

UNIVERSAL COMBAT COLLECTORS' EDITION v2.0™

Game Tutorial

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WARNING: This document is **not** a substitute for the game manual. You should have the manual handy at all times while running this tutorial.

Part I (p2-p61) is presented in a Commander career scenario that takes you through various (not all) aspects of the game. This part of the tutorial covers most aspects (including first person, asset switching, weapons use etc) of the game that can be applied to other careers. This is a standard ROAM scenario, so you can save the game (**ALT+G**) at any time and then use resume/restore later to continue where you left off.

Part II (p62-p69) assumes that by learning from part one, that you are familiar with the game and thus takes you through an Instant Action scenario in which you have tactical command of various assets (aircrafts, gunships, personnel etc) and shows you how to make effective use of them during a hostile engagement.

If you find the tutorial too difficult, you are encouraged to restart and use the invincibility cheat by adding the **/i** parameter to the game shortcut. For more info on this, refer to the game FAQ.

Print this tutorial and pause the game using the **PAUSE** key (toggle) while reading. From time to time, you will be instructed as to when to pause, resume and save the game. Pay attention to this or you will become frustrated by the massive flow of information that is sure to follow. Note that the manual pages referenced, as for the US manual only. The pages in your version (e.g. UK release) of the manual may be different.

Have fun – but remember, only wimps use cheats.

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GETTING STARTED

In this tutorial, unless otherwise stated, “click” implies that you left-click using mouse button one. Yeah, it’s the one on the left. Ingenious isn’t it? If you’re not certain which button I’m talking about, stare at the mouse for a bit.

1.0 Installation & Configuration

You have probably already installed the game. If not, uhm, you might want to do that right about now.

Once the game has started, you will be at the main menu. Click on the OPTIONS screen to tweak some of the settings if you so choose – but not before you have read the “**Game Options**” file also located in the Docs folder indicated above. For this tutorial, you are advised to (1) turn the music off (2) use the keyboard or mouse flight control method. For more on using the mouse for flight control, go to p54 of the manual.

Once you are finished selecting your options, click on SAVE, then exit the options screen to the main menu. From the main menu, quit the game entirely back to the desktop and restart. This will allow all set options to be properly configured.

PART I COMMANDER CAREER TUTORIAL

2.0 Career & Asset Selection

Select ROAM from the main menu to enter the Start New Game (SNG) screen. Here you will make several selections, some of which (asset, launch location etc) the tutorial scenario script will overwrite.

1. Click on the first available profile slot, type in your name and press ENTER.
2. In the “asset name” field, type the name of your craft.
3. Now click on the arrow next to the “asset type” field and from the drop down list, click on the Megaron heavy carrier. This will be your Command Craft (CC) for this scenario. To see what it looks like, click on the “asset” icon. **Don’t bother changing the asset type because the tutorial script will overwrite it.**
4. Click on the “gear” icon to see what sort of gear your Alter Ego (AE) currently has. To change this you would click on the “player gear” arrow and select an alternate gear profile. This tutorial relies on the default “profile 1”, **do not** change it. Each time you do something foolish such as land your CC in the middle of a hostile base, then exiting in first person mode to greet the rather hostile natives (all of whom are probably running around with weapons of mass destruction), this is the gear you will be lugging around. For more info on all the items and weapons in a gear profile, refer to the game appendix and manual p65.

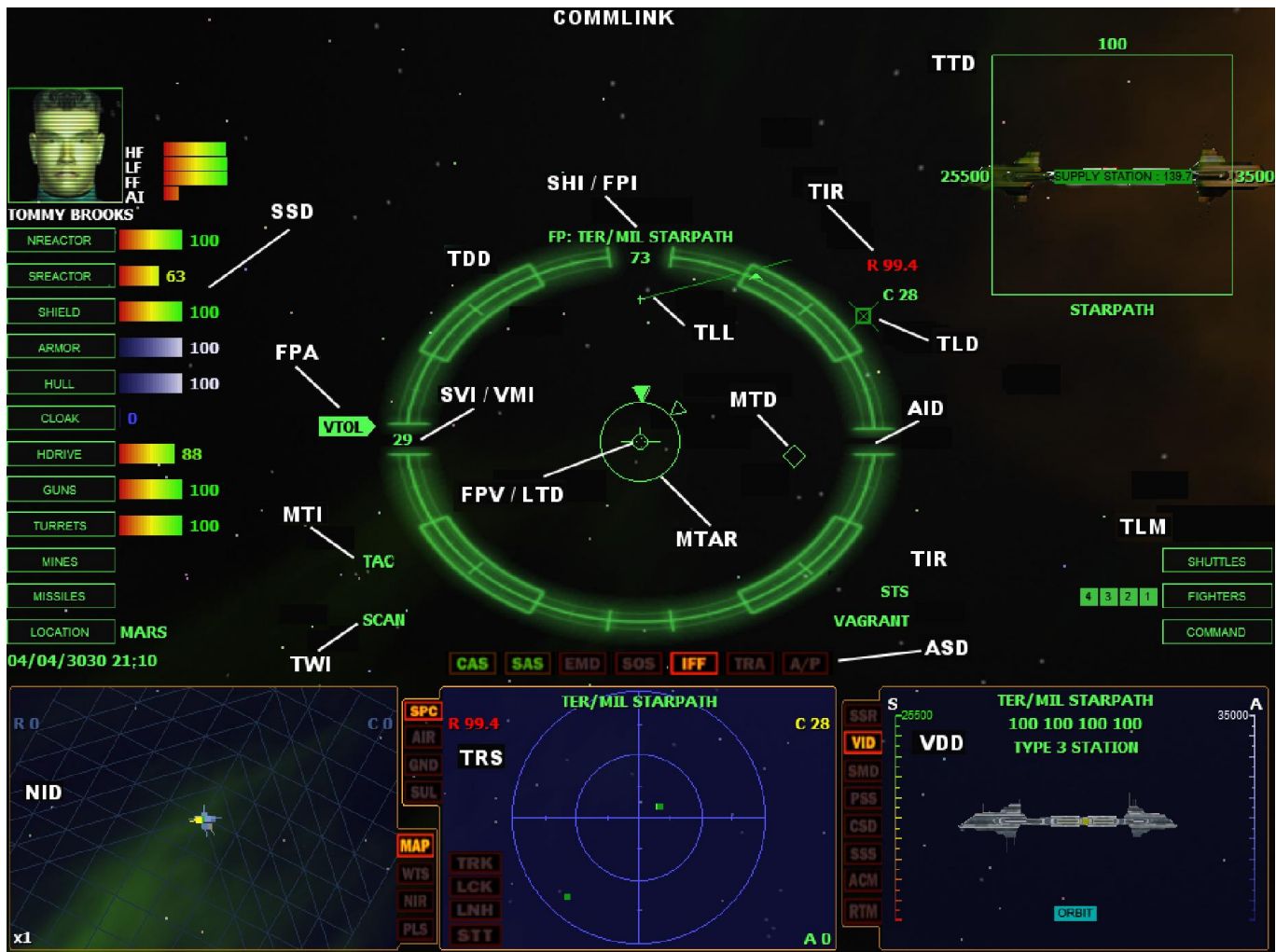
Before you are tempted to change anything else, click on the “accept” icon to exit the profile screen and access the Mission Control, Miscon, screen.

At the Miscon screen, you will see several scenarios specifically designed for the commander career. To select the tutorial scenario, click on the one that has, um, tutorial in the name.

You should now see the brief description of the scenario you are about to play. If when playing the normal game you ever decide that you want to make another selection, that’s what the “reject” icon is for. Guess what that does? Pressing the ESCAPE key will also give you the opportunity to quit the game entirely and back to the main menu. But you’re not going to do any of that – and before you chicken out, just click on the “accept” tab and lets move on.

Now move the mouse to the top right section of the display (yeah, where that large Orange looking arrow is) and a drop down menu will appear. Select the log off option.

While the game is loading, now would be a really good time to close and lock the door, lock the pet out, chain the kids to the sprinkler outside, give your significant other a blank check or better yet, the credit card and car keys, take the phone off the hook, then...oh, sorry. Got carried away there. Is it finished loading yet? No? OK, well, continue reading for a bit and when it’s loaded, come back to graphic below.



3.0 Commander on the bridge

No, don't let the title above fool you. You're as close to being a commander as I am to being politically correct.

After you have launched into the game world, you will be sitting on the bridge of your brand spanking new Megaron carrier, with a view to the outside world via the Integrated Tactical Display, ITD (manual p11).

Accessing any menus will stop AI processing; it will **not** pause the game. Try this by clicking on the "command" icon located to the right side of the display in the TLM cluster (manual p18). The game will seem to have paused – but it hasn't – since you can still hear the engines. Now click anywhere outside those menus and AI processing will resume.

Now press the **PAUSE** key to truly pause the game properly.

Now have a look around and become familiar with the interface. Don't resume the game and don't touch anything! Just keep staring at the screen for a little while longer and also at the ITD graphics above. We don't want you to panic the first time you see me ask you to click on the TLM. In the heat of combat, if you have no idea what the NID is or does, you're going to die a quick and sudden death.

Quick!! See how fast you remember what the TLM is.

All the icons in the SSD (manual p12) and TLM clusters can be selected and set by clicking in them. The most important indicators here are your shield and armor. Those bars represent the current levels. If your shields are breached, the armor will take damage. If the armor is breached, the ship's hull and internal systems will start to take damage – and eventually your ship will be destroyed. So pay very close attention to these indicators. For more on how these two critical components work, turn to manual p53.

Note: If you are using the mouse as the flight control method, you have to toggle it off by using the **ALT** key (toggle) in order to use the interface menus and selectable icons.

3.1 Target Selection & Identification

The Tactical Radar Scanner, TRS (manual p23) is already the selected system (the border around it is a brighter color than the other two displays on either side). When activated, two circles are displayed with one smaller than the other. These circles are used to track all targets in relation to your ship. Any target within the inner circle is in front of your ship's bearing. If the target is in the outer circle, it is behind your ship. The very center of the inner circle represents what is directly in front of your ship. Therefore, if a target is in the inner area you are directly facing it. All targets are color coded, but for now, you should only be concerned with the Green (friendly), Red (hostile) and Blue (neutral) targets.

To select a target, you would put the TRS in command mode by either clicking inside it or using the **T** key. Then use the **.** and **,** keys or move the mouse into the TRS and click on the desired target.

If you are using the mouse for target selection and it is hovering over more than one target, the target info is then stacked. If an item is the current target it is displayed with a flashing **>** symbol, this indicates that if you were to click just then, this would be the selected target. Therefore, if there is more than one target under the mouse and you just keep clicking, you will see the **>** symbol move from target to target in the currently visible group of targets. Each click will select the current target and display it in the Visual Data Display, VDD (manual p26).

You can also select a target from a menu list. To do this, click on one of the TRS mode tab (e.g. SPC) and use the "select target" tab make a selection.

Resume the game by pressing the **PAUSE** key or if using the menus, click on any area within the ITD but outside the currently open menu tabs. Now that you know how to pause and resume the game, going forward, I am not going to describe how to do it. When you read, “pause”, I want you to panic and pause the game right there and then.

Now, move your mouse into the TRS and hover it over a Green dot. You will see the names of one or two ships appear. The brighter Green color of the dot means that the ship is escorting you and can take orders from you. For the purposes of this tutorial, both of these escort crafts, GCV-Avalon and GCV-Windstar, are invincible and therefore cannot be destroyed.

Left click on the cluster of Green dots and see if you can select one of the ships. If you succeeded, either the GCV-Avalon or the GCV-Windstar will appear in the video feed (default) mode of the VDD.

Power users can go through the above steps by pressing **T** and using the **.** and **,** keys to locate the desired target.

Your range (in km) to the selected target is displayed in the top left corner of the TRS.

In the VDD the vertical bars on the left/right of the target’s video image are it’s shield and armor levels. During combat these are the two primary stats to keep an eye on. Once a target’s shields are breached, its armor will start taking damage. Once the armor is fully breached, then the target hull will start taking damage and will eventually be destroyed.

Sometimes you might get lucky and score a direct hit on a target’s nuclear reactor when its shields are down and the armor is fully breached. Because hits to the unprotected hull distribute damage to the ship’s systems, the target will be destroyed (regardless of the state of other systems) if the reactor takes a direct hit and subsequently goes through a meltdown. Yeah, that can happen to you too.

The race and caste of the target, its type (e.g. GCV-Windstar is a Warmonger cruiser) and other stats are visible in the display info. Since these two ships are escorting you -you being the leader (yeah, hilarious isn’t it?) of this battle group - you will see its current orders and its target (if any) at the bottom of the image.

Press **F10** (external camera) to view this target in the external camera view. Then use the arrow keys to pan the view and the **Home, End, Ins, Del** keys to zoom. You can also use the **.** and **,** keys to cycle the targets currently being scanned by the TRS. When you’re done glaring, press **F1** to return to the bridge view.

Now see if you can locate the target identified as “Target Alpha” in the TRS and view it in the VDD. If you did this correctly, you should now see a Tarin Mark 2 transport craft in the display. You can use the external camera to view it – then return to the bridge to continue.

4.0 Inter-System Navigation

Now that you have identified the target, it is time to fly toward it. You can do this either manually or by using the hyperjump engines. Because this target is too far, you are going to have to do a hyperjump – unless you want to leave the game and come back in a few days to see if you made it.

OK. Let me explain. First, take a look at the range to target numbers. At the fastest velocity running on max power (factor 10), the Megaron can achieve up to 475m/s. That's 0.475 km/s. Take that range, this velocity and do the math. No, you don't want to fly that distance manually.

Anyway, this jump takes you through hyperspace in which nothing is real. So, don't be surprised if you see your craft flying through a planet as if it wasn't there. You are actually in a different time continuum....or some sci-fi nonsense like that.

Standby for jump. You can do this [jump] in one of two ways.

The man-child way is to do five clicks starting from the "command" icon and going to /command craft orders/fly-to/other and finally selecting "Target Alpha" from the list of targets.

For this tutorial, make believe that you're an experienced commander (as opposed to a sissy man who needs menus and diagrams) and just press **SHIFT+9** to do the jump.

Your crew will blabber a bunch of stuff to you – most of which - if you are new to the game, amounts to, well, gibberish.

Notice that the Flight Path Indicator, FPI (manual p14) now displays the name of your jump target.

As your ship hurtles through space – and you sit there twiddling your thumbs wondering what the heck you just did (...or worse, you used the menus to jump instead of the method I told you to use and are now wondering why you didn't hear the crew chatter I mentioned above) – notice that your HyperDrive engine counter next to the "hdrive" icon on the bridge, is depleting.

The Flight Path Attitude, FPA (manual p14) has also changed to display "HJ".

If you watch the range to the target rapidly count down, you can basically determine when you are going to emerge from hyperspace. And no, you can't abort the operation. Once you commit to a hyperjump, that's it, you're stuck in hyperspace until the transition completes and you re-emerge in real space.

Eventually you will hear the "Emerging from hyperspace" message from Mother (the ship's computer, silly) indicating that your ship is about to drop out of hyperspace; but

until you see the FPA change from “HJ” back to “VTOL or FTOL”, the transition is not yet complete. If you want to see what is going during this time, when you hear this message, just press **F9** to see the ship emerging. When done, press **F1** to return to the bridge view.

Once the transition is complete, you should be facing the target. Note that when jumping to a target, the range at which you emerge from the jump is dependent upon the size of the jump target. So, for large objects e.g. a planet, you will emerge at a greater distance than if you were jumping to a carrier or a station.

Note that your now depleted HyperDrive engine is recharging now that you have dropped out of hyperspace. Until it recharges to 100%, you cannot do another jump. Whatever you do, don't forget this!!

Your velocity should be slowly dropping to the point where, if you don't touch anything, the FPA will switch to “VTOL” mode.

Note: FTOL = Forward Take Off & Landing, VTOL = Vertical Take Off & Landing

4.1 Basic Flight Dynamics

Assuming that you used the manual jump method, your craft's autopilot should be off. If its not, then the A/P symbol should be flashing in the Alert Status Display, ASD cluster (manual p12). In which case, turn it OFF by either pressing **CTRL+A** or by double clicking on the symbol in the ASD. If you don't turn it off, you won't have manual flight controls of this craft. Remember that.

The target should be directly ahead of you and its Target Tracking Designator, TTD (manual p15) now shows info about it. The target name/integrity level are displayed at the bottom/top and its shield/armor levels are displayed on the left/right. During combat the integrity, shield, and armor levels are updated as the target takes damage or recharges its shields.

Note that if another craft crosses your path (for instance one of your cruisers escorts), you will notice that it too (based on range) has info similar to the TTD. This is the Visual Target Tracking, VTT data (see the manual addendum PDF file) and is displayed when the TRS is in “alert” (default). The number to the right of the craft name is its range (km) from you. If the ITD gets cluttered with these (especially during intense combat) VTTs, put the TRS in command mode and change the radar mode to “active” by pressing **R**. For this tutorial, leave the TRS in “alert” mode.

Now that you have manual flight controls, tap and hold the **W** key until your velocity indicated in the Ship Velocity Indicator, SVI (manual p14) reaches around 100 m/s and then release the key. Your Ship Heading Indicator, SHI (manual p13) shows your heading - but this is more useful when on a planet.

The FPA indicator that previously read “VTOL” (one of three profiles) will clear and the ship should be moving forward at the set velocity. If you are going faster than 125 m/s, make short taps on the **S** key to engage your retro-rockets thereby reducing your thrust velocity.

Because you are moving forward at a set velocity, you will soon be flying past and over the selected TRS target. If it is directly ahead, use the up or down arrow key to pitch up or down in order to avoid a collision.

This is where Situational Awareness (SA) comes in. You have to be able to – at all times - avoid a collision not only with your intended target but also with other objects (e.g. your escorting cruisers in this scenario) that populate the region. Colliding with objects will deplete your shields, then your armor and so on – and the amount of damage is dependent on your velocity at the time of impact. Also, at a high velocity, your ship will spin out of control and in some cases will be thrust large distances from the point of collision.

Make thrust adjustments using both thrust and retro-rocket keys until your velocity is between 100 - 125 m/s. Notice that if you apply retro-rockets for too long, you will start to move backwards; and releasing the key will bring the craft to relatively low speed.

If your velocity drops to a low threshold (this varies with the type of craft), the FPA profile will auto-switch to VTOL. So, if you are in this profile, increasing your forward thrust past the craft’s low velocity threshold will auto-switch it to FTOL mode and vice versa. In VTOL mode, you can use the **F** and **Z** keys to move the craft up and down, instead of forward/backward. For more info on this aspect of flight dynamics, see manual p55.

You may be wondering why the max velocity you have been able to achieve so far, is around 238 km/s. By default, the power level of the engines set in the Logistix computer (manual p37) is set to factor 5. This essentially halves the max velocity of your craft. Which is why, if you press and hold the **W** key, the craft will not reach the max velocity of 475 m/s. If you were to [later] go to the Logistix computer and set the power level to factor 10 (the max), the craft will achieve its max velocity at the expense of additional reactor power allocation and Radine (used for the nuclear reactor). No, you’re not going to do that in this tutorial; so just leave it alone.

As you fly past, watch the target range in the TRS – and once your range is about 25 km or so, yaw slowly to the left or right (preferably) by tapping on and releasing, the **INS/DEL** key once or twice. Then apply retro-rockets until the velocity goes just past zero and release the key. Now press and hold the **numeric 5** key to level out the craft.

Note that if you are using the mouse as the flight controller, the easiest way to level your craft is to let go of the mouse (or toggle it off by tapping the **ALT** key), then press and hold the **numeric 5** key until the craft is level. You will know that the craft is fully leveled out when you don’t see any visual movement in the ITD. At that point, release the key.

If you did the above correctly, new designators should appear within the Tactical Data Display, TDD (manual p13) now that the target is out of the TDD area. These are:

(1) Target Locator Line, TLL (manual p16), which is a straight line pointing to the target location.

(2) Target Lead Designator, TLD (manual p16), which is a small box (possibly with an X in the center) which appears at the projected end of the TLL. The TLD may be off-screen depending on your orientation to the target.

If you don't see the above two symbols, use the flight controls to make minor course corrections until you do.

These two designators (they are color coded based on your race/caste alliance to the current TRS target) are a visual cue as to the location of your target with respect to your craft. They only appear if your current TRS target is not directly ahead of you or within a certain range of the Flight Path Vector, FPV (manual p17).

Now turn toward the direction of the TLL and do some pitch (up/down arrows) and yaw (**INS/DEL**) course corrections. You will eventually be facing the target again and the TLL/TLD combo will be removed once the target is back within the limits of the TDD and relatively directly ahead.

Using manual flight controls, fly around the target for a few minutes until you get the hang of it and then continue. Don't go do anything foolish!! Just fly around the target at a velocity of around 125 - 150 m/s while watching your displays and these designators as you do so.

When you are done, bring the craft to a stop at range of around 15 km from the target, by pressing and holding the **S** key until the FPA changes to VTOL, then release it. Now level out again by pressing and holding the **numeric 5** key until you no longer notice any orientation corrections in the ITD.

Note that if your craft and the target are on a different plane of orientation (the game is fully 3D after all), leveling out will probably cause it to move out of view of the ITD. That's where the TLL/TLD come in as previously described. If that happens, just maneuver the craft – without making any velocity changes – until the target is once again relatively ahead. You only need to make minor pitch and yaw course corrections to achieve this, so don't overdo it!

Now apply forward or retro thrust until your range to the target is between 4 – 6 km. Then apply retro thrust until the SVI reads 0 when you let go of the retro thrust key.

5.0 Weapon Systems

This is a crash course on weapon systems so don't expect to learn everything there is to using your weapon systems. That's what the manual is for.

GUNS

Now, to test the guns. (manual p48)

The Laser Target Designator, LTD (manual p17) is represented by four small dots that are at the center of the ITD. You probably won't see these dots (unless you look carefully) because they tend to be in the center of the FPV. When you fire your guns, the shots will converge at the location of the LTD.

