
19. We get asked if we wish to convert fighter factories to construction factories. We'll say yes.
20. We are asked if we wish to set a name for the homeworld. We'll say no.
21. Next we are asked about starting research points. In this example we have 180,000. We'll increase this to 250,000.
22. Now we are asked if we wish random distribution of the points. We'll say yes.
23. The game now goes through the creation process and you will get a notification that the process is complete.
24. Now we can change any game settings. We'll just turn on the "Use Inexperienced Fleet Penalties". You can hover your mouse over any option and a tip will pop up to explain it. If you change anything, be sure to click Save, then Select. If you do not click Save, your changes will not take effect.
25. Now we are at the main screen.

This is the end of the tutorial, part 1. Tutorial 1a shows the process for the alternate setup. Tutorial 2 is the basic game setup.

Tutorial 1a – Alternate startup

Welcome to the alternate start up tutorial. In the last tutorial, you'll recall we were asked if we wanted to create the Sol system, and we said yes. In this one, we'll click No, and proceed from there. After

clicking No, we are presented with the basic game setup. Consult Tutorial 2 for detailed information. For now, we will click Save, then Select.

We are now looking at the main game bar. In this case the title shows "New Game #115 1st January 600 00:00". New Game #115 is the name of the game, and 1st January 600 00:00 is the current game date and time.

First, click the Game Menu and Select Default Race. This brings up a list of all the races in the game. You should only see SM Race. Select that by highlighting and clicking Select, or double-clicking. Our title bar now has changed to show SM Race after the game time. Click the SpaceMaster menu, and SpaceMaster On. Type in your password, if any, and click OK. Our title bar has changed again, adding (SM) to the end to show we are in SM Mode.

Now, we need to create a system for our new empire. Hit the F9 key, or Empires/System View.

We are now presented with a blank system view screen. In the lower right corner you will see a number of buttons. We are interested in the Create Empire and Create System ones. Click the Create System. After a moment, the game will show you the system it has generated. I got lucky on my first shot, with a cost 0.0 planet in the system. You may need to generate a number of systems before you get one that is suitable. Once you have, click your new homeworld. Since this is the SM Race we are still under, click the "All SB Survey" button. This will run through the mineral generation process for all of the system bodies. Our new homeworld has 46,426,250 (.5) Duranium, 2,944,656 (.5) Tritanium and 15,163,240 (.1) Gallicite. Not very conducive to a burgeoning empire's home planet. So we click the HW Mineral button. This skews the mineral generation process to give all minerals in decent amounts with a fairly good availability.

Our next step is the actual creation of the race. Click the "Create Empire" button. Make sure you have your homeworld selected, or you'll get an error, or a race where you don't want it. You'll be asked if you wish to create the race in stages, or randomly. If you click No, you will have very limited input as to what the racial makeup is, so we'll click yes. Clicking no is a good option for throwing in NPR's later in the game.

Our first decision is whether to use an existing race or not. We'll say No. We get a suggested species name of Adobreny. We'll accept this.

The next question is Maximum deviation in Oxygen pressure. We'll accept the game generated default. Note that this value changes per species. You will not always get the same value every time.

Next question is about Suggested Maximum Atmospheric Pressure. Again, we will take the default.

Next is the Suggested Maximum Temperature Deviation. This value is in Celsius. We'll take the default value here too.

Next we are asked about the Suggested Maximum Gravity Deviation. We will accept the default value here also.

Next, we are presented with the suggested Empire name of Adobreny Empire. This sounds good, so we will accept it.

From here, the steps are the same as in Tutorial 1. You will be asked if you wish to change the name of the homeworld. I suggest not changing it, as this will only change it for the SM Race.

Before continuing on to the next tutorial, be sure to select your new empire as the default race.

Game Setup

This tutorial picks up where part 1 or 1a ended. We should be looking at the main game bar. The tutorials that follow assume the Human race on Sol.

First, click the SpaceMaster menu and select SpaceMaster On. Enter in your SM password and click OK. This will make some of the stuff we want to do a bit easier.