Using the up or down arrow keys, point the LTD into empty space and fire your guns using the **ENTER** key. If you keep your finger on the key, the guns will auto-repeat. As you fire, notice the recharge level gauge next to the "guns" icon in the SSD cluster.

Stop firing and click on the "gun" icon to display the power rating of your guns array. The higher the rating the more powerful the shots but the longer the recharge rate is. Set the rating to 30%. What do you mean, why? Just set it. You can read the manual later to find out why. Now fire again in single and auto-repeat bursts. Notice the difference in response, recharge rate etc.

In a guns engagement, the closer you are to the target, the more effective the laser shots are. This is because they [shots] degrade over time and as such become less effective.

If you are in an engagement against a [fast] moving target, you should use the TLL/TLD to locate the target because at long range, you cannot fire directly at the target as it may have moved by the time your shots get there. So you would instead follow the TLL and when the TLD appears, try to align your LTD in the general location of the TLD and fire into or ahead of the TLD. This is called *leading* the target and you only want to do this if the target is Beyond Visual Range, BVR.

The gun shots are also sized according to the craft, for this reason, you may find that you cannot hit small targets with guns from a large craft. e.g. trying to destroy a fighter with the guns from a cruiser, is a lesson in futility. It can be done, but you'll eventually find out why you shouldn't do it. On the other hand, firing on a larger object from a smaller one, is like shooting at the broadside of a barn. If you miss, you're just plain incompetent.

Now pitch the craft back down until the LTD is over the target and fire a volley or two, then stop firing. You are NOT to destroy this target or you will have to restart the tutorial!! If your shots hit the target, you should see the Bluish glow of the shields as they absorb the hits.

The shield level in the VDD will also go down as the shots eat away at the shield protection. If you don't see this, then you are out of range or the LTD is not over the target.

When the guns are level 30 strength, you probably won't do much damage to the target and as such would need more shots. When you want to soften up targets without destroying them (e.g. if you want to disable a craft so that you can tow it to a station and claim a reward), using lower strength shots is the way to go.

Stop firing and you should notice in the VDD that the target's shields are recharging to their max limits. Fire some more shots to notice how the shields deplete, recharge etc.

In order to destroy a target, you have to completely breach the shields. This is done by firing at the target until the shields reach zero, at which point they are fully breached and will probably not recharge (depending on the target). If you continue firing at the target, you will start eating away at its armor and the Bluish glow of the shields will change to a Reddish version. Once that is depleted, the target will eventually be destroyed.

TURRETS

Your craft has an array of very powerful turrets that can automatically acquire and fire upon hostile targets that are within range. These turrets are controlled by the Passive Target Acquisition, PTA system (manual p49).

Click on the "turrets" icon in the SSD cluster to display the power rating for the turrets. Now set it to 80%. Since there are no hostiles in the region, the turrets aren't going to fire.

MISSILES

The craft's missile launch control system (manual p50) is one of the most advanced systems onboard the carrier; and the effective use of missiles can make all the difference between you winning or losing an engagement.

Arm the missile systems by clicking on the "missiles" icon in the SSD cluster. A bunch of missile boxes will be displayed. Move your mouse over each box and the type/name of the currently loaded missile will be displayed. This gives you an at-a-glance look at all your missiles, in case you are looking for a specific one to arm.

These missiles are loaded into those slots in the loadout section of the Tactical computer (manual p41). The default twenty missiles are loaded by default when you are given a new ship and depending on the AI level of your officer, these slots are automatically re-armed when empty. Because you can use any type of Space To Space, STS missile in your carrier, you can purchase and manually arm these slots to your liking.

You can also normally use the **BACKSPACE** key to select the next missile in the array, if you don't want to make a manual missile selection during the heat of combat.

For now, just click on slot #6 to activate the sts-vagrant missile and then choose the “select” option from the menu to arm it. For more on missile statistics, check the manual appendix files.

The info for the currently armed missile will now appear in the Tactical Information Relay, TIR (manual p17) section of the ITD. Other indicators will also now appear. They are:

(1) Missile Target Acquisition Reticule, MTAR (manual p15) that is located in the center of the TDD.

(2) Missile Tracking Designator, MTD (manual p15) which will start whizzing around the MTAR as it searches for a valid target.

(3) Missile Tracking Indicator, MTI (manual p15) which will be in “scan” mode, indicating that the radar in the nose of the armed missile is actively searching for a target to lock on to.

Pause.

In order to fire a missile at a target, you would turn toward the target, then get close enough for the missile’s radar seeker to acquire it. Once this happens, the MTD will be fixed on the target and you will get a beep, followed by a “Target Acquisition” message from Mother.

Once the missile has locked onto a target, the MTI will change to “lock” mode at which time you can fire the missile. If you fire a missile without a valid lock solution, it will launch in “dumb fire” mode and only fly directly ahead instead of tracking and following the target.

All missiles have a proximity fuse and timer. The proximity causes the missile to detonate when it detects that it is within a certain range of the target. This means that the missile does not have to actually impact the target in order to detonate. If the missile is jammed (or didn’t have a target to begin with) and continues to search for a target, not finding one within its timer parameters will cause it to self-destruct. For e.g. the sts-vagrant, like most missiles, has an elapse timer of 60 seconds. This means that if it does not find the target and detonate within 60 seconds it will self-destruct.

Similarly, a missile’s range also plays a part in its effectiveness. If you launch the missile at its max launch range (e.g. this is 15km for the sts-vagrant) and the target moves out of range, causing the missile to extend and the timer to elapse, the missile will probably self-destruct before it can effectively detonate within the target’s effective proximity range. So, you might want to resist the urge to fire a missile as soon as you get a lock. You should watch the target range and try to reduce that range a bit, before firing. For example, if the missile locks at 15km, try to close to around 10km before firing. However, if the missile is effectively jammed post-launch, all bets are off.

Some missiles have a video camera that shows you what the missile itself sees. These type of missiles have better tracking and are less prone to EMD jamming as they can burn through it by temporarily turning off their radar seeker in order to fool the jammer into thinking that the threat has been neutralized.

Once a missile is fired, the target may engage its jammers. If the target is in the VDD, you should see EMD displayed at the bottom. If you have visual on the target via the ITD, you should also see the TTD flashing, indicating that the target has its jammers on and is effectively attempting to spoof the incoming missile. If the jamming is successful, the missile will lose its tracking and eventually self-destruct once its timer runs out. This is why you want to immediately launch another missile, a few seconds after you notice jamming activity. The strategy behind this is that while the target is jamming and dodging one missile, you've given it another missile to worry about when you launch a second and a possible third missile. Because the jammer itself has a timer and its effectiveness is reduced depending on how long it is active for, there is a good chance that even if the first missile was jammed, the second missile may score a hit due to the ineffectiveness (or possible shutdown) of the jammer.

Your craft also has a missile auto launch system called the Fast Target Acquisition & Lock, FATAL system (manual p50). Yeah, I made that up...In my sleep. This system can track and automatically fire missiles at pre-designated targets. Anyway, we're not going to use this system just yet.

Resume.

If you are facing the target and it is within range of the armed missile, you should have received a lock message and other cues, as indicated above. You will also notice that there is a flashing X in the center of the MTD. This indicates that you are locked onto a non-hostile (the target is neutral to you, hence its Blue colored TTD) target. Destroying such a target during the course of game has certain implications.

Now turn the ship to the left, right, up or down so that the target moves out of the general TDD area. The missile should now lose its lock and the MTD will resume scanning. Move the target back into the TDD area and the missile will re-acquire the lock. You can also cancel the lock by pressing **X**, but this will also clear the target and you will have to re-target it.

Assuming you have a valid lock, fire two missiles at the target by pressing the **SPACEBAR** twice. It will take two missiles to completely breach the target's shields – but they may recharge. If you breached its shields, you should see some electrical discharge around the target - this means that it is in trouble. You will need about five missiles to completely destroy this particular target. Go ahead and destroy it. Once you see its shields glow Red (instead of Blue) on weapons impact, its destruction is near.

Once the target has been destroyed, the MTAR will start flashing and this indicates that it no longer has a valid target. To remove it (in the event that it irritates you), press the **BACKSPACE** a few times until no missile is displayed in the TIR. This will shutdown the missile launch control system and the MTAR will be removed.

Once you have destroyed the target, apply thrust to around 250 m/s and leave the ship moving straight ahead.

Now select the “GCV-Windstar” in the TRS and press **F10**. Now pan the view using the arrow keys until you get a view of it from slightly behind. You can now – for the next few minutes – watch this craft (and the ensuing panorama) as it follows your craft, maneuvers around it etc. Use the **.** and **,** targeting keys (while still in the external camera view) to cycle through other targets. You can also observe the “GCV-Avalon” doing the same thing. If you want to take shots, press **CTRL+G**. The shots are saved in the TGA format in the “shots” folder where the game is installed.

When done, press **F1** to return to the bridge view.

6.0 Support Crafts

Your carrier has an array of fighters, shuttles and vehicles known collectively as support crafts. Since we are about to go in harm’s way, lets check in on those hotshot pilots who are going to be flying those fighters.

Click on the “command” icon, then “systems” and chose the Tactical computer (manual p41). Or just use **ALT+T**.

FIGHTERS

When in the Tactical computer click on the “launch” icon. You are looking at FC1 (Fighter Craft). If you click on the arrow to the right of the craft number, you will be able to cycle through all four fighters currently onboard. A quick look at each one tells you that they’re all fit for combat and each has two pilots. Though it only takes one pilot to fly the craft, while the other handles navigation, situational awareness etc. You should always send out two pilots (where the co-pilot will gain some piloting skills slowly) because one day you will need the co-pilot to act as a pilot. As such, it is a good idea to frequently rotate your pilots so that they are all effective as both pilot and co-pilot.

Currently, there are no Flight Engineers assigned to any of these fighters. What that means is that when they return from a combat sortie, they won’t be prepped for future combat. And since you can’t launch a fighter that is not flight “ready”, you definitely want FEs assigned at all times. Depending on the AI level of your Combat Officer, FEs can be assigned automatically without you having to perform these steps. But since this is a new craft with a relatively Green crew, I’m guessing that the AI of the Combat Officer is not yet at the level required for this.

So, you’re going to have to assign two FEs to each fighter.

Click twice on the arrow to the right of the “Flight Engineers” text to assign two FEs to the fighter. Then cycle to the other three fighters and do the same.

SHUTTLES

As part of this training scenario, you are going to be doing some ops that require shuttles. Shuttles usually need someone to fly them effectively – though they have an autopilot that allows you to send them orders **after** they have already been launched.

Click on the “loadout” icon, then the “sc” icon at the top of the display.

Click on the icon for shuttle #1. Next click on the “team” icon to activate the list of personnel classes on the carrier and which are candidates for the upcoming away mission.

Move your mouse over the “officer” personnel class icon to the top right of the display and from the drop down menu, select the “marines” icon. You should now see the list of marines on board your carrier. Some of them (#1-10) will be prepped and ready for deployment, while the others (#11-20) will be sitting in their quarters filing their nails with their combat knife.

We’re going to pick the first fool we set eyes on. That’s going to be hapless marine #1.

To the right of his “on station” status info, are two arrows. Click on the left arrow once to change his location to SC1. What this means is that we have now assigned him to shuttle #1 and he is going to travel through the ship to get to that shuttle.

We’re done here. Exit the system by moving the mouse over the top right corner of the display and from the drop down menu, log off to return to the bridge.

7.0 Keeping Tabs On Personnel

Back on the bridge, click on the “command” icon and select the Perscan computer (manual p47) from the “systems” tab.

This system gives you a detailed scan of personnel movement on board your ship. To the lower left corner is the section for the marine. Watch as hapless marine #1 moves from his original location, through other ship locations and on to his final destination. Until he reaches that destination and the display shows his location as being “shuttle 1”, he has not arrived there. And unless and until he (or someone) is physically in the shuttle, you can’t launch it.

Yes, you can ignore the “searching” medics. That’s their job to go through the entire ship looking for personnel with injury, fatigue etc and treating them. When you are boarded by intruders your marines (and other personnel) will also start scrambling around the ship.

If you move your mouse over the names in the first column, the image of the person will appear.

Before you exit, take a look to see where everyone is. As you become proficient in the game, all this will make more sense to you. Perscan can be very distracting at times – especially during an intruder engagement – where you would be staring at the display, mesmerized, as high AI level intruders make a blatant mockery of your highly trained – and probably inexperienced - marines.

Click on the “exit” icon to return to the bridge view.

8.0 Your First Saved Game

Now you get to save the game because – assuming you’re not using the invincibility cheat – you’re going to either die or lose some of your support assets.

To do this, go to the “command” icon and from the “systems” tab, select “quit + save with restore”. Or you could just press **ALT+G** instead.

In the save game screen, your name will be on the left side of the display and the available saved game slots will be on the right. Click in the first available slot and type “cmdr tutorial phase 1”. Then click on the “accept” icon to return to the main menu.

Now that you have saved the game, if you don’t play any other Roam or Campaign scenario, selecting “Resume Last” will take you back to your previous scenario and where you left off. But if you do play another scenario, then you have to use the “Saved” option to restore the game you just saved.

Click on “Resume Last” to resume the last game (tutorial) from where you left off.

8.0 Tactical Operations – The Basics

FIGHTERS

Click on the “fighters” icon and you should see that all fighters are manned and launch ready – hence the reason they are a brighter shade of Green. Moving your mouse over those boxes will display the type of craft that is in that slot.

In the TRS, locate and designate the “Target Beta” target so that it is visible in the VDD. This fighter, like the other one, is flying a pattern around a jump point.

Click in fighter #1 slot and then “launch” it with the “intercept [sts]” weapons profile. Do the same with fighter #2. For more info on missile loadout profiles for fighters, refer to the manual appendix.

Once both are launched, move the mouse over the slots for each of the launched fighters and you should see some stats about them.

Now click in fighter #1 slot, then select “orders”, “attack”, “other” and select the “Target Beta” target for this attack command.

Using the same method, give fighter #2 the order to “escort”, “support units” and select “FC-1” from the targets list. This fighter is now assigned as wingman to FC-1.

To watch what happens, click on fighter #1 slot, select “target” and it will be targeted in the TRS and displayed in the VDD. This is a shortcut specific to these crafts so that you can locate them quickly – especially in a high threat environment where the TRS can get cluttered very quickly. Depending on how far your craft is from the target, the fighters may have to jump. In the VDD the time to emerge from the jump is displayed.

Now press **F10** to observe FC-1 in a combat situation. The target will break from its escort profile in order defend itself – and may quite possibly end up destroying your fighter. But by pressing **F10** a few times, you can cycle through various camera types in order to observe the battle from the perspective of FC-1 and its target.

SHUTTLES

Click on the “shuttle” icon in the TLM cluster. The four boxes that are then displayed represent the four shuttles you have on board. Because there is a person now in shuttle #1, it is colored a brighter shade of Green and is thus launch ready.

Mouse over RTM tab of the VDD, press 9 to enable the tracking of pods in the TRS.

In the TRS, locate and designate the “cargo pod” target so that it is visible in the VDD. This pod contains items that you are going to order the shuttle to retrieve. To see what items it contains, move the mouse over the SMD tab of the VDD without clicking it. You will notice that it contains 1000 units of Iridium (cloak fuel), Plutonium (shield fuel) and Radine (reactor fuel).

During the course of the game, as crafts get destroyed, they will leave behind cargo pods containing all sorts of items which you can then retrieve for use or for sale at stations. Some high AI level hostile crafts tend to booby trap cargo pods, so don’t be surprised if one detonates when your shuttle attempts to collect it. Also, some pods may be empty; so if you scan a pod and the SMD does not show any items, then its empty – or booby trapped. The faster a pod is spinning, the lighter (and less stuff it contains) it is.

Click in shuttle #1 slot and then “launch” it. Once launched, click on its slot again and this time give it “orders”, “collect” and select the “cargo pod” from the targets list.

To watch what happens, locate and designate SC-1 in the TRS, then press F10 and watch it until it collects the pod.

Once the pod has been collected, it will be destroyed and the shuttle will halt. Press F1 to return to the bridge and with the shuttle still visible in the VDD, move the mouse over the SMD tab of the VDD and you will see that it now contains the retrieved items.

Click on the shuttle slot again and this time give it the “return to base” order. Once the shuttle returns, it will dock and you will get a message from one of your officers.

Using the “command” icon tab or **ALT+T**, go to the Tactical computer. Now click on “loadout”, then “sc”, select shuttle #1 and finally click on “cargo”.

This display may not look as straightforward as it really is, but the manual is there to explain it to you. What you want to do right now is see what is in the shuttle and how to transfer it into the cargo bays of your command craft.

If you recall, the items that the shuttle collected, were all minerals. So, move your mouse over the “miscellaneous” icon and from the drop down menu, select the “normal minerals” class of items. You will notice that both columns (left is the command craft cargo bay and right is the shuttle cargo bay) have zero for the items listed. So, you’re on the wrong page. To scroll the list, move your mouse to the up/down arrow icons located to the immediate right of the “SC 1” text and click on the down arrow. You should now see the items in the shuttle.

To transfer those items in smaller quantities, you would normally use the arrows next to each item, but in this case, we want to transfer everything. For this, you use the “unload all cargo” icon located at the bottom of the display. Before doing that, notice the shuttle cargo bay capacity indicated by the “SC1 Cargo Bay” text. When you unload the cargo, this level should increase.

All items that can be loaded into your crafts, have a displacement value. This means that sometimes you may not have space to carry some items. Also, if the shuttle doing the collection of cargo pods does not have space for all items in the pod, it will extract what it can, leaving behind the pod with the remaining items. You have to then send it (or another shuttle) out again to extract the remaining items left behind.

When you are done looking and absorbing all this, use the drop down menu at the top right of the display to log off and return to the bridge view.

8.1 Vital System Resources

Move your mouse over the “nreactor” icon in the SSD cluster. Notice that you now have in excess of 1500 units of reactor level. This directly equates to the number of Radine you have in your cargo bay. If you recall, you just retrieved 1000 units from a cargo pod.

Move your mouse over the “shield” and “cloak” icons. The same applies for the Plutonium and Iridium levels used for these two systems.

These three minerals are highly critical resources that you should have in abundance at all times.

The day you run out of either, while deep in hostile territory and with the nearest station too many jumps away and a bunch of hostiles between you and that station, you will know the importance of what I just stated.

9.0 Born To Die

Pause.

Your AE was a trained combat pilot and combatant before he moved up the career tree to becoming a commander. As such, he has a wide variety of skills – all of which you are going to make a mockery of very shortly. And get yourself killed in the process. Unless you are cheating of course.

If you recall from earlier, I mentioned that personnel moving through the craft, have to go through physical locations in order to get to their final destination. The same applies to your AE. In order to send him somewhere, you have to give him orders to do. It's like ordering yourself around in real life – but without the psychological implications.

When your AE leaves the bridge, the crew are in command and one of the officers will engage the craft's auto-pilot. There are good and bad sides to this. The good side is that the ship and crew can operate entirely in your absence. The bad side is that a Green crew can make some really dumb mistakes which can potentially get the craft destroyed. So, you should always have your CC in a relatively safe place and given the halt order before you take off.

Resume.

FLYING A FIGHTER SORTIE

From the “command” menu, give your craft the “halt” order and then turn on the auto-pilot either by using the keyboard command or by selecting it from the ASD cluster.

Go to the Tactical computer and “launch” tab and cycle to select fighter #3. If you look at the status of fighters # 1&2, you will notice that they are deployed.

Click on the arrow next to the pilot name to change the slot to “vacant”. This essentially takes the pilot of “Ready Alert” status.

Click on the “crew” tab, click on the arrow next to the “on-station” assignment of the commander (that would be your AE). From the drop down menu, select “FC3 Pilot” as the new assignment.

Now log off and return to the bridge view.

Back on the bridge, go to the Perscan computer and track your AE's progress through the craft. Once his location is "FC 3", he has arrived at the fighter location and is sitting in the pilot's seat, ready for launch.

Don't confuse this with the "FC 3 Bay" location, they are different! The latter just means that he has arrived in the launch bay and is about to actually climb into the fighter. Once he has climbed into the fighter, return to the bridge view.

Back on the bridge, click on the fighter #3 slot and launch it with "intercept [sts]" profile.

You will now launch and be automatically switched to the cockpit of the fighter craft. All previous targeting information for the CC has now been transferred to the fighter.

The controls, indicators and displays in the fighter are similar to those in the carrier. The reason for this synergy in all the cockpits is so that everything is familiar and similar from craft to craft.

Locate your CC in the TRS and view it in the VDD. Then apply thrust up to 100 – 150 m/s and fly around the vicinity surrounding the CC. If you go between 55 - 85 m/s you will be going slow enough to get a good view of your CC from the exterior. You can also use the external F9 camera view to see your fighter in comparison to the carrier, while using the **PageUp**, **PageDown**, **Home**, **End** zoom keys.

TACTICAL COMMAND – INTRODUCTION TO THE PLV & TOM SYSTEMS

Since you don't have the benefit of some options in the cockpit, there are ways in which you can co-ordinate attacks with your two fighters. Essentially, no matter where your commander AE is, you always have access to all your forces, including any assigned battle groups.

Back in the cockpit, select one of your fighters (assuming that they are still around and not destroyed) in the TRS. When visible in the VDD, press **P** to add it to your priority list of targets. Do the same for the other fighter. You have now added both fighters to your priority list. This priority list is very useful in heated combat situations and you can add any kind of target to it for quick access.

Next select "Target Charlie" in the TRS. When visible in the VDD, press **CTRL+P** to *designate* it as the target of your upcoming order to your fighters.

Press and release the **TAB** key to activate the Priority List Viewer, PLV (see the manual addendum PDF file) and then press it again until the Yellow arrow is pointing to one of the fighters you previously added to your priority list. The fighter should then appear in the VDD. This will be the fighter that gets the upcoming order.

Press the **ESC** key to activate the Tactical Orders Menu, TOM (see the manual addendum PDF file) and you should see a list of orders. Notice how some of the orders

listed have the previously designated target as their reference. If you hadn't previously designated a target (as indicated above), those orders that require a target, would not be active and thus cannot be sent.

Press the **F3** key to send FC-1 the "engage/attack" order on "Target Charlie". Because FC-2 is escorting FC-1, it will continue to provide cover as wingman. We're going to change that next.

Activate the PLV again and cycle to FC-2. When it is displayed in the VDD, notice that it has the "escort" order and FC-1 is its target/leader.

Activate the TOM and press **F1** to send FC-2 the "defend/escort me" order. This will order it to now act as your wingman (escort order) and leave FC-1 on its own. When the order is sent, notice how his target/leader is now FC-3 – that being you.

Activate the Tacops computer (manual p30) and opening the "fighters" tab, launch FC-4. Once launched, give it the orders to "escort" FC-1 (which now no longer has a wingman).

As you can see, though your AE is in the fighter and not aboard the CC, you still have access to your forces. You could also have done this from the fighter cockpit by using the "command" icon.

Return to the cockpit.

You might want to save the game again at this point, but that's up to you.

Now, using all previously learned techniques, locate the "Target Beta" and "Target Charlie" targets and in concert with your other three fighters, destroy both targets. Try not to waste your missiles because if you do and you run out before the fighters are destroyed, you are going to have a pretty hard time taking them out in a guns only engagement; unless you are experienced at it – which we know you're not.

There are some nifty things you can do from here:

(1) If you are tired of having to make thrust corrections in order to close the range and engage the target, when relatively close (around 1 – 5 km), use the **M** key to enable the match target speed system. The Velocity Match Indicator, VMI symbol (manual p14) will appear in the display. Matching the target's speed will keep you relatively closer to it's own speed, thus ensuring a lower range of separation. You can increase/decrease your thrust while the VMI is active and operational but remember that in close range combat, matching the target speed can sometimes lead to collisions with the target.

(2) You can have your ship's autopilot engage the target for you, while you watch. From the "command" menu, give the craft the "attack" order and select the desired target from the list of two targets that are still around. Don't forget that since these two training targets are not hostiles, they will be listed in the "other" targets filter instead of the

“enemy” filter – though during the course of this combat engagement, as their AI adapts, they could turn fully hostile (their TTD will go Red). Now engage the autopilot and sit back. To take over again, disengage the autopilot. You can even watch the whole thing from the F9 and F10 camera view.

When both targets have been destroyed, using either the “command” menu or the TOM, give all your fighters the orders to “return to base”. Note that NPC pilots will not fire on disabled (Grey) targets. So, if either of these two hostile fighters becomes disabled, you will have to destroy them yourself.

After issuing that order its time for you to do the same.

DOCKING WITH THE CC AFTER A SORTIE

You can dock your fighter with the CC at any time. To do this, target the CC in the TRS and then jump to it. When you emerge, get as close as possible (usually around 25 km or less) and press **ALT+D**. Note that if there is no power to Launch Control in Logistix, you will not be able to perform dock or launch operations. In which case you would need to access your CC systems remotely via the Tacops interface, go to Logistix and then turn power back on – then try to dock again.

Once you have successfully docked, your AE will leave the fighter and automatically make his way back to the bridge. Until he actually enters the bridge, you will not be able to regain manual control of the craft by turning the autopilot off. Once he reaches the bridge, you will get a message indicating this.

Back on the bridge, you will notice that the fighter slots for the recently docked fighters are probably Red. This is because they are off-line. Whenever you see this, the first thing you need to do is go to Tactical and from the “launch” tab, find out why they are off-line. It could be either that there are no FEs assigned, no pilot, no weapons, excessive damage etc. In your case, it may be because of the FEs. So go ahead and assign two of them to each fighter. While you are there, put a pilot back in FC-3 since your AE is no longer in it.

When done, log off and return to the bridge view. You will notice that the fighter slots have now turned Yellow, indicating that they are in “readying” state. Once ready, they will change back to Green.

IN SPACE NOONE CAN HEAR YOU GULP

I know you’re just dying to do this, so be quick about it so that we can get back to the more important things.

Anyway, if you ever come across hostile space force marines and you want to engage them in this mode – or you just want to go walk around on top of a ship, station etc - this is how you would do it.

Press **ALT+E** to exit your craft in first person mode. Unlike traveling through the ship location to a shuttle or fighter bay, when you exit the craft in fp mode, picture yourself as diving out the nearest airlock. Incidentally, regardless of where the AE is, he just happens to be – conveniently and perpetually – near an airlock. Yeah, I find that odd too.

Anyway, once you egress the craft, you will find yourself in space wearing a space force marine outfit and totting a Sabre combat rifle. Since you are not in a combat situation, you might want to holster the weapon by pressing the **0** (zero) key. To re-equip, press the **2** key.

Everything in this fp view is described clearly on p65 of the manual and in an upcoming tutorial phase, so I'm not going to repeat any of it at this time.

Using the **W/S/A/D** keys to thrust forward/backward/left/right and **F/Z** to thrust up/down. If you fly over to your craft and then using the **Z** key lower yourself so that your feet touch any part of it (you might want to do this from the F9 view), your magnetic boots will get stuck to the craft, allowing you to walk/run along the craft. To detach, press the **F** key. Using these boots, you can stand on any object that is a “support structure” (e.g. craft, station, building etc). In fact, if you stood on your craft, then gave it an order (via the Tacops computer) that causes it to move (e.g. fly-to), you will be attached to it as it hurtles through space – and you won't fall off.

Take a good look around in space and since you still have two cruisers patrolling around your craft, you should see them zoom past every now and then. If you want to see just how small you are compared to those much larger objects, go to the F9 view and keep your finger on the **PageUp** key until your model almost disappears; then use the arrow keys to pan around the view. Imagine this. The smallest station is about 50x the size of your carrier.

To re-enter your craft, just fly to within 1m of it and press **ALT+D**.

9.0 Intra-System Navigation

Pause.

If you recall the Miscon briefing, the mission takes place in the Nevuela space region and you just happened to have been (forcibly) started in the Varan space region. If you don't remember your briefing orders, then go to the “command” menu and from the “systems” tab, go to the Commlink computer (manual p47) and using the arrows, scroll up to the very first page in the log. When done, log off and return to the bridge view.

You can tell where you are because the name of the region is located to the right of the “location” icon in the lower left section of the ITD. So now you're going to have to figure out how to get there (Nevuela) from here (Varan).

Now, locate your printed keyboard sheet and flip it over to view the map of the galaxy. Look in the Terran quadrant (top left section) for the Alpha Centauri galaxy. Now look for the Varan starsystem. That's where you are. As you can see, Nevuela is just one jump away from Varan, so this should be an easy hop.

Resume.

Click on the "map" tab of the Navigation Interface Display, NID (manual p19). This will put it in command mode (the borders will be brighter) and display the map zoom factors. Click on zoom factor 8. You will notice that the targets in the NID are now spaced farther apart, making it easier to select targets using the mouse.

Using the same method as described for the TRS, select the target labeled "To..Nevuela" and it will appear in the VDD. That is your jump point that links the Varan and Nevuela space regions.

Power users can go through the above steps by pressing **N**, followed by **J** four times; and finally using the **.** and **,** keys to locate the desired jump target.

In the NID, your range to the target is displayed in the top left corner of the display.

In the VDD, the name of the target – which indicates its end point, is displayed at the top of the display.

Now jump to the target using **SHIFT+9**

Note that if you had used the "command" menu to do this jump, then the ship would automatically jump directly through the jump point and onto Nevuela. The only way to prevent this is to disengage the autopilot (using **CTRL+A**) when you drop out of hyperspace. Also, you cannot make a jump unless the jump target is visible in the VDD. This ensures that while flying around jump anomalies, you don't accidentally make an unintended jump into the next region.

If you ever want to jump out of a region really, really quickly, this is probably the best way to go. Especially if you have hostiles inbound and you don't have a prayer of surviving the ensuing skirmish that is to follow once they arrive at your location. In such a situation, the last thing you want is to be messing around in the NID when you can just use this menu to select a target and have the ship's system designate it and make the jump for you automatically and immediately. For more info on this aspect of navigation, see manual p56).

By now you should have emerged from hyperspace and facing the jump point. No, it doesn't look anything like an urn, or an hourglass. A holy communion cup or any such nonsense that you're probably thinking. Besides, you should be thinking about the dangers which lie beyond that odd looking object.

10.0 Strategic Operations - Threat Assessment

Pause.

Since you are not going on a site seeing tour, but rather a multi-role combat engagement in which lives are at stake, you have to prepare accordingly. Sidddown!! Where'd you think you're going? No, leave the camping gear and dental floss alone for now and just pay attention.

These upcoming steps are for the purposes of this tutorial; but most of them will definitely come into play once you set out on your own in an attempt to see just how many AEs you get to kill before you learn how to park this thing. So pay attention – and consider yourself duly warned.

First thing you want to do is make sure that your shields and armor are in top shape. Since you've only just started – and assuming you didn't bump into any of those escorting cruisers, your shield and armor levels should be at 100% peak level. So take a look at the shield and armor levels in the SSD cluster.

Your Megaron carrier also has a cloaking system (manual p51), but we're not going to use it just yet. But what the heck, let's try it out anyway.

Resume.

Press **F9**, then rotate the view to get a good angle, then press **CTRL+C** to activate the cloaking system. Once the ship is completely cloaked, press **CTRL+C** again to deactivate it. From the bridge, you can use this system using the same keys or the menu icons. Press **F1** to return to the bridge view.

As a new commander, it is going to be hard to think in terms of tactics and strategy. Unless and until you learn to think this way, you will soon find out that you are not playing the game as it was intended when I designed it. And you will die. A lot. Unless of course, you're a wimp and using the invincibility cheat.

So, here we are in Varan and if our intel is to be believed, on the other side of that funny looking jump point, Nevuela, lies a bunch of targets we're going to engage. We're not taking any chances, so time to see what they're up to before we dive in, butts first, and get kicked.

Go to the “command” icon menu and select the Tacops computer (manual p30) from the “systems” tab.

TACTICAL COMMAND – INTRODUCTION TO THE TACOPS SYSTEM

Welcome to one of the most powerful – and complex – system on board your craft.

Tacops gives you a complete picture of the region you are in and depending on how you play the game, you will end up spending a lot of time in here. In fact, you can play the entire game from here if you wanted.

The bright Green target in the display, is your CC. If you click around the center of that cluster of targets, you will be able to zoom and see some of the targets in the area. If you happened to click on a target – instead of empty space – you will be zoomed to that target and will be able to watch it as the camera tracks it. You can then use the viewing keys to manipulate the camera. To cancel the target and release it from the camera, select another one or click in empty space.

Try viewing some of the targets in the display, before moving on to the next step. For more viewing commands turn to page 30-31 of the manual. When done, reset the view by pressing the **numeric 5** key.

Now click on the “probes” icon to reveal all your probe slots. Then click on the box for probe #1 and “launch” it.

Once the probe is launched, click on its box again, and this time select “jump at”, then choose “To..Nevuela” from the targets list. This gives the probe orders to jump to that region.

Once the probe has jumped, you will get a message – and the Tacops view will auto switch to the probe’s new region. If you look at the info to the lower right corner of the display, it should show Nevuela as the location, instead of Varan. The probe is now scanning in TacLink mode (manual p22) allowing you remote viewing of a region you are not located in.

Now that you can see all the targets in the region, move your mouse over the cluster of Red targets and click once to zoom to that location. If you did it correctly, you should see two Red targets and a Grey (disabled) one. The disabled target is emitting an SOS signal (Blue emitting circle) indicating that it is in trouble and the other two targets seem to be guarding it. If you don’t see this, either press the **numeric 5** key to reset the view and try again or just use the “zoom” icon and from the “enemy” targets tab, select either “target 02” or “target 03” from the list.

Once you’ve got one of those two targets (preferably “target 02”) selected and zoomed to, the camera will track it. You can then use the arrow keys to pan the view and the **PageUp, PageDown, Ins, Del** keys to zoom. As the camera tracks the target, you should be able to see all three targets in the general vicinity. If you achieve good camera angles, you should get some pretty cool looking movie-like scenes as the target craft flies around the target it is guarding.

We want to put our probe to good use, so before we jump into the hornet’s nest, we’re going to send it on to the Centris system. Click on the probe box again and this time give it the jump at command “To..Centris”.

Before returning to the bridge view, set the Tacops view system to the local region, thus detaching the probe's remote link (which you can re-establish at any time). To do this, click on the probe box again, then select "view local region (Varan)".

To return to the bridge, click on the "menu" icon to the lower left of the display and then the "bridge" tab.

One thing to note about probes is that, while fast, they do take a long time to traverse a region. So, if you are attempting to launch a probe into an adjacent region, you should jump to the jump point through which you wish to launch the probe and then launch it. This way, it will take less time to jump to that region. In the next region, if you want to send the probe to another region but the jump point is too far, try towing (see upcoming tutorial section) the probe and releasing it near the jump point. Then break the tractor beam lock on the probe and give it the jump order to the target region.

Save the game using **ALT+G**. No seriously, save it now, then resume from the main menu.

12.0 Into The Breach – Executing Mission Orders

You are about to suffer a massive sensory overload. Bar none. If you survive this, you'll have a lot to show for it.

Check to make sure that the VDD is displaying the previous "To..Nevuela" jump target, then apply thrust and fly the craft directly into the jump gate.

TACTICAL ENGAGEMENT – MEETING THE ENEMY

As soon as you jump to the Nevuela target region, your warning klaxon will go off, alerting you to hostile crafts in the vicinity. A quick glance in your TRS should confirm this. Your cruiser escorts – which will eventually jump in after you - will also commence their own tactical preparations and automatically engage any target that poses a threat to you.

Pause.

A bunch of things are going to happen all at once, so pay attention and remember, the "pause" button is your friend.

Also note that since you have an active probe in the region, it will be sending you tactical relay information about combat actions in the region. You will see these messages popping up every now and then at the top of the display in the smaller Commlink section.

Resume.

Target the “Target 01” threat in the TRS and jump to it. Notice that since it is now the current target, you can see its SOS emitter in the ITD.

During your jump transition, your carrier escorts may have already engaged the other two targets and destroyed them. You can find out by quickly searching the TRS (using the . and , keys is much faster in combat, than using the mouse). If they are still around when you emerge from the jump, assist in their destruction using guns, missiles, foul language etc. Whatever works. For now, leave the “Target 01” threat alone since it cannot harm your craft.

When the two threats have been eliminated, cycle through your two cruiser escorts and you will notice that their orders may have reverted to “sad”. If this is the case, press escape to activate the TOM system and give them each the “defend/escort me” order.

Now, using low thrust, fly around the “Target 01” threat and take a good look at it if you want. Since its not moving, you should have a good time gawking. When you’re done, destroy it. That’s why you are here remember?

As soon as you destroy that target, given that some time has elapsed and it has sent out an SOS, another hostile craft call sign “Target 04”, will appear in the region. Its orders will be to destroy you and your escorts at all costs. As soon as it appears, your two escorts will engage it when it emerges from hyperspace.

When it is about to drop out of hyperspace, it will launch a pair of fighters. You can probably ignore them since your escort cruisers are quite capable of taking them out. If you want to play it safe and if you have fighters ready for launch, launch them and once launched, give them direct orders to attack these fighters via the “enemy” filter in the targets list.

Quickly locate this “Target 04” threat in the TRS. It should still be in hyperspace, but you might want to keep a close eye on its hyperjump timer in the VDD. When that timer elapses, it will drop into real space. Depending on your current location, it should take about a minute or so for it to drop out and engage you.

TACTICAL COMMAND – INTRODUCTION TO THE FATAL SYSTEM

Click on one of your missile slots and select the “designate fatal target” option, then select “Target 04” from the targets list. Repeat this operation and assign four missiles to this target. Then “select” and arm one missile for direct launch. He’s going to be in for a shock pretty soon.

After you complete assigning this target to your FATAL system, you will notice that the TTD for the target and the missile MTD have turned Yellow. These indicate that this target is “FATAL assigned”. If you don’t see the TTD, make pitch and yaw corrections until it appears in the ITD and directly ahead of you. And as before, once the MTDs have a valid lock, they will cease whizzing about the TDD.

Now wait until “Target 04” emerges from hyperspace and all hell is going to break loose.

By now, you’re probably dead and are just about to use the “Saved” option in the main menu to restore the previously saved game. You did save the game when I told you to, right? Right?

Assuming you did save, just click on your profile name, then click on one of the saved game slots (on the right) and finally click on the “restore” icon. Your game will be restored and you will get another chance to get your butt kicked.

If you get frustrated in the combat engagement, quit the game and add the /i cheat parameter to the “Run Universal Combat” shortcut and restore your saved game.

Assuming you’re still alive and the ship is currently emerging from hyperspace, wait until you get the lock cue and then fire your currently armed missile. The FATAL system would have already started launching a volley of four previously assigned missiles automatically once they lock on the target.

The target is going to be turning away from you in order to avoid a collision and to make another pass. Quickly arm another missile using the **BACKSPACE** key and applying a little thrust – around 150 m/s - go after it and fire the missile, fire your guns etc etc. If you are fast enough, you could also assign a few more FATAL missiles.

Your PTA turrets – assuming you kept them armed when you were told to, earlier in this tutorial – would also be tracking and possibly firing on the target as well. Since it is a carrier, its own PTA system is probably doing the same thing. This is a cap ship and due to your inexperience, you probably will not get a second chance to take it out if you don’t do so before it comes around for a second pass.

TACTICAL ENGAGEMENT – INTRODUCTION TO THE CLOAKING SYSTEM

You might want to try using your cloaking system if taking out this target proves to be too difficult.

First you need to turn off the PTA system and disengage any FATAL targets you may have. If you don’t do this, each time these systems fire, the ship will briefly de-cloak, thereby revealing your position. Once you have checked to ensure that both the PTA and FATAL systems are not online, activate your cloaking system by either using the “cloak” icon or by pressing **CTRL+C**.

As you are cloaking, change your position slightly so that, over time, the tracking data which previous hostile ships had about your position, will degrade. Eventually, they will be unable to locate you. Now cloaked, you can shadow the hostile craft and once you have an optimal advantage, you can let loose a volley of gun shots, missiles etc, then go “dark” (i.e. no more firing ops) and wait for another opportunity.

Try not to keep your cloaking system on for too long or it will run out of Iridium and/or leak radiation throughout the ship. Check your Radiation Level Indicator, RLI (manual p51-52) status by moving your mouse over the “cloak” icon in the SSD cluster. Cloaking can come in very useful, especially when you are about to engage a hostile station. For that, you would want to cloak **before** jumping to the station or you’re history.

While cloaked, you can also order your cruiser escorts – assuming they have not been destroyed – to engage this target.

Once you have dispatched the target, locate your cruiser escorts and ensure that they haven’t done something foolish like, going after that hostile Destiny station in the region. This tutorial script has deliberately disabled its weapon and launch systems for the early parts of this skirmish. Once you destroy “Target 04”, you have fifteen minutes to get the hell out of this region before it comes back online and totally ruins your day. But if you want to stick around to see what happens when it does come online, save, then resume the game and stick around. You’ll see.

Anyway, locate each of your cruisers in the TRS and assuming that they are not currently engaged, give them the “defend/escort me” order (via the TOM) if you see their orders reset to “sad” (as indicated in the VDD).

13.0 Post Combat Ops

POST-COMBAT STATUS CHECK

At the end of every combat engagement, the first thing you normally want to do is check your crew, assess the ship damage, check your weapons supply etc.

To check your crew and your stats, you can use the Crew Status Display, CSD (manual p27) tab of the VDD. For example, if you want to check how many EPs you earned in this engagement, activate the CSD by clicking on the tab and then select yourself, “cmdr” from the list. Your image and stats will be displayed on the top left section of the ITD.

Note that if you are in multiplayer and have the chat window open, you will have to remove it first, since it overlays everything on that side of the ITD. You can also check your crew stats via the Tactical or Commlink computers.

To assess ship damage, use the Logistix computer.

To check your weapons (missiles, mines etc) stockpile, use the Tactical computer.

Note that unless your Combat Officer has a high AI level (see the crew.html file in the manual appendix), your missile bays are not automatically reloaded when empty. As a result, you will have to manual reload your missile bays by moving missiles from the weapon [cargo] bays into the missile bays.

POST-COMBAT STRESS DISORDER

If you went “...OMFG!!!” or “...oh, \$^&**(@!!!” or “...Ho Lee Cow!!!” during the prior engagement, then you are suffering from a condition known as PCSD. Not to be confused with PLSDD. And assuming you are not playing with cheats, you probably heard your crew – especially your Chief Engineer – raving on about damaged systems etc. Time to take a look and see what the furor was about.

Combat damage repairs are performed in the Logistix computer. The systems that make up your ship are very complex and require several components for operation. A good commander always knows where the nearest friendly station is and always has an ample supply of repair materials.

To assess the damage (if any) resulting from the previous engagement and to initiate repairs (assuming your Chief Engineer hasn’t delegated this task to engineers), go to the Logistix computer. Then click on the “crafts”, then “cc” icons. There you will see icons representing all decks on your ship. If you click on each deck, you will see a list of the systems located on that deck. These are color coded to represent their state.

Read manual p37-38 (what? You didn’t think I was going to type all that up again, did you?). When done reading – and absorbing those pages – repair as many damaged systems as you can. If you have taken excessive damage – and you didn’t save prior to the hostile engagement – you may have just cut short this tutorial. The reason being that if you have a critical system that is destroyed and which you cannot repair/replace, you will have to find your way to a station and perform these operations there – using their own engineers. Or you could go to the station, do some critical repairs, buy the needed items (you may have to sell some of your inventory to raise the money), launch and then have your engineers do the repairs. But this tutorial is not about that.

When done, if your ship is too damaged to fly etc, you will have to restore the saved game and see if you can fare better in the engagement. If you can’t, then use the cheat parameter previously mentioned and you won’t take any combat damage – hence nothing to repair or replace. Your call. Lets move on, I’m getting older.