Next, click the Empires menu, and select System View, or hit the F9 key. We want our race to have not only completed a grav survey of the Sol system, but a geo survey too. In the lower right corner you will see a box that says Spacemaster Functions. In this box, click the "SB Survey" button. This will grant our race the knowledge of what minerals are where in the system. Take a moment to look and see what you get. At this point, your game will be different from what I am seeing. A quick summary of what I've got. Mercury has Duranium Neutronium, Sorium, and Uridium, with Sorium and Neutronium having high amounts and concentrations. Venus has 7 of the 11 minerals, though only Vendarite and Tritanium are above .5 concentrations, and both are 15+ million amount. A few scattered asteroids and moons have minerals. Neptune and Uranus have good amounts of Sorium. At the moment, Titan is the only other system body that is eligible for colonization at 5.67 cost. Go ahead and close this window.

Click the Empires menu and select Economics, or hit F2. The first thing you see is the summary screen. This gives you an overview of your race. Something to look at is the number of shipyards/slipways. We've got 7 shipyards and 14 slipways. We've also got 120 automated mines. I think we'll move those to Mercury and Venus as soon as possible to start exploiting those planets.

First thing we need to do is build ships. But before we can design ships, we need technology. Click the Research tab. You can browse through the list of what you have available to research. For an experienced player, this will give you a good idea of what has been selected already. For example, I see a lot of early beam techs available and Capacitor Recharge Rate 2. This means Beams will not be a high priority on our warships at the beginning. Scrolling through the list, our missile tech does not seem to fare any better. In the upper right corner, you can see some sorting options for the tech list. Click Completed Research (exc Start). This shows you what the game allocated our 250k research points to. Glancing over the list now, we see the Confederation has active grav sensor strength of 28, internal armor 3, and thermal reduction 25% normal. Click on the Category droplist and select Racial capabilities. Here we see increased fuel efficiency .8 and increased research rates. Click the droplist again and select Ship Components. There is not much here that looks good, beyond Improved Geological Sensors. Turn the sorting back to Available Research Projects.

At the bottom, you should see 8 buttons labeled Research, Design, Instant, Turrets, Instant RST, Fighters, Delete, Missiles. Click Design.

I'll only walk through creating Lasers. The other tech is very similar in how it is created. You'll want to go through each category and create some items for each. For lasers, our choices are Laser Focal Length, Laser Wavelength, and Capacitor Recharge Rate. Of these, we've only got an increase in wavelength. So we will create a 10cm C1 Visible Light Laser. That is the game suggested name. As you can see, our laser has a maximum range of 60,000 km, a rate of fire of 15 seconds, and does 3 damage. We can change the name or leave the default. We'll change the name to "S&W 100mm Laser Cannon". Click the create button. This creates a research project (shown under Ship Components) for you to research. Go ahead and create the rest of your technology.

As a note, Missile Launchers can be created any size 2 to 24 that you wish. The size of your launchers

will affect the size of missiles you can fire. As a practice, I create a size 2 launcher, used for point defense if the fire rate is low enough; and a few sizes (usually even) up through size 8-12 depending on reload rates. I also create size 24 ground based launchers for our PDCs. Note that missile launchers can also fire smaller missiles, so a dedicated PD sized launcher is not always needed.

Once you have created all your basic tech items, you can either research them individually, or click the Instant RST button. This button gives you knowledge on how to build your Race Specific Tech. You will also want to create turrets and missiles. Turrets need to be created AFTER you create some beam weapons to put in them. Not all weapons may be turreted. Turreted weapons are good for point defense and for mounting multiple barrels. Once you have created turrets and missiles, click the Instant RST button again.

This ends part 2 of the tutorial. Part 3 will focus on Ship creation.

Ship Creation

Ship creation is as much an art as a science. Cliché, I know, but accurate. You'll need to have a basic plan for your ships before you start.

Ask yourself these questions.