TACTICAL COMMAND – INTRODUCTION TO THE TRACTOR BEAM SYSTEM

Once all threats have been neutralized, you will notice that a friendly craft, ECV-Zaroth has entered the region and is emitting an SOS squawk code which means that it requires urgent assistance.

You will also notice several cargo pods in the region. Launch a shuttle to retrieve them. Once launched, you can then give it the “cargosweep” order and it will collect all detected cargo pods in the region. If you want it to collect a specific pod, then use the “collect” order instead and select the list of pods from the detected targets list.

Note that sometimes shuttles will not collect disabled pods. And they won't collect empty pods. If either of this happens, you will notice the shuttle circling the pod but not collecting it. If this happens, target the pod and use the SMD to scan it. If it doesn't contain any items, then there is nothing for the shuttle to do. Eventually the pod will self-destruct.

If you give the shuttle a "cargosweep" order, it will continue to patrol the region looking for cargo pods. So if you check the TRS and there aren't any, you should recall the shuttle.

While the shuttle is collecting whatever pods it can, it is time to assist this friendly craft. Since he is disabled, he's probably looking for a tow somewhere.

While you can use a shuttle to tow disabled crafts, we're going to do this first manually in order to show you how it's done, then we're going to use the shuttle.

Target the ECV-Zaroth craft in the TRS and jump to its location if it is too far from you. If you are going to jump, this time lets use the menu system to do it, so that you can become familiar with it.

From the "command" menu, go to the "command craft orders" tab and then select the "fly to" order. Since the target is emitting an SOS signal, it will be in the "sos" target filter. So open the "sos" tab and select the target from there. It will then be displayed in the VDD and if your autopilot is on, the ship will jump. If the autopilot is off, engage it and when you emerge from the jump, disengage it.

When you emerge from hyperspace, make sure that the craft is directly ahead, then press the C key - or click on the TRA icon in the ASD cluster - to activate the tractor beam, TB (manual p53). You should now hear a warning from Mother about the shields being down. This is because you cannot use the tractor beam if the shields are active.

After activating the TB, you will see a Cyan colored box appear in the VDD. The goal is to slowly thrust forward at velocity of around 30 – 50 m/s and while moving, maneuver the craft using minor pitch, yaw and velocity corrections while keeping the Cyan colored box centered. In order to capture the object, you must maneuver the ship so that the larger Cyan colored box becomes small enough to be superimposed over the brackets surrounding the target you wish to tow. The range to the target, displayed at the bottom of the display, will start to decrease as you move closer to the target.

The tractor beam extends down and to the lower rear part of the ship. So, in order for the target to be captured quickly, the ship must pass over and above it slightly. You will know this because the range will start to decrease. If the range increases, reduce your thrust and minor pitch and/or yaw course corrections to remedy this. Once you are moving in the right direction, the range will start to decrease again. You must continue to make course corrections so that the target stays within the Cyan box. Once the proper range is reached and the target is at the optimum orientation, the tractor beam will lock

and the target will be captured. Once captured, the TTD for the target will change to Cyan and you will get various lock-on messages.

Note that if you had captured one of your own [disabled or badly damaged] support crafts, you would have been prompted to recover it. Answering **Y** will bring the support craft into the CC - if there is power to Launch Control. You cannot retrieve any other ships in this manner because your CC can only accommodate your own support crafts.

Use the F9 camera to observe the TB in the external camera view. You can also use the F10 camera to observe from the perspective of the now captured target.

Now we are going to use the shuttle to tow the target. If the shuttle has already docked, re-launch it. Then press the C key - or click on the TRA icon in the ASD cluster - to disengage the TB.

From the “shuttle” icon menu, give it the “tow” order, then select the GCV-Zaroth from the “sos” targets list as before. Wait until the shuttle has towed the craft (you should get a message), then proceed to the next sequence of events.

The next step is to find a station to deliver the Zaroth to. This would require you to jump out of the current region, but if you do that and leave the shuttle behind, you will have to go back and give it the order to escort you. So, here is a quick way to kill two birds with one stone and see something cool.

Using your new found mad towing skillz, tow the shuttle (which should now have halted after capturing the Zaroth) using the CC. When prompted about recovering the shuttle, press **N**. If you press **Y**, the shuttle will be brought back into the CC and the Zaroth will be left behind. So don't do it. Anyway, once you have towed the shuttle, go to the F9 camera view to see a nice, neat daisy chain of ships. Yes, you can do this all day long (e.g. have another shuttle tow the CC and so on and so on. No limits). The max velocity of your CC is affected by the ships being towed, so don't expect to go very fast; now that you are towing a shuttle which is towing a capital ship.

TOWING AND DELIVERING SHIPS

If you know where the stations and bases in the game are located (which you probably don't, since you probably have not yet looked at the “Launch Bases” section of the game appendix), you should know that the nearest friendly or neutral station where you can deliver the Zaroth, is the Orion station located in the Centris region. Yeah, take a quick peek at the printed game map. That region just so happens to be one jump away from your current location. How convenient.

Now that you know how to do this – no, I'm not going to repeat it – target the Centris jump gate and initiate the jump to that region. If the CC fails to jump, it is because of the mass propagated along the TB daisy chain. There are two ways around this. You can either (a) disengage the TB on the shuttle, then issue it orders to escort the CC (so that it

follows you when you jump) or (b) give the shuttle orders to tow “nothing (disable)”, which will cause it to drop the TB. Then manually tow the Zaroath using the CC. Give the shuttle orders to “rtb” and when it docks with the CC, jump to the Centris region. After you have jumped into Centris, locate the “Orion” station on radar, then wait for your jump engines to re-charge before jumping to it. When you emerge from the jump, press the **0** key to kill your thrust or you will keep moving ahead and eventually crash into the station!!

Now you have two options for delivering the Zaroath to the station, depending on your previous towing method.

(1) Drop the TB on the CC to release the shuttle. Then give the shuttle the “Deliver To” order and select the Orion station from the “friendly” targets list. The shuttle will deliver the Zaroath to the station and then stop. You can then give it the “rtb” order.

(2) If the CC is towing the Zaroath, target the station, move to within 10 km of it and press **ALT+D** to request docking clearance. The Zaroath will now be delivered once you respond with **Y** to the prompt.

During the normal course of the game, you will encounter ships that are either disabled, in distress etc. If you are playing one of the good guys, your job is to deliver these ships to the nearest station. If you delivered them using the CC, you will get rewards in the form of EPs, Galcreds (the game monetary unit of currency) or both. If you are playing one of the bad guys, you can disable ships, then tow them to stations for a reward – apart from doing it for the purpose of collecting post-destruction cargo pods which some ships leave behind.

If you were observant, when the Zaroath was delivered to the Orion station, a cargo pod was created in the region. If you scanned the shuttle using the VDD/SMD tab, you will see that it contains some items. At point, you have no clue what they are. They are actually reactor, engine, shield and armor upgrades. You can now order the shuttle to collect the items from the pod. Now I’m going to show you how to upgrade your CC to use these items.

SHIP UPGRADES

You can upgrade certain components of your CC, as indicated above. The upgrades for each ship type are listed in the “Upgrades” section of the appendix. You can obtain upgrades by buying them at a station or you can get lucky and find a cargo pod (dropped by a destroyed ship) containing them.

After the shuttle has collected the pod, give it the “return to base” order and wait for it to dock, then go to the “cargo” tab of the shuttle loadout screen and transfer these items (and any other items e.g. minerals you may not have already transferred) located in the “spare parts” section, to the cargo bay of the CC. You should already know how to do this.

After unloading all the items from the shuttle, go to the Logistix computer and access deck 3 of the craft via the “crafts” tab. From this deck tab, you can upgrade the nuclear reactor and the engine. We are going to do the engine first.

To do this, click on the engine from the list of systems to the right of the display, then move your mouse over the “upgrade” button under the list of components to the left. You will notice that it will be highlighted because the system has detected the availability of upgrades in your cargo bays. Click on it.

Once you have clicked to upgrade, the list of upgrades for that engine, will be listed and the NuMega engine upgrade is highlighted. Click on the highlighted upgrade (there are times when you will have several) you want to upgrade to and assign four Systems Engineers to perform the upgrade by clicking on the arrow next to the “assigned” column. Notice that as you assign each engineer, the estimated completion time to perform the upgrade, is reduced.

The Megaron carrier only has ten Systems Engineers and you now have four systems to upgrade. Now you only have six SEs left to perform the other system upgrades. Assign two to perform the nuclear reactor upgrade, then go to deck 4 and assign two each to perform the hull/armor and shield upgrades.

After you are done assigning all ten SEs, press the large arrow to the left of the deck 1 tab to return to the list of crafts. To the right of the display, you will now see the list of systems being upgraded, when they will be completed etc.

Here is the part where you raise your eyebrows, stare at the clock and search the keyboard sheet frantically for the non-existent time acceleration key. The game runs in real time and that game time you see displayed, is exactly how long it is going to take for those upgrades to be performed. So, if the current time at the bottom of that engineering assignments lists you are staring at reads 23:45 and the longest repair time reads 00:18, then do the math. That’s how long you’re going to be sitting around waiting. If you’ve ever watched, paint dry or a boat sail across the ocean or a bi-plane coast across the sky or that girl you always wanted waltzing (which, when you’re a geek without a prayer, tends to happen in slo-mo) across your field of view or a bird sprouting a hernia trying to grab that worm you super glued to the sidewalk or your history class lecturer drone on and on and on and on about a civilization you could care less about – that’s what it can begin to feel like. You might as well cut your losses now and go listen to the soundtrack for the Sound Of Music while you wait.

Luckily – for you – there are other things you can be doing in the meantime. So, log off from Logistix and go to Tactical.

In Tactical, go to the “crew” (manual p41) tab and send two “on station” marines and two medics to shuttle 1 (SC 1). Next, send two “on station” marines as well as the Flight and Combat officers to the transporter. You can mix and match the marines you are sending.

For example, send one Mobile Infantry Marine, MIM and one Elite Force Marine, EFM, to the shuttle and one Recon Force Marine, RFM, and one Assault Force Marine, AFM, to the transporter.

Now logoff and return to the bridge.

When you return to the bridge, you may get a lot of queued up damaged/repair messages from the Chief Engineer. These are normal. What happens is that when you upgrade a system, the existing system has to be downgraded in order for the new one to be installed. During this time, the existing system will have minimal functionality and will return to full functionality after the upgrade is complete. So don't panic. At least not yet.

14.0 Planetside Ops Phase I

Go to Perscan and make sure those folks you just sent scrambling across decks, have made it to the "shuttle 1" and "transporter room" locations. Once you have verified this, exit Perscan and activate the Tacops computer.

PLANETARY SCANS FROM SPACE

There are two ways to observe a planet from space. The easy way, (select it using menus) and the no-so-easy way (click it from the Tacops map). For the purposes of this tutorial, we are going to do it the easy way.

Click on the "zoom" icon and navigate to "planet" then select Centris (it's the only planet in the region). The planet should be zoomed and centered in the Tacops display. Move your mouse to the center of it where you see that White circle and click once, then observe" the planet.

Once you have observed the planet, you will see a top-down view of it as seen from space. On the lower right corner of the Tacops display, you will now see the local time for the planet displayed in brackets next to the game time (aboard your ship for instance). If you noticed the numbers running along the width of the map, these are the time zones in standard 24hr GMT format. Most planets have a different day length, weather, climate etc etc. In other words, you will sometimes notice that if you want to assault a planetary base, you should come back when it is night time on the planet – if you'd like that.

The Green squares on the planet map mark the regions on the planet. The race/caste abbreviation for the ownership of the region, is listed on the lower left section of the region rectangle. e.g. Emp/Mil is the abbreviation for Empirian/Military. You can toggle the race/caste info by pressing the **SPACEBAR**.

Within those regions you will see colored boxes (manual p31-32) representing the mission zones (mzones) within the regions. These mzones are "areas of interest" where you can actually find stuff like cities, bases and whatnot. Outside of these areas, is just the wide open yonder.

Now we are going to zoom to an mzone. Again, we can do this the easy way (select it using menus) or the no-so-easy way (click it from the Tacops map). Lets keep it simple. For this tutorial, we're going to be beaming our folks down to the mzone named "centris00[sbase]" located in the lower left section of the larger Emp/Mil region to the left of the map. So go to the "zoom" icon again and this time select "mission zone", then "emp/mil" and finally "centris00[sbase]". Once you have select this, the local map of that mzone will be displayed and you can now select the scene contained within that mzone. Since there is only one scene, "base_centris01" (you should also see it flashing on the map), in the mzone, click on it. Wait for it to load all the objects within that scene and build a selection menu of all objects.

Once loaded, you will be presented with a scrollable list (you would click on the scroll bar to the right and drag up/down) of objects in the scene. If you were interested in zooming to a particularly object, you would use this list. But you're not. So, move your mouse outside the menu area and click anywhere on the map instead.

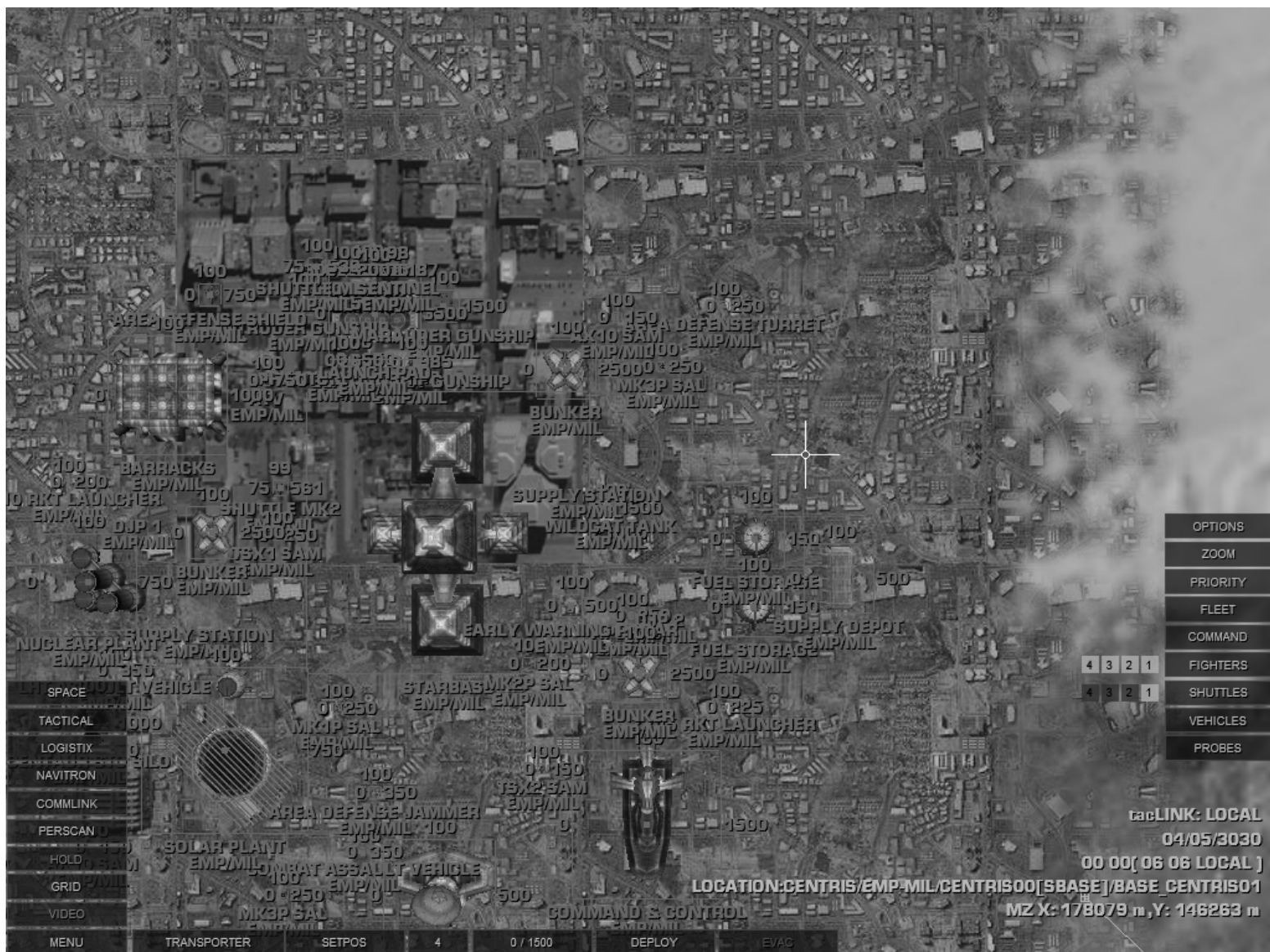
This map is the scene, centered in the view. From this map view, you can select and zoom to any object by clicking on it – or use the "zoom" icon options as before. You can also manipulate the map (manual p31) in a variety of ways. For now, just leave the map alone because for what comes next, you need this top down view and at that zoom level.

AWAY TEAM DEPLOYMENT – USING TRANSPORTERS

If not open, click on the "menu" icon on the lower left of the display, then click on "transporter" icon. The second box to the right of the icon should have the number four in it. That's the number of people currently in the transporter and awaiting deployment. This is a base owned by a race that is neutral (hence the Blue color of the TTDs) to the Terrans, so there is no danger to the away team.

Click on the "setpos" icon and the Transporter Deployment Designator, TDD (manual p34) will appear under the mouse cursor. Find a place to deploy your personnel by moving the TDD to a section of the map where there are no objects. To the right side of the map, you will see some fuel storage tanks next to a supply depot. I would recommend the clearing north of those tanks as a suitable deployment location. Move the mouse over this area and then click once to anchor the TDD to that location. If you change your mind, you can select the "setpos" icon again to pick up the TDD and put it elsewhere.

Your initial TDD position should look something like this image.



Now that you have picked a suitable spot, this being your first time, you might want to see this up close and personal. This is going to be tricky, so pay attention.

Move the mouse cursor over the TDD then press the **END** key to zoom in. As you zoom in, the TDD will shift to the left or right due to your zooming the view. To re-center the TDD in your view, click on an empty section of the map and drag it left, right up or down. Then move the mouse back over the TDD and continue to zoom – making similar view panning adjustments as necessary. An optimal viewing distance is one in which the TDD is centered in the display and you can see a fair amount of its center section. Personnel will be beamed down within that circle.

Click on the “deploy” icon and you should see the special effects as the team is transported to the planet. You can use the **HOME/END** keys to zoom the display; as well as click and pan the map to get a better view. Use the up/down/left/right arrow keys to rotate the display. If some are deployed outside of your field of view, zoom the display out to see all of them.

The video camera will also appear and zoom to the first person to be transported down to the planet. Click on the “video” icon to the lower left of the Tacops display to see the person’s inventory. If you click on another person on the map, their image will again appear in the video feed and you can check their inventory in the same manner. Click on the “video” icon again to remove the video feed. This is how you would check on your deployed personnel to ensure that they have not run out of ammo, supplies etc during a long away mission.

Note that when deploying to a hostile base, you most certainly don’t want to deploy your team next to units that can quickly dispatch marines to intercept them. Such units include starbases, command & control centers, bunkers and barracks. Beam them near the edges of the base and then give them orders. By the time the marines are dispatched, your guys would have been able to get a feel for their surroundings and won’t be surprised by the interception that is sure to come. If you have one of them selected, the camera will track him as he moves to his objectives in the same way it tracks objects in the space mode of the Tacops display.

AWAY TEAM DEPLOYMENT – ISSUING ORDERS

Now that you have deployed the team, you can give them orders as you see fit. For example, if this were a hostile base, you would either give them search & destroy orders or pick a target and give the attack order.

Zoom in to where your personnel were beamed down and click on one of them. You will see a White circle appear in their TTD indicating that this is the currently selected person. The now familiar orders menu will also appear. For now click inside the “evacuate” orders box. From the map, notice that this person’s TTD has now been tagged for evacuation. Repeat this operation for the other personnel. You may have to zoom the map

out, pan/rotate it etc in order to find and select them. Or you could just use the zoom menu and select each person from the “support units” targets list.

Something you can try later, is to send your AE to the transporter, then using the same method as above, beam him down to the planet near your away team. Once you are beamed down, you will see have access to the Tacops computer (**ALT+S**) which you can then use to select your AE for evac and then beam yourself back to the ship. Don’t try this now or you are going to lose the focus of this tutorial.

When ready, check and double check to ensure that you have tagged all team members for evacuation and then click on the “evac” icon. If you have a good view of all four members, you should again see the special effects as they de-materialize. If your AE was on the planet alongside your team and looking at them, you will also see the effects as you are all transported back to the ship.

AWAY TEAM DEPLOYMENT – USING SHUTTLES

Deploying personnel via shuttle is a bit more involved and requires a bit more planning. Using shuttles has the strategic advantage of allowing you to do multiple ops. For example, you could deploy troops, then have the shuttle waiting behind a hill to quickly come back and get them after the op ends.

Click on the **numeric 5** key. This will reset the view to the mzone map level. Move your mouse over the flashing mzone and click on it to zoom to the scene level map. Using the zoom keys, zoom the map out a bit so that you can see can clearly see the extents of the base.

Click on the Tacops “menu” icon, then on the “waypoint” icon. Then click on the “cc” icon to display the crafts icon strip and from there, select the SC-1 craft. Again, you will notice that the box next to the craft box has the number four in it. This is the number of personnel currently in the shuttle.

Click on the “add” icon, then the “setpos” icon. Notice that the box to the lower right now says, “proceed to next”. This is the default order for the waypoint and is displayed in the “orders box”.

With the waypoint marker (manual p32) anchored to the mouse, move the mouse to the top right (north east) section of the base and click on an empty area. Note that you can use the zoom keys to get a better view of the map.

After placing the first waypoint, click on the “add” icon again and this time, click in the orders box and from the list, select the “deploy team” order. Now click on the “setpos” icon and place this second waypoint on the top left (north west) corner of the base.

Notice that a line connecting the two waypoints has a number in the middle. That number is the distance (in km) between the two waypoints. Because the shuttle is very fast, you

need to have a distance in excess of 3km (preferably 5 - 10km) between the first waypoint and the actual deployment waypoint. This gives the craft time to obtain an optimal landing approach. If this range is too short, you can fix this as follows.

Zoom the map out some more. Then click on the box (the waypoint number box) to the left of the “add” icon and select waypoint #1 from the list. Now click on “setpos” again to pick-up that waypoint. Having picked it up, move it around until the distance between the two waypoints has increased. You may have to move waypoint #1 further out into the terrain, since the location of that waypoint is not as important and that of waypoint #2.

Now place a third waypoint by first clicking in the waypoint number box and selecting waypoint #2, then click on the “add” button to create waypoint #3. Once created, select the “land” order for this waypoint and place it at any corner of the base at a distance of.

Note that if you ever see your shuttle circling a waypoint in an attempt to land, the problem is that it reached the waypoint before it could plot an accurate approach pattern. In which case, all you would need to do is pick up the target waypoint and relocate it further away. The shuttle will proceed to the new location and hopefully land more quickly.

Done! When launched. the shuttle will enter the planet at waypoint #1, start plotting a route to waypoint #2 with the appropriate approach pattern flight dynamics at which point it will land, deploy the team, take-off and land at waypoint #3 awaiting further orders.

Note that without a third waypoint, once the shuttle has deployed the team at waypoint #2, it will immediately initiate a “return to base” order and attempt to return to and dock with the CC. In this instance, we don’t want that, so we give it a third waypoint to have it land and hold its position until further orders are sent to it. For example, to later recall it, you would select all the waypoints and delete each one. Then select the shuttle from the map and give it the “return to base” orders via the shuttle orders menu.

FIGHTER ESCORT DEPLOYMENT

Using the same method as above, create three waypoints for fighter #1 (FC-1) with orders “proceed to next” for wp1 and wp2, and “repeat actions” for wp3. Change the craft’s weapons profile box (manual p33) from “intercept” to “cap [ata/ats]”. What this means is that prior to launch, the fighter will be armed with air-to-air and air-to-surface missiles, suitable for the Combat Air Patrol operation. This fighter will fly to the first waypoint, then the second and when it hits the third, will repeat the pattern by flying back to the first waypoint. It will repeat this pattern until recalled, it runs out of power, is shot down (by hostile forces) etc.

VEHICLE DEPLOYMENT

You can use waypoints in the above manner to deploy vehicles and mining drones to the planet. I will leave this as something for you to learn how to do on your own.

If you learn how to plan and use Tacops properly, you will be able to stage simultaneous space, air and ground attacks on hostile bases using vehicles, shuttles, fighters and marines. For example, you could have two shuttles deploy marine teams at different locations on the base. Then have them deploy a vehicle (e.g. a tank) that you could later use. And finally create fighter waypoints with missions such as CAP or SEAD to provide air cover as your shuttles come in etc. That done you can beam yourself down there and fight alongside your troops.

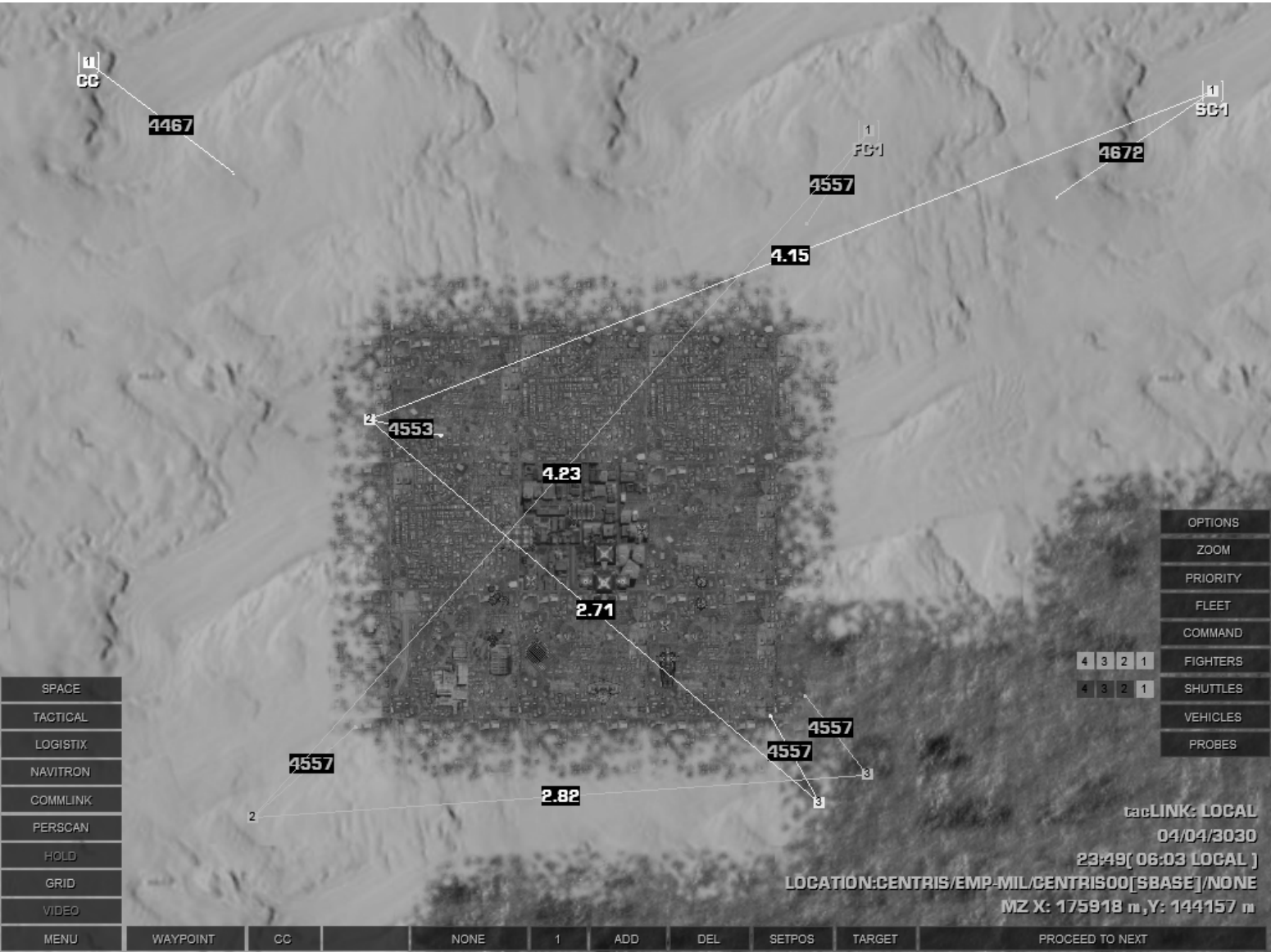
The possibilities are endless. Use your imagination and you'd be surprised at just how powerful the tools at your disposal are.

PREPARING FOR PLANETFALL

Before you enter any planet, you are advised (but not required) to create a waypoint for the CC. This is because the CC on planetfall will enter the planet at the location of that first waypoint. Without a waypoint, the craft could enter the planet over water, very low altitude (which could result in a crash) and other possible unpleasant things can happen.

Click on the craft box (should currently show SC-1) and select the CC. Now add a waypoint (no need to change the orders as it doesn't matter) and place it on the map and anywhere outside the base.

Your final setup should look something like this image. In the image, you will see the waypoints plotted for the CC, SC-1 and FC-1. Note the waypoint ranges etc. Also notice in the image that the TTDs for the objects are not visible. This is because I used the **SPACEBAR** to toggle the viewing filter (manual p31) off. This reduces the clutter in the display.



EXECUTING THE OP

Using the Tacops menu, first launch the shuttle. Then launch FC-1. Both of these crafts will immediately read their waypoint orders and fly to the planet to execute them.

After the crafts have launched, move the mouse over the orders box for SC-1 and you will see some stats. Pay attention to its orders and range to the planet Centris. Once the range reaches 0, it would have entered the planet and its orders will change to “land”.

Immediately (or you will miss this fun part!), go to the “zoom” icon and in the “support units” filter, select SC-1 so that the camera starts to track it. If you did everything correctly – and from a good angle (using the Tacops viewing/zooming/panning keys) - you should see the shuttle land, deploy the team (you will see the team members run out of the shuttle if you are zoomed in slightly when it lands at wp1), take-off, then move on to the last waypoint and land. Keep tracking it – while using the Tacops keys to adjust the camera view – until it lands at wp3.

FC-1 should also be on the planet by now and is flying its waypoint pattern. You can use the “zoom” menu to also track it as you did with the shuttle.

Now, using the “zoom” menu, locate the first marine in the “support units” target filter. When the unit appears in your view, move the mouse over its center point and when you see some info appear, click to select him. Then from the orders menu, give him the “go to” order and selecting SC-1 from the “support units” target filter. Repeat this op for the rest of team. If you find it difficult to select them while they are moving, use the “hold” icon on the Tacops menu tab to pause the action, then click on the person, when done giving the order, press the “hold” button again to resume processing.

After giving all marines the “go to” order, zoom to SC-1 and from its camera view point, wait for all the marines to arrive. When they get there, they will halt and await further orders.

Lets assume this was a hostile hop and you’ve now put FC-1 in harm’s way. The wise thing to do is to send him some support. So, you would launch the Alert Five crafts, FC-2, 3, 4. When launched, you would then give FC-2 the order to “escort” FC-1. Then give FC-3 the order to escort FC-2 and finally give FC-4 the order to escort FC-3. You would have sent down four fighters, each with a wingman. You can always dynamically change their orders later, as you see fit. This is just one of many examples.

Congratulations, you have just completed your first tactical ops preparation.

Exit Tacops by clicking on the “space” icon, then the “bridge” icon.

Save the game. Then resume.

PLANETFALL

Back on the bridge, select the Centris (Green dot) planet in the NID and notice from the range that it is approximately 8,000 km away. This is because when you jumped to the Orion station (in orbit around the planet), this brought you closer to the planet.

Turn the ship so that the planet is ahead and then engage the HyperDrive engines using **SHIFT+9**. When prompted to establish planetfall, press **Y**. Around 150 km from the planet you will reach “zero barrier” at which point the ship will be pulled by the planet’s gravity and thrust into the planet’s atmosphere.

On planetfall, you will get an external camera view of the transition. Notice that your ship is pointing downwards. Once you are switched to the forward view, use your controller (or down arrow) and pull up the nose of the craft until you can see the horizon. Then press and hold the **numeric 5** key until the craft levels out. You should be at an altitude of around 6,000 ft AGL (Above Ground Level) and just above the waypoint marker.

Now press the **5** key to set your engines to that speed factor and tap the **W** key until your velocity is about 100 m/s. Then pitch the craft down (controller or down arrow) and fly to an altitude of around 1,000 ft AGL, then level out again.

Notice the “WP 1” text and a vertical bar appeared on the top right corner of the TDD when you returned from Tacops. That bar is the Waypoint Heading Indicator, WHI (manual p14). If you yaw (controller or **INS/DEL** keys) the craft to the left or right, you will notice that as you change your heading with this yaw movement, the WHI will start to move toward the Ship Heading Indicator, SHI (manual p13). When the WHI is directly below the SHI, you are flying toward the currently selected waypoint. You can also move your mouse over the WTS tab (manual p20) of the NID to see the programmed waypoint. If you had several waypoints and you wanted to change and fly to a specific one, this is where you would do it.

Change the TRS target filter to Support Unit Locator, SUL (manual p23) mode by clicking in that tab along the left side of the TRS. This filter makes it easy for you to locate only your own craft. Now click on the shuttle in the TRS to target it. You should now have a bearing to the shuttle.

Notice that when you switched to SUL mode, the color-coding for the TRS targets changed. This color-coding allows you to quickly locate your troops. The Tacops also uses these radar mode filters. So if you were to go to Tacops, you would see this color-coding used on the TTDs for your units.

Maintaining current velocity and altitude fly over the shuttle, then buzz around the base by circling it once.

Remember, the F9 and F10 external camera views work on the planet as well – if you are in those views and not paying attention to your altitude, you will crash the craft.

When you're done sightseeing it's time to land the craft. Locate a suitable spot to land. Preferably somewhere outside the base in the open terrain, but in the general vicinity of your landed shuttle.

Once you have found a spot, hit the **0** key to kill your thrust, then either wait for the craft to slow down and go into VTOL mode, or assist this operation with some taps of the **S** key.

When the craft goes into VTOL mode, press and hold the **Z** key until the FPA reads TAXI. At that point, the craft has landed on the terrain. Now go to the “command” icon and give the craft the “halt” order, then turn on the autopilot. **WARNING:** If you don't do this, when you exit the craft, it will take off, since it has a programmed waypoint. At other times it will take off if there are hostiles around etc.

Activate Tacops and you will notice that it has zoomed to your current mzone location. You can still go all the way to the top level planetary map if you wanted to, but this default view – while on the planet – enables you to quickly see what is going on in your immediate vicinity and you should see your units within the mzone as you did when you were back in space.

When done looking around, return to the bridge view.

Before you exit the craft, check your location, the planet's weather forecast etc by moving the mouse over the NIR tab. Because the game features dynamic time of day lighting effects, including a variety of weather types, you might want to make it a habit of checking the weather of the planet you are on. The NIR gives you the current weather type as well as a forecast. e.g. if you see “overcast 99m” as the forecast, that means the weather will change to this in ninety-nine minutes.

Press **ALT+E** to exit your craft.

PLANETARY FIRST PERSON MODE

After you toss yourself out the nearest airlock, you will be in first person mode (manual p65) on the planet and your view should look something like this image. If you are not looking directly ahead, use the mouse look to orient your view. In my case, I had parked my CC close to the shuttle's location and some of the marines had already made it there as previously ordered, using the "go to" order.



The info bar shows your rank, name and number of Experience Points. It also shows the current date time, with the planet's local time in brackets. Your current stance (which will be displayed in inverse video if you have run mode active) and planet location are displayed off to the right side of the bar.

The graduated bars to the right side of the display monitor your oxygen timer (in min/sec) as well as your hunger, life and fatigue factors. See manual p72-73 for a description of these and how they affect your well being.

The radar map at the top right of the display (which will sometimes be faint against the planet's backdrop) is similar to the TRS but has a range of 5km.

Any target within the inner section is in front of your current bearing. If the target is farther out, it is behind you. The very center of the display represents what is directly in front of you. Therefore, if a target is in the inner area you are directly facing it.

The map has four filter modes cycled using **T** when the D.I.E is off. The current filter is displayed to the left of the heading as follows :

- P - Personnel units
- V - Vehicles & naval units
- C - Craft units
- A - All targets

The current target (selected in the D.I.E) is indicated by a flashing box and is always shown, irrespective of the filter being used.

The map can be zoomed by up to x4 using **[** and **]** when the D.I.E is off. The current zoom mode is displayed to the right of the heading indicator as a bar graph. The default zoom factor is 5km. Each zoom step decreases this range (zooms in) by x5. So the ranges at the circle boundary are 5km, 1km, 200m, 40m

The letters T, D and S around the edge; and with numbers next to each are the bearing and range to the currently selected target, the nearest DJP and nearest supply station.

14.1 Planetside Ops Phase II

BASICS OF WEAPONS USE

If you noticed from the view, you don't currently have a weapon armed. The weapons in the game are sorted in groups whereby the 1, 2 and 3 keys activate and cycle through a weapons group. The group 1 (standard) weapons are pistols and light weapons; group 2 (primary) is for rifles and group 3 (secondary) is for launchers. Since all the game careers use different type of weapons, some grouping may not be available. For example, if you are playing the commander career with the default gear profile (selected in the Start New Game screen), you will not have access to launchers (e.g. the GLE-22, KLMP etc). As such, pressing the 3 key won't do anything.

In this training scenario, the commander is using the default gear profile, which means that you have a Wristlaser (standard on your combat suit), a pistol, a rifle, some grenades and an assortment of other inventory items (manual p70).

Press the **1** key to activate the first weapon in group 1. Notice that the weapon, ammo, grenades etc are now initialized and present in the display.

Press the left mouse button to fire a few rounds. Some weapons have dual firing modes that can be switched. Press the **G** to switch the Wristlaser to single fire mode and back again.

Now try the other two weapon groups. You will notice when you armed group 1 and 2 weapons that two numbers showed up. The top larger number is the number of rounds in the current clip; and the smaller number underneath that is the number of clips you have left. The number to the left of the weapon image indicates its mode.

Your rifle (group 3) has a zoom scope that can be used for sniping. Activate it using the mouse wheel or the **HOME/END** keys. When using the scope, your weapon mode, number of rounds and clips are also displayed in the view under the zoom factor. Due to your characters idle animation, the crouch and prone poses are best for sniping.

There are three types of grenades. The frag grenade explodes with fragments and damages anything within the blast radius. The smoke grenade emits a blinding smoke. The proximity grenade explodes when an object comes within range or when its timer expires, damaging anything within the blast radius. The number next to each grenade type is the number of grenades you have in that type. For example **F 04** indicates four frag grenades.

To launch a grenade, first select it using the appropriate key. Then press and hold the key. You will then hear a ticking sound indicating that you have pulled the pin. Release the key to throw. The longer you hold the key, the farther the grenade will be thrown. If you hold a grenade until the timer expires, it will detonate in your hand. Take a wild guess what happens next.

For more info on weapons and their use, refer to the game manual.

BASICS OF INVENTORY USE

Your combat suit has a specific type of armor and the level of protection that armor provides is the larger number to the left of the armor icon. As you take weapon fire, if you are hit, that armor will deplete and you will eventually start taking hits to your body. If you don't repair the armor, you will eventually die.

During combat, if your armor takes damage you can use your toolkit to repair it. The toolkit can be used to repair your body armor. Each application will boost your armor integrity by 10 units. Each Toolkit can be used 4 times. To use the toolkit, press the **K** key.

The medkit can be used to increase your health stats. Each application will boost your LF by 10 units, reduce your FF by 15 units and clear any radiation or infection condition instantly. Each medkit can be used 2 times. To use the medkit, press the **M** key.

The number next to the toolkit (T) and medkit (M) indicates the number of each that you have as well as the number uses left. For example **T 02 008** indicates that you have two toolkits of which each can be used four times, for a total of eight uses.

For more info on inventory items, turn to manual p70

USING THE DARKLIGHT IMAGE ENHANCER

Press the **4** key to activate your Darklight Image Enhancer, DIE (manual p70). This tiny little gadget implanted in your head, is a neural marvel – complete with the headaches. Once activated, it has three view modes. In the TVM (default) mode, you will see familiar displays similar to those in ships. As before, the **N** and **T** keys activate and cycle the NID and TRS modes. While the **.** and **,** targeting keys, cycle through targets. The DIE also has two additional target filtering modes. They are FMT and HMT filters for hostile and friendly marine teams.

Now we are going to locate our forces already on the planet using the TVM mode.

The radar is already in ground mode, but you want to use the SUL filter to locate your forces quickly. So press the **T** key a couple times to switch to this mode. Now use the targeting keys to locate SC-1. Next, using the mouse, turn to the left or right until the flashing Yellow dot that is SC-1 is located around the bottom section of the TRS display. This indicates that you are now facing the general direction of the target.

Press the **4** key to switch to the EVM view. This is a pair of binoculars for which the zoom is controlled by the mouse wheel button. Try it by rolling the mouse wheel up/down to set the zoom factor.

Press the **4** key again to switch to the IVM view, this is primarily used during low light conditions.

Press the **4** key again to switch to the default TVM mode, then press the **1** key to shutdown the device.

Using the controller or mouse look, turn so that the T is at the top of map. You will now be moving toward the currently selected target (in this case SC-1) and its range from you is the number next to the T.

USING THE JETPACK

Some careers have access to a jetpack (manual p67) in their gear profile. The commander career has a jetpack by default. This can be used to cover large distances, as well as to fly to the top of buildings and other units for sniping purposes.

To use the jetpack press the **F** button to go airborne, then still holding this button, press the **W** key to move forward.

The jetpack charge appears on either side of the jetpack icon when the jetpack is in use. Once depleted, the jetpack cannot be used until it auto recharges.

The **W**, **S**, **A**, **D**, **Q**, **E** movement keys all work while the jetpack is activated and the **F** key is held down. So to move forward, you would press and hold **F+W**. If you release the **W** key while still holding the **F** key, you will increase your altitude.

Releasing the **F** key while airborne or if the jetpack runs out of charge, will cause you to fall to the ground under gravity. If you fall from a high altitude and at high speed, there is a very good chance that you will be hurt or possibly killed.

When in use, your current speed and altitude appear to the left and right edges of the display. The altitude is a log scale and indicates the altitude in feet. The speed is linear and in m/s.

The maximum height you can fly while on the planet is 2000 ft. Oxygen use is dependent on altitude above ground. At around 500 ft oxygen use increases linearly to a maximum at 2000 ft. At the maximum jetpack altitude the rate of oxygen consumption is 100 percent (as if you were under water). The consumption at 500 ft is very low. If you run out of oxygen, you will pass out and eventually die. Your Fatigue Factor also increases with jetpack use, regardless of altitude.

The jetpack also has a boost mode that is activated using the **BACKSPACE** key. Once activated, your current pose in the top right corner of the display will be in inverse display. Boosting the jetpack consumes a lot of its charge and can be depleted very quickly.

Using the jetpack, fly toward the direction of the shuttle. You're probably not going to make it, so try not to fly at too high an altitude because your injury is height dependent. It's better to be at 50ft off the ground than at 500ft off the ground when your jetpack runs out of charge. A neat trick to use is while airborne, you can release the **F** key so that you freefall for a bit. During this period, the jetpack will recharge, since you are not using it.

You're going to die. Again.

When you get to the shuttle's location, you should find your marines standing around there. Without these marines, the remaining sections of this tutorial are not going to work.

Press **CTRL+S** to activate the Tacops computer and then locate your marines. Any of them not currently idling by the shuttle, should be selected and given the "go to" order, with SC-1 as the target.

TARGET DESIGNATION AND THE PRIORITY LIST

During combat, it is far easier to locate targets – especially your troops – and issue orders, if they are easily identified. You can add a target to a priority list and using the Priority List Viewer, PLV (see the manual addendum PDF file), you can cycle through priority targets easily without having to use the DIE or the in-ship TRS computer. The PLV is a lot more useful in the first person mode than anywhere else.