1. What is my best weapon system?
2. What is my second best weapon system?
3. What is my longest range weapon system, both in fire control and weapon?
4. Do I have point defense class weaponry (5sec rates of fire)?
5. What are my sensor techs at?
6. For my survey ships, do I want them jump capable or not?
7. What is my best survey type, both grav and geo?
8. Can I build specialized ships, fuel harvesters, gate construction ships, troop transports, carriers, asteroid miners, terraformers?
9. What is my favored mix of weaponry, missile heavy, beam heavy?
10. Can I build multi-role ships?
11. What is the largest size I can build in my yards?
12. What is my best defense?
13. Can I build parasites and parasite carriers?

Once you've thought through these areas, you should have an idea of what ships you can build. I'll list my answers to these questions based on the tech I have available to me now.

1. 25cm plasma carronade. Sadly, only recharge 1. 80 second fire rates.
2. 12cm railgun. 40k range, 30 ROF.
3. Missile control is 400k km. Max beam fire control is 80k km. Max beam weapon is 60k km.
4. No.
5. Very low, except active scanners.
6. Preferably. Might not be doable below 6000 ton.
7. Standard Grav/Improved Geo.
8. Gate Construction ships, terraformers.
9. Dedicated missile ships, dedicated escorts, dedicated beam ships.
10. Not viable with current tech.
11. 2x 9000 ton yards with 4 slips, 2x 7000 ton yards with 6 slips, 1x 5000 ton yard with 1 slip, 2x 4000 ton yards with 3 slips.
12. Alpha 150/8 Shields. High Density Duranium armor.
13. Parasites, no. Carriers, yes.

Now that I have a base idea of what my capabilities are, I've decided on the following. Survey ships, geo and grav, jump capable, aiming for 6000 tons (jump drive limit, next larger size is 7500). Missile ship in the 7000 ton range. Beam escort in the 5000 ton range. Cargo/Colonizer in the 9000 ton range (not jump capable). Capital ship, mixed beam/missile in the 9000 ton range. Scout in the 4000 ton

range.

I finalize on the following designs. Please note these designs are from a couple versions of the game earlier. The only fundamental change is how armor works.

Code:

```
Geode class Survey Ship      6000 tons      515 Crew      1508 BP      TCS 120  TH 30
EM 0
1041 km/s      JR 3-50      Armour 1      Shields 0-0      Sensors 8/0/0/0/10
Damage Control 0-0      PPV 0
Replacement Parts 5

J6000(3-50) Jump Drive      Max Ship Size 6000 tons      Distance 50k km      Squadron
Size 3
Nuclear Thermal Engine E8 (5)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 100,000 Litres      Range 89.9 billion km      (1000 days at full power)

Thermal Sensor TH1-8 (1)      Sensitivity 8      Detect Signature 100: 0.8m km
Improved Geological Sensors (5)      10 Survey Points

This design is classed as a non-combatant for maintenance purposes
```

Code:

```
Stellar class Survey Ship      6000 tons      515 Crew      1258 BP      TCS 120  TH
30  EM 0
1041 km/s      JR 3-50      Armour 1      Shields 0-0      Sensors 8/0/0/5/0      Damage
Control 0-0      PPV 0
Replacement Parts 5

J6000(3-50) Jump Drive      Max Ship Size 6000 tons      Distance 50k km      Squadron
Size 3
Nuclear Thermal Engine E8 (5)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 100,000 Litres      Range 89.9 billion km      (1000 days at full power)

Thermal Sensor TH1-8 (1)      Sensitivity 8      Detect Signature 100: 0.8m km
Gravitational Survey Sensors (5)      5 Survey Points

This design is classed as a non-combatant for maintenance purposes
```

Code:

```
Lexington class Missile Frigate      4000 tons      410 Crew      557 BP      TCS 80
TH 30  EM 150
1562 km/s      Armour 1      Shields 5-150      Sensors 8/0/5/0/0      Damage Control
1-1      PPV 16
Magazine 200      Replacement Parts 5

Nuclear Thermal Engine E8 (5)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 50,000 Litres      Range 67.5 billion km      (500 days at full power)
Alpha R150/8 Shields (5)      Total Fuel Cost 40 Litres per day

Missile Launcher 04-040 (4)      Missile Size 4      Rate of Fire 40
Missile Fire Control S01-040 (1)      Range: 400k km
Class 4 (50)      Speed: 7,000 km/s      Endurance: 33 secs      Range: 231k km      Warhead:
2      Size: 4

Thermal Sensor TH1-8 (1)      Sensitivity 8      Detect Signature 100: 0.8m km
```