Activate the DIE and switch to the SUL radar mode. Locate each of your units using the **.** and **,** targeting keys and when visible in the VDD display, press the **P** key to add to the priority list.

When done adding all your units to the priority list, cycle through to SC-1 and press **CTRL+P** to designate it.

Now press the **TAB** key to activate the PLV. You will see a list of all the units you just add to the priority list. Each press of this key will cycle to the next target. Do this and notice that the T marker on the map is updated to reflect your bearing and range to the current target. If you don't tap the cycling key for a few seconds, the PLV will be removed, leaving the currently selected target as the current one.

Cycle through to FC-1 (which should still be flying around), then switch to the F10 camera view and manipulate it to watch your fighter flying its waypoint pattern. Press F1 to return to the front view when done.

USING THE TEAM ORDERS MENU

You can use the Team Orders Menu, TOM (see the manual addendum PDF file) to give orders to your units or any NPC units you have control over. In a high stress combat situation, this is a much faster way than using the Tacops computer

First activate the PLV and cycle to one of your marines. Then press the **ESC** key to activate the TOM. You will see a list of orders that you can send to this marine. Notice that because you have previously designated SC-1 as a target for future operations, it is now the target of several of the orders. These are orders that require a target. Had you not previously designated SC-1 these orders would have been invalid and would show N/A as the target of the order. You could also have used the **<** and **>** keys to cycle through the list of detect targets – but you **DON'T** want to do that right now.

Here is a quick example of what you can do using the PLV and TOM interfaces. I am assuming that, so far, you've done everything correctly and that all the units I am now going to be referencing, exist and are in your PLV.

Press **F1** (“defend/escort me”) to send that order to the currently selected marine. Activate the PLV again cycle to the next marine and issue him the same order. For the next two marines, give them both the **F2** (“defend/escort” SC-1) order. Now you would have two marines escorting you and two marines guarding the shuttle while you're gone.

USING SUPPLY STATIONS

Most bases and starstations have supply stations where you can perform various operations such as rearming, repairing your body armor and healing your injuries.

Look at your view map and turn so that the **S** marker is at the top of the map, press the **BACKSPACE** key to go into run mode, and take off in the direction of the supply station. You may be tempted to use the jetpack, but if you look behind you, you will notice that you have two marine escorts who probably don't have jetpacks. So, if you take off and leave them behind – while they will still follow you – you will get there ahead of them. During combat, you never, ever want to leave your men behind.

As you run through the base, you will come across several units, just ignore them for now (you can sightsee if you'd like) and proceed to the supply station. You can't miss it, but if you want to know what it looks like, go to the game's HTML appendix files and look in the "Misc Units" section.

Once you get to the station, stand in front of it and press the **U** key and press **Y** to use it.

You are not injured, but using the mouse, click on the "medical" option anyway. You will get a message that you are not injured and you will be ejected from the station.

USING THE TARGET DESIGNATOR UNIT

There are times when you want to designate a target real quick. This target will pop-up on the radar of all your forces and you can issue orders to them. Using the Target Designator Unit, TDU (manual p71) works like the designate target you previously learned, but this one is quicker since you can designate a target in your immediate vicinity – quickly – and without wasting time searching for it in the DIE radar mode. If you have fighters flying above (remember FC-1 is on CAP profile?) and you have a target you want destroyed, you would designate it and give your fighters (or marines or any other forces under your command) the order to do so while you cower behind the cover of a hill or building.

Walk past the supply station and toward a building that looks like a bunker. You can't miss it, but again, if you want to know what it looks like, go to the game's HTML appendix files and look in the "Ground Structures" section.

Stand a few feet from the structure and equip the TDU by pressing the **J** key. Now, using it like a weapon, just move the mouse over the target. The system will attempt to identify the object and then lock on it when it does. Once identified, the name of the object will appear in the TDU cursor. Press the fire button to designate this target. A timer will now appear above the cursor. The designation of this target will be cleared once that timer expires.

Now activate the PLV, cycle through to FC-1, activate the TOM and give the fighter the **F3** (“engage/attack” bunker) orders to destroy the bunker. Then immediately press F10 to observe what the fighter does. Don’t forget to use the left/right arrow keys to rotate the view, and the zoom keys to get a better view of the engagement. Notice from the camera info that the fighter now has the bunker as its strike target.

The Empirians aren’t going to be happy. And that bunker – though once friendly (the Empirians are friendly to the Terrans, which is why you can use their base as a training ground) is going to open fire if your fighter doesn’t ceasefire within ninety seconds and activate its Friendly Fire Sequencer. A pilot with high AI will – regardless of being given a direct order by you – activate its FFS once it gets the message from the bunker that it is attacking a friendly. Doing that, will cause it to temporarily cease the attack. If you re-issue the order, it will resume the attack and either destroy the target or be destroyed. This action by the pilot simulates him requesting confirmation (from you) about firing upon a friendly and ignoring ROE guidelines.

There is a very good chance that unless you are using the cheat that your fighter has been destroyed by the beam turrets on that bunker. If not – and assuming that your fighter pilots have high AI and BA skills (manual p72) – they have now destroyed the bunker. If the fighter does destroy the bunker, it should happen right in front of you - assuming you are not still in the F10 view observing the fighter. Once the bunker is destroyed – or if you want to save your fighter from destruction – activate the TOM and give your fighter orders to resume waypoints. It will cancel its strike orders and return to its previously programmed CAP waypoints over the base.

You can use the TDU to designate any target. As long as you can point at it and the TDU can lock on and identify it, you can designate it. You can even use it on your own troops. For example, say you wanted marine #1 to cover marine #2 who is covering you. First you would arm the TDU and designate marine #1. Next you would select marine #2 from the PLV or DIE, then from the TOM give him the **F2** (“defend/escort” marine #1) order.

USING DYNAMIC JUMP PADS

If you remember how jump anomalies (e.g. jump gates) in space work, then the use of a Dynamic Jump Pad, DJP (manual p68) should be immediately familiar. In the same way jump anomalies link different star systems and regions, DJPs link all the various bases and cities on the planet. You can use a DJP to hop to another DJP within the same base/city or to a completely different base elsewhere – even clean, clear across the planet.

If you were observant as you were running toward the supply station, you may have come across a flat star shaped object with an animated graphic at the center. That is a DJP. Look at your view map and turn so that the **D** marker is at the top of the map, now head off in that direction and you should eventually find a DJP.

Once you get to the DJP, stand in front of it and press the **U** key and press **Y** to use it.

You don't want to get lost by going to another base right now, so using the mouse, select the "nearby" option from the list and then click on "portal 2". Wait a few seconds and you will be transported to the location of the selected DJP. When you come through, start moving backwards immediately otherwise when your escorting marines (yes, they will follow you through a DJP) come through, they will collide with you. If you are facing the DJP, you will see them coming through – accompanied by the sound of the DJP being activated.

If you look around, you are now at a completely different part of the base. Using the DJP again, go back to the location of "portal 1" (the first DJP in the scene).

Using DJPs, you can hop around a base, from a hostile to a friendly base and vice versa. In fact, retreating from a combat engagement at a hostile base using a DJP is usually your only option. You could hop to a friendly base, use a supply station to grab ammo, treat your injuries and repair your body armor. Then jump back to the hostile base to finish off the job of flattening it.

ASSET SWITCHING & USAGE – VEHICLES

As a commander, you have the ability to enter and fly/drive your own support assets as well as others you find on the planet – and which most likely don't even belong to you. Playing this career, you cannot fly other fighters or gunships, except your own (see the manual addendum PDF file). This was done for game balancing reasons.

There are times when the commander will need to use an asset you don't have on your CC. Like now. Imagine using a DJP to hop to a hostile base, then grabbing one of their tanks, fighters, gunships etc, to flatten the base. Yeah, its fun.

On your way to the supply station, you probably came across a Wildcat tank. Go look for it. If you don't know which one it is, activate your TDU and point it at the vehicles in your immediate vicinity – without pressing the fire button to designate any of them. Or you could activate the DIE, change the filter to GND mode using the **T** key and then using the . and , keys to cycle the targets until you locate this vehicle. Then close the DIE and follow the T marker on the map until you reach the vehicle.

Once you get to within 1m of the vehicle, press **ALT+D** to enter it.

Remember those marines? They won't enter any units you have entered. Instead, they will go into SAD mode and cancel all previous orders. So once you have switched to the vehicle and are in the front view, activate the PLV and select the first one, then using the TOM, give him the **F7** ("halt"). Repeat for the other marine. This instructs them to stay where they are, until further orders.

The indicators in the vehicle (manual p63) should all be familiar, so no point in explaining them. The plan here is to drive the tank.

Driving vehicles (manual p56) is fairly trivial. Press the **W** and **S** keys to move forward and backward. While moving, press the **Q** and **E** keys to turn left or right.

Some units, like the Wildcat, have a main gun as well as a turret-mounted gun. These can be cycled through using the **1** and **2** key (see the manual addendum PDF file). Other units (e.g. SAM sites) have a missile launcher, controlled by the **3** key. To fire the main gun, press the **ENTER** key and watch the gun's recharge rate. In this mode, the gun will fire in the direction of travel. Press the **2** key to switch to the turret gun and fire it. You probably will not see the shots because the turret is mounted a bit higher than the main gun. Switch to the F9 camera view and from that view fire it again. When done, switch back to the **F1** forward view.

As you have noticed, you have no control over the gun or turret's direction of fire. To change this, you need to de-couple the controls. This assumes that you have mouse as the controller method selected in the game's option screen. If you don't, press **ALT+O** or use the "command" menu to enter the game options screen where you can change this. Save the settings and return to the game when done.

To engage the "de-coupled" gun mode, press the **ALT** key (this is a toggle). You will now see a mouse control pointer (manual p55) appear. Move that pointer until it is straight ahead and a large targeting crosshair will appear. This marks the gun and turret direction of fire.

Press **1** to switch to the gun; move the mouse up/down/left/right then press the left mouse button to fire. Notice the behavior of the mouse pointer and the targeting crosshair.

Now switch to the F9 camera view and do the same thing. Notice that you are now changing the gun's direction of fire, regardless of the direction the vehicle is pointing and traveling in. In fact, tap the **W** key to move forward, while using the mouse to turn the gun and fire off to the side as you move forward.

Still in the external camera view, press **2** to switch to the turret and try firing while moving the mouse as indicated. When done, switch back to the F1 forward view.

Using the same procedure as with vehicles, you can switch to other mobile and fixed units such as SAM sites (you can launch their missiles the same way you can fire a vehicle's guns), naval crafts etc. Later when playing the game and coming across these, you can experiment with their use.

If you're not going to be firing on the Empirians property (which most certainly can and will get you killed), press the **ALT** key to disengage the free gun mode. Note that if you reset the gun controls before aligning the mouse pointer straight ahead, your gun and turret will be left pointing in the current position.

Use the **T** key to change the TRS mode to AIR mode, then locate SC1. Using the driving controls, drive to the location of the shuttle. When you reach the shuttle, press the **S** key to bring the vehicle to a halt and then press **ALT+E** to exit from it.

The commander can asset switch to any gunship, fighter or shuttle that is not part of his support assets. You have two options from here.

Option A: use either the shuttle or vehicle and locate a fighter or gunship at the base. Then exit; enter the new fighter or gunship; then proceed from the next page.

Option B: press **ALT+G** to save the game. Return to the main menu when done; and proceed from the beginning of the next section below.

ASSET SWITCHING & USAGE – AIR/SPACE CRAFTS

From the main menu, select the “Roam” option.

At the Start New Game, SNG, screen, enter your name, then make the following selections . For career, choose the Planetary Support Pilot (PSP. For asset type, choose the Phantom gunship. Don’t change anything else. When done, click on “accept”

At the Miscon screen, click on the listed scenario, then click on “accept”

At startup, you will be located at the Earth starbase and at the controls of the gunship. The indicators in the gunship (manual p61) should all be familiar, so no point in explaining them again.

You will probably have a lot of target clutter due to VTT tags on the ground target. To de-clutter the view, press **R** to switch the radar to Active mode (manual p25). This will leave only the current target’s TTD visible in the display.

The objective here is to fly around the base, learn some basic target acquisition and then land.

Tap the **F** key until the craft lifts off to about 500 ft. Now press and hold the **W** key and thrust up to about 75 m/s. When the FPA switches to FTOL mode, pitch up and climb out to 1000 ft using your controller or the down arrow. Press and hold the **NUMERIC 5** key to level the craft, then fly straight ahead for a bit – remembering to avoid objects, hills, flying pigs etc.

You might want to disable the Altitude Hold System (AHS) by pressing **CTRL+M**. This will allow you to then fly to any desired altitude without AHS forcing the craft to the default altitude indicated on the left side of the HUD.

Fly around the base for a bit.

In a gunship, you only need to use the yaw (**INS/DEL**) controls to quickly change your heading. Start doing uncontrolled turns (left/right arrows or controller) without adequate practice and you're going to crash it. So practice rapidly killing your thrust, bringing the craft to a VTOL profile quickly, identifying and acquiring a target and quickly taking evasive maneuvers by flying behind buildings etc.

In other words, pretend that you're under hostile fire. Even at 100 m/s, you will traverse the entire width of that base in no time flat, so don't be surprised if you overshoot your target etc.

At cruise speeds of 55 – 75 m/s – with practice – you can acquire a target, engage it, destroy it, break closure and fly around the outskirts of the base – instead of through it – and live to tell about it.

When done, switch the TRS to GND mode and locate an ATV vehicle from the targets list. You can click on the GND mode tab and select it from the “friendly” targets filter.

Now press the **BACKSPACE** key to arm an APM Radix (see appendix files for missile info and specs) missile. Flying at around 50 m/s, head toward the target and when you get a missile lock message, launch the missile using the **SPACEBAR**. If you miss or don't destroy it, fly around the base and come back for as many passes as it takes to destroy it.

You can also use the guns to destroy the target. Remember also that the gunship has VTOL mode, so, you can come to a halt a short distance from the target and then destroy it using guns.

When you are done training with the gunship, locate another gunship in the AIR mode of the TRS, then fly to it and land. To land the gunship, press the **S** key to reduce thrust to 0, then press and hold the **Z** key until the craft descends, touches the ground and the FPA switches to TAXI state. Press **ALT+E** to exit the craft. You will not be able to exit a craft unless it is in TAXI mode (manual p59).

On exit, Press **0** to put your pistol away if it was equipped.

Now walk over to the new gunship and when within 1m of it, switch to it by pressing the **ALT+D** key. Then just take off and fly around. Remember, if you engage units with turrets, SAM or SAL sites, you will be engaged and possibly destroyed!

The PSP career cannot fly fighters. So, if you want to try out the fighters, you have to quit this scenario and start another ROAM scenario as an Elite Force Pilot (EFP) career, then pick a fighter asset as before. With this dual-mode career, you can also choose to train in space or on a planet, based on the launch base choice you make.

While flying a fighter, you will notice that they are much faster than gunships; as a result, it takes quite some handling and fine tuning to find an acceptable cruise speed threshold.

For example, the fighter needs to be going a lot faster than a gunship in order to switch from VTOL to FTOL mode.

In future engagements where you are part of a flight group, you can stay within range of the group by flying to within a few km of your leader or craft you are escorting, then engage the “match target speed” system (manual p14) using the **M** key.

And if you have command authority, you can also use the PLV and the TOM to give the other fighters orders to escort you. You can even do this as the commander career; in that you can launch other fighters, then fly one of them on a strike sortie either in space or on planets.

Also during combat, you will take damage in your fighter or vehicle. If there is a Mobile Forward Base nearby, you can commandeer it using **ALT+D** as you would any valid unit.. Doing this allows you repair and rearm your craft so that you can get back into the engagement. You can even use an MFB like a supply station when in first person mode by standing in front of it and pressing the **U** key. This will activate its station menu allow you to repair your body armor, heal your injuries and rearm your weapons.

When you’re done practicing fighter flight dynamics, find a place to land, then press **ALT+Q** to exit. When prompted, press **Y**. If you wish to save this session for later, then use **ALT+G** instead.

From the main menu, use the Saved option to restore your previously saved tutorial session and continue to the next section of the commander career training scenario.

PREPARING FOR DUSTOFF

With your training exercise coming to a close, it is time to recall all your forces, leave the planet and head for your home station.

Use the PLV and TOM to select and order each of your marines to “Return To Base” using the **F8** order. They will automatically select the shuttle (because it was their deployment platform) as their target, run over to it and enter it. You can even observe them from the F10 view as they each do this.

When all marines are aboard the shuttle (you can tell by checking the TRS while in SUL mode as they will no longer be on radar), switch to it using **ALT+D**.

The indicators in the shuttle (manual p62) should all be familiar, so no point in explaining them. Switch the TRS to SUL mode and target your CC. Then take off and fly the shuttle to the location of the CC. You can even buzz the base one last time if you’d like.

When within 5km of the CC, press the **ALT+D** to dock (manual p58) with it.

PLANET EGRESS

Back in the CC, wait until your AE returns to the bridge and then disable the autopilot.

Speaking of which. Check Perscan to see the location of your AE. If he has ended up in Medibay, then you need to activate the Tactical computer then go to the “Medibay” tab to find out what he’s doing there. In my case, I had caught some radiation, possibly from being exposed to the planet’s atmosphere for too long or from standing too close to the bunker when it was destroyed. Either way, the quickest way to get him out of Medibay (instead of waiting for the Medical Officer to do her job), is to treat him manually.

To treat your AE, click on his name and then click on the “treat” button. While you were reading this he may have already been treated by the MO. In which case, you should just click on the “release” icon. When done, return to the bridge view and wait until he returns to the bridge. You might want to monitor his progress via the Perscan computer.

When you get notification that you are back on the bridge, disable the autopilot, the follow the same procedure as you did before to take off from the planet surface. Climb to about 3,000 ft, then pitch up at an angle of about forty-five degrees, apply max thrust by pressing the **9** key and hold the **W** key until you achieve the crafts max thrust profile.

Upon passing the egress altitude (manual p59) or 14,000 ft, press **SHIFT+9** to initiate the egress sequence. Your CC has enough power – at this point – to breach the planet’s Escape Velocity, so leaving the planet shouldn’t be a problem.

If FC-1 had not be destroyed by your latest antics on Centris, when you return to space, use the PLV to select the fighter, then using the TOM, give it the RTB order. No matter where the CC happens to be, FC-1 will locate it and dock. You could have issued this order while on the planet, but I wanted to show how this aspect works because you could do the same thing even if you were clean, clear across the galaxy – the fighter would still plot a nav course and fly to the CC.

Save the game. Then resume.

ONE LAST GOODBYE

The Empirians are so not going to be pleased with this. And after doing this, if you hang around long enough, you’ll soon find out if all this training has done you any good.

Go to the Tactical computer and via the “loadout” tab, go the missile loadouts screen for the CC. Scroll the list of missiles (to the last page) and load one OTS-Bugnor missile. If you get a message about insufficient bay space, then unload currently loaded missiles until the “cc weapon slots” indicator shows a value of 10 or higher. These missiles are a lot larger then the normal STS missiles, so they take up more space. Once loaded, return to the bridge.

Activate the Tacops computer and observe the planet. Then locate the mzone you just left. You can navigate there quickly **after** observing the planet, by using the following menu sequence:

zoom / mission zone / emp-mil / centris00[sbase] / base_centris01

When the scene has loaded, click anywhere on the map to remove the menu.

Click on the Tacops menu, then click on the “ots” icon. The missile type box will display “none”, so click inside it and the Bugnor missile you previously loaded will appear.

Move the mouse over the starbase building that is located at the center of the map and click to select it as your current target. Use the **HOME** key to zoom out a bit.

Click on the “setpos” icon and the Target Acquisition Reticle, TAR (manual p35) will appear (you probably won’t see it in full). It will be Red but as soon as it acquires the selected target, you will get a target acquisition message and the TAR will go Green.

Click on the now enabled “launch” button to fire the missile. Then wait until you are switched to the spectator view that will show the missile and the destruction that it is about to inflict on the base and every target within the TAR.

After observing your handiwork, you can leave – safe in the thought that you only destroyed a few targets. Later in the game you will eventually have access to a very devastating weapon capable of destroying an **entire** planet – not just a few targets – and changing its entire topology, ecosystem etc. I’ll let you mull over the moral issues associated with this. For more info on this RANDOM weapon, read the missiles section of the game appendix files.

RETURNING TO BASE

To conclude your training program, see if you can plot a route from your current location in the Centris space region to the Earth space region located in the Sol system. Then target and dock with the GALCOM HQ starstation.

Prior to your departure, you may need to dock with the Orion station and sell some items (e.g. the rest of those pricey OTS missiles you retrieved from that pod earlier in this tutorial) in order to obtain enough money to purchase more Radine (manual p40). You’re not going to get to Sol from Alpha Centauri without an ample supply of Radine.

SOLO EXERCISE

When you return to Earth space, observe the planet Earth. Then see if you can locate the **base_earth02** scene within **earth18[sbase]** mzone. Using your forces, see how much damage you can do to that hostile starbase without getting yourself killed. If you’re really brave, you would beam your AE down to the planet and fight alongside your brave – but soon to be dead – marines.

Good luck!!!

1.2 Preparing For War

Wait about a minute (look at the local time in your first person display) or so and you will see the pilots race off to their fighters. Turn to your left and you should see the other gunships take off.

Press the **BACKSPACE** key to enter run mode, then press + hold **W** to run toward the gunship. When within 1m of it, switch to it by pressing the **ALT+D** key.

In the cockpit, press and hold the **F** key to lift off in VTOL mode and watch your altitude in the Altitude Information Display, AID, (manual p17) located on the right side of the display as it rises. When it is close to 1,000 ft, release the key.

Next, use the **INS** key to yaw the craft to the left until your heading at the top of the display in the Ship Heading Indicator, SHI, (manual p13) is pointing as close to 330 degrees as possible. You should now see the VTTs for the other gunships and fighters as they head for the target area; almost 60 km away.

Now press the **/** key to select the closest ahead target. If its not the EAGLE 01 gunship, use the **.** and **,** target cycling keys to cycle all targets until you have it selected and visible in the VDD. You can also attempt to locate it in the TRS by moving the mouse into the display and selecting its dot or by clicking in the AIR tab.

Once you have the target selected, press and hold the **W** key until the craft switches out of VTOL mode and is moving at a velocity of around 85 - 90 m/s as shown in the Ship Velocity Indicator, SVI, (manual p14) located on the left side of the display. If you manage to go above 100 m/s, tap the **S** key a few times until the velocity drops. The idea is that – for a period of time – you are going to be following EAGLE 01 to the target area.

Now that you are moving forward, look at the AID and you will see H250 in a Green box to the right of the indicated heading. That is the Altitude Hold System, AHS (see manual revision PDF file p6) which keeps the craft on a straight and level course, while avoiding the terrain. The default altitude is 250 ft but the AHS system is not engaged.

Press the **UP ARROW** key and pitch the craft down toward the ground; and when you hear the ground collision warning from the craft's computer, release the key. Now watch as the AHS system kicks in and takes the craft above the terrain.

Press **CTRL+M** to disengage AHS, then fly to an altitude of around 500 ft and turn it back on using the same keys. You will notice that the new AHS altitude is relatively close to your current one. The craft will now maintain that altitude until you change it or cancel AHS.

If you are near mountains or hilly terrain (as you should be), press **F9** and watch how the AHS controlled craft performs from that view. Use the arrow keys to pan the view around and the Home/End keys to zoom in/out. After a few minutes, press the **F1** key to return to the forward view.

Press the **BACKSPACE** key to enter run mode, then press **W** and run ahead and toward your gunship, stopping just short of it and pressing the **/** key to switch to it.

In the cockpit, press and hold the **F** key to lift off in VTOL mode and watch your altitude in the Altitude Information Display, AID, (manual p17) located on the right side of the display as it rises. When it is close to 1,000 ft, release the key.

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If you are near mountains or hilly terrain (as you should be), press **F9** and watch how the AHS controlled craft performs from that view. Use the arrow keys to pan the view around and the Home/End keys to zoom in/out. After a few minutes, press the **F1** key to return to the forward view.

Check your heading and ensure that you are still following EAGLE 01. If you are, it should be relatively ahead and its VTT should be visible.

If you are not, then you need to figure out where it is by using the TLD/TLL (manual p16) systems built into the ship's radar.

Assuming all is well and you are on the right path behind EAGLE 01, ensure that the AHS is still on, then tap the **F** key a few times; then tap the **Z** key a few times. Notice how with each tap, the AHS set altitude adjusts. What is happening is that while AHS is on, you can adjust its preset altitude without assuming control of the craft. The system will simply use the new altitude. If while AHS is on, you manually increase or lower altitude (by controlling the craft instead of using the F/Z keys), when you let go of the controls, AHS will kick in and will ascend or descend the craft to the preset altitude.

Using the **F/Z** keys, set an AHS altitude of around 1000 ft at a relative heading of 330.

1.3 The Strike Package

While you are en-route (it will take 15 mins to reach the target zone from Base Camp), now would be a good time to become familiar with and add all your assets to your priority list. This scenario gives you command & control so that you can use them in a manner that will make the mission a success.

There are eight assets in this strike package as follows. The Eagle team are gunships and the Skyguard team are fighters.

EAGLE 01 orders are to land at the strike zone, deploy a six member marine squad to provide cover fire, while the four member ArkAngel marine team (currently at the strike zone) escorts and provides cover for the two escaping pilots Viper and Goose; who are instructed to enter EAGLE 01 when it lands. This craft will take off ten minutes after landing and return to Base Camp.

EAGLE 02 orders are to land and deploy a six member marine team to provide cover fire while engaging nearby targets which threaten the strike package. This craft will take off ten minutes after landing and return to Base Camp.

EAGLE 03 orders are SAD at the target location. This means that they will engage any detected ground targets.

EAGLE 04 orders are SEAD at the target location. This means that they will engage any detected ground targets capable of engaging airborne targets.

SKYGUARD01 orders for these guys are CAP and SAD at the target location.
SKYGUARD02
SKYGUARD03
SKYGUARD04

Starting with EAGLE 01 (visible in the VDD), press **P** to add it to your priority list. Then, using either the . and , target cycling keys or the mouse in the TRS, locate the other gunships and fighters and add all of them to the list. When you have added all eight, press the **TAB** key to activate the Priority List Viewer, PLV. Then press the **TAB** key to cycle to the EAGLE 01 asset so that it is once again the current target.

1.4 The Ingress Profile

It is always a good idea to filter out missiles from your radar target mask because you don't want to be cycling through them when frantically searching for targets. So, move the mouse over the RTM tab (don't click the tab!) in the VDD and then press the **7** key to turn off the missiles filter.

From the map in the NID, you can see a Yellow line extending from your current position and in your current direction of travel. If you look closely, you should see the square markings of the scene where the target zone is located. The outer square (you should see its Yellow right border) is the current mission zone (mzone) but you are at too high a zoom factor for it to fit within the NID. For more information on how these relate, refer to the Navigation Interface Display, NID, (manual p20).

Press **R** twice to put the radar system in Passive mode (manual p25). Notice that the targets in the TRS, the VTT for the crafts nearby and ahead, as well as the contour map in the NID, have been removed. Your craft is no longer broadcasting an active radar signal and can now only be engaged by targets that still have you in their aged (when you go passive, it takes a few minutes before your bleep disappears completely from their radar) radar returns or are in visual range (can see you with the naked eye) or have pass-through (can still track your last radar bleep for a longer period of time) radar mode.

In the NID, which is now zoomed to 2x, you can now clearly see the White box for the scene you are traveling to. Note that you can also enter this NID mode without engaging Passive radar. To do so, you would press **N** to put the system in command mode, then press the **]** and **[** keys to control the zoom. If you are directly within a scene that has objects, at the highest zoom factor, they will appear in the now zoomed scene box. Remember that certain ground targets (buildings and non threat targets) only appear in the NID radar, while threat (air, ground, sea, space) targets always appear in the TRS radar.

Maneuver the craft so that the directional line in the NID is relatively above the scene indicator so that you know you are traveling directly toward it. Now tap the **R** key twice to put the radar back in Alert mode; sit back and enjoy the ride.

Again check your altitude and heading to ensure that you have not drifted too far off course and that AHS is still active. If you fly above 1000 ft altitude, you stand a very good chance of being engaged long before you even see the target on radar. This is because most ground targets (e.g. SAMs, SALs) have a longer radar range and employ various methods for target acquisition and prosecution.

For more about this, refer to the TRS radar information on p25 of the manual; as well as the Track Warning Indicator, TWI on p18.

Once you have confirmed that everything is fine, check to make sure that EAGLE 01 is the current target, then press **F10** to view it in the external camera. Now use the arrow keys, as well as the view zoom keys and look around. You should see EAGLE 01 and the other gunship in the vicinity. From this view, you can also use the . and , target cycling keys to switch targets. Use **F9** to view yourself but make sure that before EAGLE 01 lands, that you are actually looking at it either from the forward (**F1**) or external (**F10**) camera views.

When the strike package is detected and engaged, you should hear some gunfire; assuming of course that the Skyguard team haven't already been engaged and sending messages about their status. Once you hear the gunfire, you know that the gunships are on final approach and are low enough to be engaged by small arms fire. Since you are in cheat mode for this first run, you can ignore any threat warnings and just keep watching EAGLE 01 in the **F10** external camera view until it lands and deploys its marines.

1.5 The Engagement Profile

Once EAGLE 01 deploys its cover team, the ArkAngel team along with the two pilots, will break cover (from behind buildings) and be rushing toward the gunship. At this point you have several choices for this mission but neither one guarantees a success because there are various ways to play this scenario. Your primary goal is to ensure that the pilots (and as many of the ArkAngel team as possible) are rescued and EAGLE 01 makes it back to Base Camp and lands.

Option 1 After EAGLE 01 lands and has deployed its team, return to the forward view. Then using the **S** key, lower your thrust to around 50 m/s (as long as you don't stall the craft and enter VTOL mode); then disengage AHS.

Fly to the general location where EAGLE 01 landed and do the same. To land, press and hold the **S** key until the craft enters VTOL mode. Then press and hold the **Z** key until the craft settles on the ground and enters TAXI mode.

After landing, press **ALT+E** to exit the craft. Switch your weapon to fire mode 2 by pressing the **G** key, then go into run mode and race toward the team providing cover fire for the ArkAngel team and the pilots. You should be able to spot their VTTs as they race toward EAGLE 01.

Continue to provide cover fire by engaging any hostile marines (you should be able to see their Red VTTs when in range) so that the ArkAngel team and the pilots, make it safely to the gunship. Remember that regardless of who makes it or doesn't, EAGLE 01 will egress the hot zone ten minutes from touch down.

Once EAGLE 01 takes off, race to your gunship, enter it and do the same then follow it back to Base Camp.

Option 2 This option is best used before EAGLE 01 actually reaches the target zone or touches down. First you would switch the TRS to ground (GND) mode, by pressing the **T** key. Then using the target cycling keys, locate and destroy both of the launch pads to prevent gunships and fighters from going airborne. Also destroy as many enemy vehicles that are spawning marines as possible.

You arm your missile systems by pressing the **BACKSPACE** key, then while flying at low speed (around 50 m/s) or in VTOL mode at a safe location, wait for a missile lock (you have to be in range) then launch missiles at the targets until destroyed. If you run out of missiles, use your guns.

Continue to take out ground target threats (and buildings which can spawn marines too) until EAGLE 01 takes off, then head for Base Camp.

Notice how most buildings (e.g. the tall office complex) collapse into the ground when destroyed but you can still see their frames. Like stations, most ground buildings can also be repaired over time. So when you destroy targets, don't stick around because most of them can be repaired (they will rise out of the ground slowly over time as they are repaired) within an hour!

1.6 The Egress Profile

Once EAGLE 01 goes airborne – assuming that it does – it is time to head home. The Skyguard team should continue providing air and ground cover; and if you destroyed the launch pads, you pretty much ensure that they meet with minimal resistance; at least until the launch pads are repaired and go operational again.

If you don't want to follow EAGLE 01 back to Base Camp, you can locate it on your own by locating it in the TRS ground radar when within range.

The entire strike package is scripted to return to Base Camp once EAGLE 01 give the signal to egress the strike zone.

On the off chance that there are still hostile fighters milling around, they are going to come within radar range of Base Camp and will engage it first, then send a signal back their base for reinforcements. Once that happens, Base Camp will most likely be destroyed and the mission will fail.

Assuming all goes well, back at Base Camp, just land and wait for at least EAGLE 01 to land. Be sure to check the ACM tab in the VDD at intervals, in order to determine how much time you have left before the scenario ends.

1.7 Mission Debriefing

If EAGLE 01 lands safely at Base Camp, you will be awarded 5000 EPs and a Combat Shield medal.

If EAGLE 02 lands safely at Base Camp, you will be awarded 2500 EPs and an Award For Gallantry medal.

The EPs are in addition to any which you may acquire during your engagement at the strike zone.

1.8 Things To Try

You can boost your EPs by taking out other targets of opportunity.

You are in a hostile area, so if you run out of missiles, you can't re-arm. Also, unless you're cheating, you are going to get shot down at some point or run out of missiles. So being that you are a marine who can fly gunships (but not fighters), you can locate (in the AIR radar mode of the TRS) their own gunships, land nearby, run over to one, jack it, then go airborne and use it to take out targets. You can even abandon your own craft and return to Base Camp with theirs if you want.

You have command over all friendly forces, so you can locate friendly marines either in the ground radar mode of the TRS or in the FMT radar mode of the DIE and give them specific orders (e.g. Escort/Defend Me) using the Team Orders Menu, TOM, which you can activate using the **ESC** key when you have a target selected.

You can locate the ArkAngel team and the two pilots, then add them to your priority list. You can then cycle to them quickly (in order to check their status and condition) without having to use the TRS target search function.

You can also first locate a target, designate it using **CTRL+P**, then use the Priority List View, PLV activated using the **TAB** key, to pick a target, then give it an order for the designated target. For example, you could assign a marine to escort one of the pilots, by first designating the pilot, then locating the marine in the PLV and give it the order to escort the previously designated pilot, using **F1** from within the TOM.

As a marine, you can drive vehicles, fly gunships etc. So, you can locate a ground vehicle and use it cover large distances at the base. This is especially useful when trying to cut off hostile marines from engaging your marine teams.

For night flying, you can use the night vision mode but pressing **SHIFT+\. Don't forget that your DIE also has night vision!**

QUICK TIPS

While this is not an exhaustive list, due to the sheer number of features in the game, it should serve as a quick start to save the trouble of going through the manual each time.

BASIC SYSTEM NAVIGATION

If you wish to jump to a planet or jump anomaly (jump gate, fluxfield, wormhole) within your current region

1. Select it from the target list available via the MAP tab of the NID and it will be displayed in the VDD video display
2. Now turn the ship toward the selected target and either fly to it manually, or engage the HyperDrive engine (SHIFT+9)

Once you reach the target, if it is a jump anomaly AND it is currently visible in the VDD, your ship will jump to that region.

If the target is a planet/moon, you will be prompted if you wish to establish planetfall. If you respond with **Y**, then the ship will establish planetfall and enter the planet/moon.

You can also another method. Simply issue the FLY TO or JUMP AT order from the menu system and select the target from the targets list. Then activate the autopilot and the ship will fly to the target.

If you wish to fly to a starsystem, it is tedious to this manually, so you would use the NAVITRON computer instead.

1. From the Craft Status Menu, select the NAVITRON computer from the Systems list
2. Assuming that this computer is functional, scroll the galaxy map (right-click, hold and drag mouse in desired direction) until you see the destination starsystem.
3. Once you have found the desired starsystem, click on it to set it as the target destination
4. Move your mouse to the top right corner of the display (where the system name is displayed) and log off using the menu
5. On return to the bridge, the WTS tab of the NID will be active and all waypoints set to the chosen starsystem, indicated.
6. Simply activate the ship's autopilot (A) system and the ship will fly the designated route to the destination. All you have to do is sit back and enjoy the ride.

Note that while in hyperspace, nothing is real. Though your ship appears to fly through objects, this is only because they don't exist in hyperspace. During the hyperspace transition, you cannot perform some ship actions.

During a long distance transition, you can use the MAP tab of the NID to see the distance to the current jump anomaly. Just move your mouse over this tab to view it momentarily without actually changing from WTS mode.

To abort the transition, simply activate the WTS tab and use menu option (or **SHIFT+X**), to clear all plotted waypoints.

It is vital that you monitor your Radine level. As your ship flies or jumps, Radine is used. Eventually you will run out of Radine and become stranded. Support crafts have self-charging reactor subsystems that allow them a longer combat operation time.

SURVIVE A COMBAT ENGAGEMENT

The rule is simple. Unless you're fighting to win, don't fight at all. Sometimes, you have no choice - especially if you are outgunned.

In most cases, you will probably be in command of a capital ship (carrier, cruiser, transport). While you stand a very good chance of winning a dogfight in a cruiser, you stand very little chance in a carrier.

If you are up against a fighter or fast moving target, you have to ensure that you don't overshoot or collide with the target. Both of these instances have deadly results.

1. First, arm your weapon systems and select a missile as desired
2. If the target is far away, hyperjump to it using **ALT+9**. Note that the HyperDrive system will not engage at close target range.
3. Once you drop out of hyperspace, assuming you are jumping to a distance target, engage the target speed match system, by pressing the **M** key. Your flight control system will now match the target's speed. You can still use the thrust and afterburner to temporarily adjust the current speed.

As long as you can keep close enough to the target for your weapons to be effect and you don't overshoot or collide with it, or another object, you should be able to score enough hits to win the engagement.

EFFECTIVELY USE MAIN GUNS

Sometimes, especially in fighter combat, you will need to use your main guns for target prosecution. Its not always as easy as pointing and shooting. You have to determine whether you want to fire short powerful bursts, or longer less powerful bursts. The main gun recharges after each volley is fired.

Until it actually recharges fully, all subsequent shots won't be at full strength. The higher the intensity of the laser setting, the longer the gun will take to recharge. If you are in a dogfight with a particularly skillful opponent, you may want to have the laser intensity at

low level. This will allow the guns to recharge more quickly, allowing you to fire more rapidly.

You also have to be able to lead your target when you fire, especially if it's moving. If you don't lead your target, when you do fire, by the time the shots get to where the target was, said target would have moved. And you have missed.

1. Select the main gun icon from the SSD list and change the intensity level to 50%
2. Watch the Target Locator Line, TLL and turn your ship in the direction that it is pointing. At the end of TLL is usually the Target Lead Designator, TLD, box that predicts where the target will be, if you fired in the general direction of the TLD.
3. Once you are satisfied that you have a good firing solution, press the fire button.

EFFECTIVELY USE MISSILES

In order to launch a missile at a target, you must first acquire and identify the target, then select the desired missile.

Select the target from the TRS system or by using the menu system

1. Select a missile from the MISSILES icon in the SSD. The Missile Target Acquisition Reticule, MTAR, should now be visible with the Missile Tracking Designator, MTD, whizzing around inside as it searches for a valid target to lock on.
2. With the autopilot off, maneuver your ship until the TTD for the target is within the MTAR and in front of you and continue to fly toward the target so that it comes within range of the missile.

If you have checked the online appendix and know the capabilities of the missile, you should then keep checking the target's range, indicated on the top left corner of the TRS or the top right corner of the HUD display.

3. Once the target is within the launch parameters for the missile, LOCK will appear in the MTI. You can now launch the missile.

Firing at a stationary target, is easier than firing at a moving one. Either way, in an intense dogfight, you may find that it will take quite a while for you to achieve a missile lock, in order to fire. If the target is using its EMD jammer, the missile won't lock on it either.

EFFECTIVELY USE MINES

Mines are usually used to deter hostile targets from breaching a certain area. Most tactics involve deploying them near and around your craft (especially if you are disabled and performing repairs) so that they can acquire and detonate on hostiles that come near.

Some commanders (and NPCs) also mine jump anomalies by deploying mines near them. The effect of this is that, as soon as a craft emerges from the jump anomaly, the mine will detonate.

Mines are launched straight ahead, so if you are moving when you launch, you could collide with it. Try not to!

There are two types of mines. The Leech mine is a proximity mine. This means that once an object gets within range, the mine will detonate. The Crab mine has turrets that fire at targets that come within range.

1. Select a mine from the MINES icon in the SSD icon and confirm the launch.
2. Once launched, the mine will activate and start tracking targets. If you turned to face the mine, you will see a number on the left side of its TTD. That is the timer. Once that timer expires, the mine will self-destruct.

FIGHTER COMBAT ENGAGEMENT

FIGURE 1A



1. The “Match Target Speed” feature is enabled. Without this, combat sessions will be nothing short of jousting matches. If you get caught in a combat with a faster more agile craft with a high AI pilot and you’re not using this, you’re going to die.

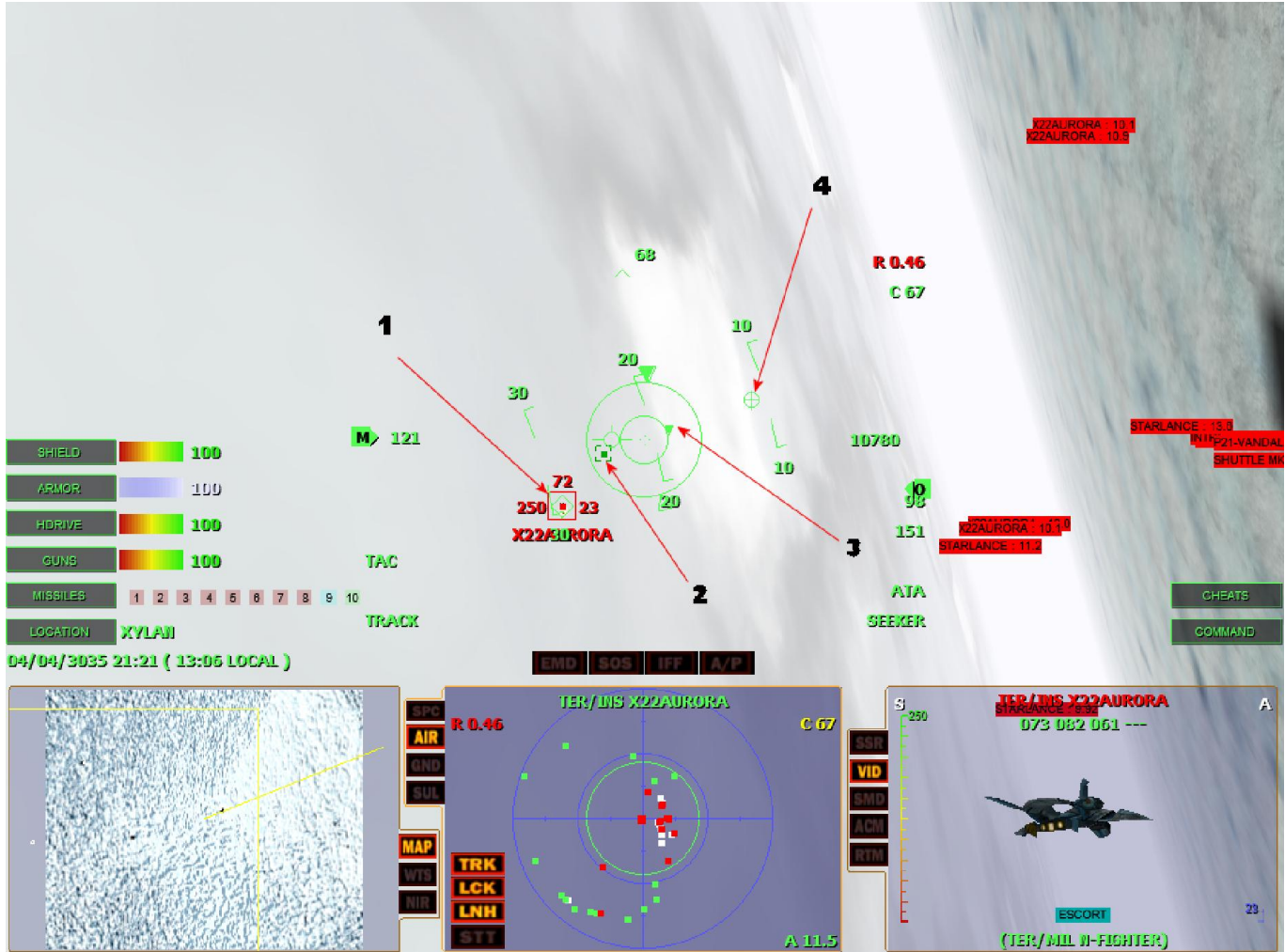
If the target is destroyed or if you change targets, the MTS feature will cancel and the M symbol will disappear.