Active Sensor MR11200-R40 (1)	GPS 1120	Range 11.2m km	Resolution 40
EM Detection Sensor EM1-5 (1)	Sensitivity 5	Detect Strength 100: 0.5m km	

Code:

Spruance class Destroyer Escort	5000 tons	425 Crew	551 BP	TCS 100
TH 30 EM 300				
1250 km/s	Armour 1	Shields 10-150	Sensors 1/0/0/0/0	Damage Control
1-1 PPV 20				
Replacement Parts 5				
Nuclear Thermal Engine E8 (5)	Power 25	Efficiency 0.80	Signature 6	
Armour 0 Exp 5%				
Fuel Capacity 50,000 Litres	Range 54.0 billion km	(500 days at full power)		
Alpha R150/8 Shields (10)	Total Fuel Cost	80 Litres per day		
Quad S&W 100mm Laser Cannon Turret (1x4)	Range 20,000km	TS: 10000 km/s		
Power 12-4 RM 2 ROF 15	3 3 0 0 0 0 0 0 0			
Fire Control S04 10-9600 (1)	Max Range: 20,000 km	TS: 9600 km/s	50 0 0 0	
0 0 0 0 0 0				
Pressurised Water Reactor PB-1 AR-0 P20 (1)	Total Power Output 20	Armour 0		
Exp 5%				
Active Sensor MR56-R0.2 (1)	GPS 5.6	Range 56k km	Resolution 0.2	

Code:

Enterprise class Cruiser	8800 tons	850 Crew	1334 BP	TCS 176 TH
66 EM 300				
1562 km/s	Armour 1	Shields 10-150	Sensors 8/5/5/0/0	Damage Control
1-1 PPV 26				
Flag Bridge Magazine 400	Replacement Parts 10			
Nuclear Thermal Engine E8 (11)	Power 25	Efficiency 0.80	Signature 6	
Armour 0 Exp 5%				
Fuel Capacity 100,000 Litres	Range 61.3 billion km	(454 days at full power)		
Alpha R150/8 Shields (10)	Total Fuel Cost	80 Litres per day		
25cm C1 Plasma Carronade (1)	Range 80,000km	TS: 2400 km/s	Power 16-1	
RM 1 ROF 80	16 8 5 4 3 2 2 0 0			
Twin R3/C1 Meson Cannon Turret (1x2)	Range 30,000km	TS: 10000 km/s		
Power 6-2 RM 3 ROF 15	1 1 1 0 0 0 0 0 0			
Fire Control S04 40-2400 (1)	Max Range: 80,000 km	TS: 2400 km/s	88 75 62	
50 38 25 12 0 0 0				
Pressurised Water Reactor PB-1 AR-0 P20 (1)	Total Power Output 20	Armour 0		
Exp 5%				
Missile Launcher 04-040 (2)	Missile Size 4	Rate of Fire 40		
Missile Fire Control S01-040 (1)	Range: 400k km			
Thermal Sensor TH1-8 (1)	Sensitivity 8	Detect Signature 100: 0.8m km		
Active Sensor MR112000-R80 (1)	GPS 11200	Range 112.0m km	Resolution 80	
Grav Pulse Detection Sensor GPD1-5 (1)	Sensitivity 5	Detect Strength 100:		
0.5m km				
EM Detection Sensor EM1-5 (1)	Sensitivity 5	Detect Strength 100: 0.5m km		

Code:

Fletcher class Freighter	7750 tons	445 Crew	664 BP	TCS 155 TH 60
EM 0				

```

1612 km/s      Armour 1      Shields 0-0      Sensors 1/0/0/0/0      Damage Control 0-
0      PPV 0
Cargo 25000      Cargo Handling Multiplier 50      Replacement Parts 5

Nuclear Thermal Engine E8 (10)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 250,000 Litres      Range 174.1 billion km      (1250 days at full power)

This design is classed as a freighter for maintenance purposes

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Code:

```

Ark class Colony Ship      7750 tons      470 Crew      1114 BP      TCS 155      TH 60
EM 0
1612 km/s      Armour 1      Shields 0-0      Sensors 1/0/0/0/0      Damage Control 0-
0      PPV 0
Colonists 50000      Cargo Handling Multiplier 50      Replacement Parts 5

Nuclear Thermal Engine E8 (10)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 250,000 Litres      Range 174.1 billion km      (1250 days at full power)

This design is classed as a freighter for maintenance purposes

```

Code:

```

Coontz class Scout Frigate      3800 tons      300 Crew      573 BP      TCS 76      TH
42      EM 300
2302 km/s      Armour 1      Shields 10-150      Sensors 8/5/5/0/0      Damage Control
0-0      PPV 0
Replacement Parts 5

Nuclear Thermal Engine E8 (7)      Power 25      Efficiency 0.80      Signature 6
Armour 0      Exp 5%
Fuel Capacity 100,000 Litres      Range 142.1 billion km      (714 days at full power)
Alpha R150/8 Shields (10)      Total Fuel Cost 80 Litres per day

Thermal Sensor TH1-8 (1)      Sensitivity 8      Detect Signature 100: 0.8m km
Active Sensor MR112000-R80 (1)      GPS 11200      Range 112.0m km      Resolution 80
Grav Pulse Detection Sensor GPD1-5 (1)      Sensitivity 5      Detect Strength 100:
0.5m km
EM Detection Sensor EM1-5 (1)      Sensitivity 5      Detect Strength 100: 0.5m km

```

Code:

```

North Carolina class Planetary Defence Centre      34200 tons      3585 Crew      3284
BP      TCS 136.8      TH 0      EM 0
Armour 3      Sensors 8/140      Damage Control 0-0      PPV 320
Troop Capacity 5 Divisions      Magazine 2400

Quad S&W 100mm Laser Cannon Turret (4x4)      Range 60,000km      TS: 10000 km/s
Power 12-4      RM 2      ROF 15      3 3 2 1 1 1 0 0 0 0
PDC Fire Control S16 60-9600 (1)      Max Range: 120,000 km      TS: 9600 km/s      92
83 75 67 58 50 42 33 25 17
Pressurised Water Reactor PB-1 AR-0 P20 (2)      Total Power Output 40      Armour 0
Exp 5%

PDC Missile Launcher 24-120 (10)      Missile Size 24      Rate of Fire 120
PDC Missile Fire Control S04-320 (1)      Range: 3200k km
Class 24 (100)      Speed: 6,000 km/s      Endurance: 62 secs      Range: 372k km
Warhead: 6      Size: 24

```

```

Thermal Sensor TH1-8 (1)      Sensitivity 8      Detect Signature 100: 0.8m km
Active Sensor MR112000-R80 (1)  GPS 11200      Range 112.0m km    Resolution 80
Active Sensor MR56-R0.2 (1)    GPS 5.6        Range 56k km       Resolution 0.2
Grav Pulse Detection Sensor GPD1-5 (1)  Sensitivity 5    Detect Strength 100: 0.5m km
EM Detection Sensor EM1-5 (1)    Sensitivity 5    Detect Strength 100: 0.5m km

This design is classed as a Planetary Defence Centre

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This ends Part 3 of the tutorial. Part 4 will focus on setting up the homeworld.

Tutorial 4 – Homeworld Setup

In this part, we will concentrate on setting up shipyards, assigning commanders, creating our initial Order of Battle (OOB), and setting up the research queue.

First, let's set up our shipyards. Click the "Manage Shipyards" tab. The Confederation has 7 yards. They are summarized below.

1. 2 slipways, 4000 ton capacity
2. 3 slipways, 7000 ton capacity
3. 3 slipways, 7000 ton capacity
4. 2 slipways, 9000 ton capacity
5. 1 slipway, 5000 ton capacity
6. 1 slipway, 4000 ton capacity
7. 2 slipways, 9000 ton capacity

We'll assign classes as follows. To assign a class, select the yard, then select the Task Type droplist. Select Retool. This will show the ship class drop list and activate the Set Start Class button.

1. Since this yard has 2 slipways, we'll assign the Lexington to it.
2. We'll need one of our 7000 ton yards for the survey ships. Since both have 3 slipways, Yard 2 gets it.
3. This yard gets the Spruance.
4. As one of our big capacity yards we'll need these for the civilian freighters/colonizers and the flag ship cruisers. Yard 4 gets the civilian ships.
5. This yard will get the Coontz scout.
6. Yard 6 we will leave unassigned for the moment.
7. Yard 7 gets the Enterprise flagship.

From this screen you can assign tasks to the shipyard (increasing slipways, increasing capacity, retooling to a new class). You can also assign construction tasks here. These tasks will be displayed on the "Shipyard Tasks" tab.

For the moment, we decide we want all the shipyards to have 3 slipways. So we assign the "Add Extra Slipway" task to yards 1, 4, 5, 6, & 7. Yards 2 and 3 are fine for now how they are.

After we've done this, we see that the smaller yards, 1 & 6 will finish in 2252, the medium yard 5 in 2253, and the large yards 4 & 7 in 2255.

We don't add any construction tasks as we will be using the Fast OOB to add our initial ships.

From the main bar, click the SpaceMaster Menu, and select Fast OOB. This small window shows us our Empire, Species, Task Group and Class. We decide we want 10 civilian ships, 5 each Fletcher and Ark to go into the Cargo and Colony groups respectively. So we select the Colony task group from the list,

type 5 in the Number box and click Add. The same procedure is used to add our Fletchers and our combat ships as well as the survey ships.

Our Task Groups end up with the following.

Battle Group

2x Enterprise CA
8x Spruance DE
8x Lexington FFG
4x Coontz SF

Cargo Group

5x Fletcher FT

Colony Group

5x Ark CS

Survey Group

5x Stellar SS
5x Geode SS

Shipyards Group

4x North Carolina PDC

Looking at this, we decide to create a Terra Ground Group for the PDCs and create a Geo Survey Group for the Geodes. We do this by hitting F12, which brings up the Task Group window. Here is where we assign orders and control our ships. We start by clicking the New TG button twice. This creates Task Groups #426 & 427. We select 426 and click the Rename TG button, renaming it Geo Survey. 427 becomes the Ground Command.

Now we need to move ships into these groups. We select the Survey Task Group and click the Organization tab. In the far right droplist, we select the new Geo Survey group. We add ships by selecting them (in this case the Geodes) and clicking the right-facing arrow button. The same procedure is used to move the PDCs to the Ground Command.

Next we'll set up some default orders. Under Conditional A, for all fleets we set the condition to "Current Speed Not Equal to Max" and the order to "Change to Maximum Speed".

The only other fleet we want to set default orders for are the two survey fleets. Select the Geo Group, and set the Primary Default to "Survey Nearest Planet or Moon". For the Grav fleet, set the Primary to "Survey Next Three System Locations". For both fleets, we will issue orders to Transit Jump Point #1. Select Jump Point #1 (Unexplored) from the locations list. Then double-click the Transit order in the Actions list.

The Battle group we need to have rearm. Click Earth in locations, and double-click Load Ordnance from actions.

If you recall we wanted to move some automated mines to Mercury and Venus. Select the Cargo group. Click Earth in Locations and double-click Load Automated Mine in actions. Now click Mercury in Locations and Unload Automated Mines in Actions. Click Earth again and Load Automated Mines. Now click Venus and unload them. With our cargo ship design and the number in the fleet, they will transfer 5 mines per load/unload. We wanted to move 60 to Mercury and 60 to Venus. So we need to do our order another 11 times to move them all. Under the Plotted move list you should see a

"Repeat" button. In the box next to it, change the number to 11 and click Repeat. For clean up purposes, click Earth and select the Refuel and Freighter Maintenance Check orders. This should keep our Cargo fleet busy for a bit.

Now we want to assign commanders to various posts. In the upper left corner, in the Empire section, you will see a check box labeled "Automated Assignments" along with a drop list labeled "Tour Length". I suggest checking the box. This will rotate your commanders into new slots (and assign commanders to new construction) automatically every (by default) 24 months. The only slots not rotated this way are governorships and Task Force commands. TF staff commands are rotated.

To do this, hit the F4 button. This brings up our commanders. We have more slots than commanders, but we'll do the best we can. Click the Admiral rank. Our Admiral is named Sandy Bowsher. Admiral Bowsher is about to be assigned to the Governorship of Earth. Click her and you'll see a list of potential assignments. Click R6 Governor of Earth. And click the Assign button in the lower right corner. Admiral Bowsher is now the Governor of Earth and her bonuses (listed in the upper right corner) apply to Earth.

You should see a list of ship commands and Task Force command. Let's get our survey ships commanded. On the right side, you will see the "Search by Ability or Location". In Ability A, select Survey Bonus. I got lucky with 10 commanders with this bonus. I'll select the first, and assign him to Geode 001. I'll repeat the process with each commander to a new ship.

You can assign your other officers to your ships as you see fit. One word about Task Forces. The officer you place in there sets the maximum rank for his staff officers. If you place a Commodore in the slot, only Captains and Commanders will be eligible. Once you have assigned all the officers you want, close this window. You may find you have more slots than officers to fill them. This happens. Just wait a couple months game time, and you will have more officers.

Now, you will recall we gave our Battle Group an order to reload ordnance. Click the Industrial Production tab. You'll notice in the upper right corner, our existing planetary stock of missiles. Along that top row, you will also see our Ordnance factories, and the production queue. Add 1000 of each missile type by selecting the missile, changing the amount to 1000, and click "Add to Stocks". Now our fleet will have sufficient stocks to draw from.

At the bottom of this screen, you will also see our regular construction queue. One of the first things we will want is a Sector HQ. Scroll through the list for Sector Command. If you cannot find it, you will need to research Improved Command and Control first. This is our case. So we will load up the queue with some infrastructure for when we start off world colonies. We add 10000 infrastructure to the queue.

Click the Research tab. First thing we do is find Improved Command and Control in the General Science category. We select it and click Research. This starts our scientist to work on this project. Now we have some decisions on what to build. We like the idea of a small (2000 ton) parasite survey ship. But to do that we'll need some new technology. Under Ship Components, we select Small Craft crew quarters and click the Queue button to the middle right. What this does is set the labs to researching this project once they've finished their current one without any involvement on our part. We also add in improved capacitor tech and beam fire control.

If you went through Tutorial 1a instead of 1, you may not have Jump Point Theory. Without this, you cannot create jump drives, nor use gravitational survey instruments.

The last thing we want to do is create some ground units to place in our PDCs. Each PDC can garrison 5 battalions. We've got 4 PDCs, so we create 4 HQ units, and 16 Garrison units. This is accomplished on the GU Training tab. Normally, (in our case), we could train 7 units at a time. As part of our "pre-existing" infrastructure, we'll create the units without training them. Select the unit type, and click the "Add Units" button. We are asked how many divisions we wish to create. As we selected HQ, we enter 4. We repeat the process with the Garrison type.

Click on the Ground Unit tab. You'll see the troops we just created. You can assign them to the PDC by selecting the unit, and the location from the droplist at the bottom. We assign our units to all of the PDCs. If you try to exceed the capacity of the PDC, the game will not let you.

At this point, we've started a basic queue for production and research. We've assigned our commanders. We've issued orders to our task groups. All that is left is to start time moving forward. To increment time, there is a number of ways. My preferred setup is having the Economic window and the Event window open. This shows me what is going on, and allows me to issue orders to my planets. Unless something is occurring, I increment in 5 day periods.

This concludes the Tutorial for now.