2. Your “Flight Path Vector” is pointing toward the ground. Guess what, you’re in a dive; as indicated by the degrees displayed in the HUD ladder symbol.

3. Range to the selected target. Pay attention to this. Normally firing at a target – regardless of size – outside of 5km is a waste of ammo. When you are within 5km, you would match the target's speed, then commit to the engagement.
4. The target's closure rate. If this number is getting smaller, the target is moving toward you very quickly in most cases.
5. Your altitude. Pay very close attention to this. In the image above, 10,000ft AGL is pretty safe (depending on your craft's characteristics). But at high speeds – and in an inverted dive, you'd be surprised just how close ground zero can be. Especially when you've been hit with a bout of either target fixation or obsessive compulsiveness.

You need to know when you disengage from a fight. Especially if you find yourself in a case of either chicken or “turn and run” with a faster craft. If you find that no matter what you do, you simply cannot get a bead on the target, break of the engagement by either hitting the low deck, going vertical or executing a loop over the vertical axis. Usually this will give you a different bearing on the target.

FIGURE 1B



1. Your current armed missile (ATA-Seeker) is tracking the target. The "Missile Tracking Designator" is inside the "Target Tracking Designator". The "Track Warning Indicator" shows TRACK because the missile is not yet locked on the target. In this instance, the reason is because I am outside the missile's launch parameters because I am less than 1km (the minimum launch range for a missile) range from the target. So this ended up being a guns only fight because the opponent also kept close to me in order to prevent me from getting a lock.
2. The "Target Lead Designator" is where you should be aiming for when in a guns only engagement. The reason being that if you insist on firing directly on the TTD, by the time your shots get there, the target will have moved. The TLD attempts to predict the target's position in 3D space in real-time. If you are patient, remain within 5km range (2-3km is optimal) and fire when appropriate, eventually you will see its shields, then armor, light up as it takes hits.

3. In mouse flight mode, the directional pointer indicates my direction of flight, as it is pointing toward the current position of the mouse reticule.
4. The mouse flight reticule indicates the current position of the mouse and your direction of flight. In this instance, I am in a tight turn against that craft, so the directional pointer and the mouse flight reticule are pointing toward the ground and my direction of turn. In this case, to the right.

FIGURE 1C



This image shows you what happens if you do everything correctly in a guns only fight. I continued to aim and fire at the TLD until the shields and armor was gone.

FIGURE 1D



In the image above, I am within the 1km minimum launch range of the selected missile. So the "Missile Tracking Indicator" has a LOCK which means that I can now fire the missile.

ATTACKING GROUND TARGETS

FIGURE 2A



Attacking ground targets takes a lot skill. If you don't know what you're doing, you are either going to die on your way to the target or on your back – after missing the target entirely.

The “Track Warning Indicator” is your friend. This box with four carets lets you know if the current target has your craft's radar signature or not. Usually there are lots of threat systems with different capability. So just because one doesn't have a signature, doesn't mean that another doesn't.

Once you have selected the target, the idea is to fly either high, low, fast or slow, so that those four carets in the TWI box, are never all on at the same time. If they are, then it means that a surface to air missile or a stream of laser fire, is imminent. In the image above, I had to do something quickly.

FIGURE 2B



1. By hitting the low deck (i.e. the ground), I ended up flying very low. The target no longer had a positive lock on my craft because I had now dropped below the target's low altitude radar limit. In this case, I had dropped down to 136ft AGL (Above Ground Level) which is well below the 500ft limit of the target's radar. So, the bottom caret is gone since my craft no longer gives off a positive radar signature.

Notice that I was so close to the ground that the ground collision warning cue, have now appeared – along with the “Warning! Warning! Warning” voice from the ship’s computer system. This is telling me that if I maintained this altitude, I was going to collide with the terrain ahead.

2. Notice in the “Tactical Radar Scanner” that since I am flying directly toward the target, it is close to the center of the display.

I also have “Single Target Tracking” mode turned on. This not only de-clutters my view of targets, but it also means that if I wasn’t careful, someone could sneak upon me.

FIGURE 2C



Since I had no missiles left, I had to get close enough to use my guns. Notice also that the right caret in the TWI is off, as I am now outside its minimum radar range.

Flying in a 100m/s (meters per sec) at an altitude of 182ft AGL, I started firing at a range of 0.15km and ended up hitting another target beyond my currently selected target.

FIGURE 2D



By the time left, went and got re-armed (with a batch of air to surface Magellan missiles), I was tempting fate. As you can see – the target – along with all the threat systems in the mission zone, had lit me up like a Christmas tree. At an altitude of 1000ff+ AGL, I was just asked to get killed. Good thing I was in cheat mode. :D

EFFECTIVELY USE DEFENSE SYSTEMS

Depending on your Command Craft, you have access to a variety of defense systems. All of which, if used properly, will ensure your continued survival.

SHIELDS: Your ship's shields are the first line of defense. Normally you would have them functioning at full strength. Your shields protect the hull armor from damage. Once the shield is breached, the hull armor, and subsequently the hull itself, will start to take combat damage.

The level of your shields, determines the amount of Plutonium that is consumed. Remember though that the shield only protects you from weapons fire, not collisions. So, even at full shield strength, if you collide with anything, your hull/armor will be breached.

HULL/ARMOR: Your ship's hull is the most important defense system - depending on how you look at it. If your hull is breached, then ship systems and personnel, will take injury from gunfire, as well as flying debris from explosions. If your armor is breached, eventually your hull itself will be breached. If you sustain a total hull integrity breach, the ship will be destroyed.

CLOAK: If your ship has a cloaking system, and you have an ample supply of Iridium, use it often during combat engagement. Once cloaked, unless the enemy have the TMCD cloaking device artifact, or they are very clever, your ship will be undetected. Remember that being cloaked doesn't make you invincible. It merely renders you invisible, as long as you are not firing weapons or launching/extracting support crafts. Each time to perform one of these operations while cloaked your ship will create a distortion field. Usually, that's all it takes for the enemy to track and maintain a lock on your ship. If you detect that you have created such a field, you should immediately change your ship's position, in order to make it difficult for the enemy to triangulate your position effectively.

Similarly, if you are in a region where there is a cloaked ship, and you don't have the TMCD artifact, they too will create a distortion field. Most times, its not long enough for you to pinpoint their location, but the telltale static which will appear in your displays, coupled with a message from one of your officers, should be enough to let you know that there is a cloaked ship in the region.

Due to the intense levels of radiation that the cloaking system emits when active, you should use it sparingly. The CLOAK icon located in the SSD, gives you an indication of the Cloaking System Radiation Level (CSRL). If the CSRL gets too high the system will contaminate the deck(s) your ship.

The timer and Iridium Level (ILVL) are displayed when the mouse pointer is hovered over the icon. The timer indicates for how long the system can be activated based on the current ILVL. The more Iridium you have, the longer the ship can remain cloaked.

The system can be safely operated eight to ten minutes at a time without fear of radiation contamination. However, the contamination of various portions of the ship will occur when the CSRL indicator reaches critical mass - the Red zone. The CSRL will gradually return to zero after deactivating the cloaking system.

EMD JAMMER: The Electromagnetic Disruptor is usually very effective in jamming missiles. However, its effectiveness is reduced with continued use. Normally, you would activate the EMD jammer (**J**) when a missile is close enough for your proximity warning to starting beeping. Activate the EMD and then make a radical course change otherwise,

even while jammed, if the missile ends up being spoofed and then stops tracking and flies in a straight line, you will still get hit.

PTA: Most capital ships have various amounts of turret laser arrays in addition to the main gun laser. These turrets are controlled by the Passive Target Acquisition, PTA system.

Once activated, the turrets will acquire and automatically fire on hostile targets that are in range.

The PTA turret intensity setting affects both firepower and recharge rate of the turrets. At min setting, the PTA recharges at 1.5 the time but has 1/4 the power and range. The penalty at high fire rates is compensated for by increased rate of fire greatly improving the chances of a hit on smaller objects.

The system automatically selects a low recharge setting for the lasers but you can modify them manually via the icon.

FATAL: The FAsT Target Acquisition & Lock target acquisition system provides an easy way of attacking targets in the heat of combat using the ship's weapons computer and missile launch systems. Up to eight (8) missiles at a time can be designated on target(s) for the FATAL system.

To designate a FATAL target, select a missile as normal. Then select the desired target from the target list.

When a FATAL target is designated, the missile is armed and starts to track the target that is displayed in a yellow TTD. Once the target comes within range of the missile, the missile will be automatically launched by the FATAL system and guided by it's own internal radar guidance system.

The tool tip for a FATAL missile shows the designated FATAL target. If the target is destroyed, it is cleared from the target list.

Once you have assigned a missile to the FATAL system, you will no longer be able to fire it manually. To regain control of a previously assigned missile, remove the target from the list by selecting the designated missile and using the cancel designation option.

You can also select a different target for the missile, without first removing it from the FATAL system.

DOCK AT A STATION

There are times when you will want to dock at a friendly or neutral station in order to trade, recruit personnel or perform repairs.

Target the station in the SPC mode of the TRS. Depending on the range to the station, jump to it using the HyperDrive system.

Once you are within 25km of it request docking clearance by pressing **ALT+D**.

If there are no hostile threats around and the station's docking bays are functional, you will be immediately docked and logged into the station's computer systems.

You can also select the FLY-TO order from the command menu orders tab and select the station from the friendly target list. Once you activate the autopilot system, the craft will fly to the station. At a range of 25km or less, press ALT+D to request docking clearance.

If you are towing a craft with your tractor beam, you will be asked if it should be delivered to the station. If you say yes, **(Y)**, then the craft will be delivered. If not, **(N)**, it will remain outside the station until you launch from the station later.

On a planet, you can also use the same procedure to dock your fighter, shuttle or vehicle, with a starbase.

CAPTURE A STATION

You can capture hostile stations and place them under control of your race/caste alliance.

When stations are badly damaged or low on resources (if you have a siege in place), they will emit an SOS signal allowing a hostile ship to dock and capture it. Docking with a hostile station emitting an SOS will prompt you for a response to a capture request. Once you dock, the station race/caste will change to your own, i.e. Terran/Military.

Once you or an NPC ship has docked with the station and taken it over, the SOS condition is cleared and a ten minute timer begins. Until this timer expires, no other ship can capture the station.

All previously deployed ships from the station will attempt to flee from the region and any fighters that were previously engaging the station will cease attacking it when it emits an SOS or is taken over.

NPC ships can also capture stations, therefore if a station is emitting an SOS, it can be taken over by an NPC ship that is either docking as a routine order or docking as a result of a direct AI order to capture the station. All nations will attempt to recapture their stations over time.

Apart from gaining Experience Points and medals for capturing a station, you also have Fleet Command And Control access to all of the station assets if you are of the proper rank (Strategic Commander or higher).

CREATE A FLEET

In order to build a fleet, you must be of sufficient rank (Strategic Commander or higher).

Once you have Fleet C&C control authority, you can create your own fleet, regardless of what ships are assigned to you by a scenario (e.g. Instant Action).

1. To create your own fleet for roaming the galaxy, you would:
2. Access the Fleet tab from the CSM
3. Select the station from the targets list
4. Select a craft from the station's assets list and give it the ESCORT order, with your craft (selected from the Priority List) as the target.

The station will then launch the craft with the desired order.

If you go back to the Fleet tab, you should now see this new ship in the friendly objects list, with an ESCORT order and your ship as the target. From here, you can select it and give it further orders as you can your own support crafts.

You can also order ships that wander into the region to become part of your fleet. You even have access to a ship's missile launch systems that allows you to designate targets for them. The procedure for both options, is the same as described above.

Commanding a fleet takes responsibility and tactical training. Requesting five carriers to go on a galactic killing spree is not going to earn you any medals. You could get innocent personnel killed as well as subject GALCOM forces to enormous losses.

If you are ever court-martialed or do anything that causes your EPs to be lowered and your rank reduced, you will lose Fleet C&C. Subsequently, all crafts under your command, other than your own support crafts (assuming you are commanding a carrier), will return to the nearest station.

LAUNCH PROBES

Probes can be used to gain tactical info about a region you are not located in. This is useful in instances where you don't want to jump into a region without scouting it first. They also provide a lot of tactical feedback about the region they are located in.

When in SCILINK mode, you can also use probes to view regions that your ship is not physically located in.

1. From the TACOPS system, select the Probe Control icon in the RHS icon bank and launch it. You can also perform quick probe launches using the PLS tab of the NID, but you won't have as much control or info, as in TACOPS.
2. Select the launched probe's box (changes from Green to Yellow) and select a jump anomaly from the JUMP AT target list.

The probe will now fly to the selected jump anomaly and jump into the connecting region. Once it reaches the destination you will be alerted by the ship's computer. You can then select the probe icon box again, and use the View Probe Region command to peek in that region. You should be able to see everything that is in that region.

To reprogram the probe and send it on to another destination, select it again. This time, the target list will contain jump anomalies in the probe's current region.

To switch TACOPS back to your location region, select the probe icon box again, and use the View Local Region command.

You can always tell where your probe is and where it is going, by hovering the mouse over its icon box.

PREVENT INTRUDERS FROM STEALING MY SUPPORT CRAFTS

Most of the time, other NPC ships will beam intruders on to your command craft. Their main objective is to kill your crew, steal valuable cargo and escape with one of your own support crafts (shuttle or fighter). To counter this:

Have a team of marines (type doesn't matter) always on SEARCHING assignment via the TACTICAL computer

If you are not doing any launch operations, shutdown power to Launch Control via LOGISTIX. This way, they can't launch even if they did succeed in stealing a craft.

Cloak the ship in short bursts. Intruders cannot beam on board your ship while cloaked

UPGRADE MY COMMAND CRAFT SYSTEMS

You can upgrade some of your ship's systems, such as its shield, reactor, engine etc. To do this:

Dock at a station and buy the new system

Launch and from the LOGISTIX system, select the system and use the upgrade option to have your engineers do it

If you lose support crafts, you can also do the same thing. Simply purchase a new one from a station and have it replaced. The trade names of support craft replacements are FC Asset, OC Asset and SC Asset. They appear in the spare parts section of the inventory.

TOW DISABLED CRAFTS

You would use your command craft's tractor beam for this:

Select the target in the TRS and view in the VDD video mode

Activate the tractor beam with **C** and move your craft slowly toward the target until you get a lock

You can also use your shuttles to do this.:

In TACTICAL, send a crew member (e.g. a marine) to the shuttle

From either the Crew/Location tab in TACTICAL or from PERSCAN, monitor the person's location until they get to the shuttle

Launch the shuttle

Select the shuttle from the Fighter Control icon and send it the TOW orders. Select the target from the list

Once the shuttle has captured the target, it will automatically return to the command craft. If this is not the desired operation, send it the DELIVER TO order and pick, for example, a station from the list. The shuttle will then deliver the shuttle to the station and wait there for further orders. You may then either have it tow another object or have it return to base.

Only your own support crafts can dock with the command craft. So if your shuttle attempts to dock while towing a support that is not one of your own, it won't be allowed to.

One of your own shuttles can also tow your command craft, in the event that you run out of power or are severely disabled. In which case, simply have it tow the CC and then give it the DELIVER TO order and pick a station. Once the shuttle docks, you will automatically dock at the station as well, where you can then perform repairs.

COLLECT CARGO PODS

Most capital ships and stations will drop their cargo pods when destroyed. If you see any of these pods in space, you can retrieve them, thereby collecting their cargo.

To do this, simply send a crewmember to a shuttle. Then launch the shuttle with the COLLECT order and pick the cargo pod from the displayed list.

The shuttle will then collect the cargo pod and return to the CC.

You can also view the contents of the cargo pod (depending on the race/caste alliance) prior to collecting it, by targeting it in the TRS and viewing it in the SMD tab of the VDD.

You can also use the CC tractor beam to collect cargo pods. Just tractor the pod as you would any other object and then answer **Y** when prompted to retrieve the contents.

TRADE FOR PROFIT

This is all about exploration as well as understanding the economics of the galaxy. Since you can only trade with friendly or neutral stations, your choice of stations or starbases to trade with may seem limited. It's not. If you are playing as a Military caste, you do limit yourself to friendly or neutral stations. But if you play as a Trader, you have more places to trade and only have to worry about the less well equipped raider caste.

The appendix contains a list of stations, a map and their location. Use this to plot a profitable trade route and you will live long and prosper.

While there are several trading tips over on our web site, the favorite trick is to first fill up your CC cargo hold with as much cargo as you can. Then find a safe place to park it. Once you find a good area (e.g. a moon), give your CC the HALT order and then turn on the autopilot. This prevents the CC from taking off - even if attacked!

Now, send your AE to a shuttle and launch it. Use the shuttle to make trade runs with stations until you have pretty much filled up all your shuttles and CC cargo hold. Now dock with the CC, take off and go sell everything.

Remember that in order to sell cargo in your shuttle bays, you have to first transfer them to your CC bay, assuming of course that you are docked with the CC and not the shuttle itself.

If you are going to be straying far from friendly space, you definitely want to upgrade all your upgradeable ship systems, stock up on shield, reactor and cloak fuel, before heading out into unknown space.

IMPROVE THE SKILLS OF MY CREW

Your crew stats improve with experience. They gain experience by being on station (officers, medics, engineers) or going out on combat missions (pilots, marines).

If your crew are in their quarters all the time, they're not gaining any experience. Always ensure that as long as their Fatigue Factor, FF, is at a safe level that they are on station. Tired, injured or hungry personnel will go off-station automatically. Similarly, your CC support crew (engineers, medics), perform their tasks more efficiently when the officer in charge, also has sufficient experience and knowledge.

Training combat pilots and marines, is a little more dangerous. While you can simply find a safe area, then deploy them on standard patrol or escort duties they gain more experience while in combat. So, send them out...and hope they live to tell about it.

FLY ONE OF MY SUPPORT CRAFTS

From the “command” menu, give your craft the “halt” order and then turn on the auto-pilot either by using the keyboard command or by selecting it from the ASD cluster.

Go to the Tactical computer and “launch” tab and cycle to select fighter #3. If you look at the status of fighters # 1&2, you will notice that they are deployed.

Click on the arrow next to the pilot name to change the slot to “vacant”. This essentially takes the pilot of “Ready Alert” status

Click on the “crew” tab, click on the arrow next to the “on-station” assignment of the commander (that would be your AE). From the drop down menu, select “FC3 Pilot” as the new assignment.

You can do similar steps with the shuttle if you want to manually fly one – in which case, just send the AE to the shuttle directly.

Now log off and return to the bridge view.

To later dock with the CC, target it in the TRS when within 25km range, and press **ALT+D** to dock. As soon as you dock, your AE will return to the bridge.

Note that you must remember to put your ship in HALT state and then activate the autopilot, prior to taking off in a craft. If you don't do this, your ship's crew will assume control and there is a very good chance that the CC will take off and head into combat. This is most likely to occur if you have an incompetent crew of officers.

You won't realize the important of this, until you decide to either exit your CC in first person, or launch in a fighter, only to find that your CC has taken off. While you still have access to TACOPS in all cases, and as such, can order your craft back (e.g. if you deliberately sent it off on patrol while you were down on a planet doing something), you don't particularly want to leave your CC in hostile territory, with an incompetent crew at the helm. If your CC is destroyed, the game ends. You don't get another chance.

ENTER/LEAVE A PLANET

Entering a planet is as simple as flying directly into it. Once you establish planetfall, you will regain normal flight controls but depending on your velocity on entry, you may crash into the ground if you don't grab the controls as soon as you enter the planet.

If the planet/moon is targeted in the NID and visible in the VDD video tab when you jump to it using **SHIFT+9**, you will be prompted as to whether or not to establish planetfall. If you answer **Y**, the ship will automatically establish planetfall. If **N**, it will simply fly to the planet and stop short of its gravitational pull.

If you want to enter a planet at a precise location, you have to go to TACOPS and set a waypoint for your CC. Upon planetfall, the craft will be directly above that waypoint. This is because waypoint point 1 is always the planetfall location. If there is no waypoint, the planetfall location will be selected at random.

Leaving a planet is also automatic. Pitch up to an altitude of around 14K feet (this will vary) and then press **SHIFT+9** to egress.

Certain crafts do not have the ability to leave the planet. Similarly, a damaged craft may be unable to achieve sufficient thrust to breach the planet/moon escape velocity.

There is an Egress Altitude Indicator, EAI, in the ITD area which assists in finding out whether you can egress or not.

The EAI indicates the altitude at which the O egress command will work

When at or above the egress altitude, the EAI will be at or below the HUD centerline

When pegged at the top or bottom of the altitude indicator, the EAI arrow flashes

If you enter a planet without first setting a waypoint, you will make planetfall at the center of the planet. To pick a specific location to enter the planet, go to TACOPS and set a single waypoint for the CC with Proceed To Next or Halt orders. Now when you enter the planet, you will make planetfall at the location of the waypoint.

ENGAGE PLANETARY UNITS FROM SPACE

The TACOPS computer gives you access to several planetary options, which do not require that you go into orbit. To attack targets from space, do the following.

Send troops using the transporter and deploy them at the desired location.

Send troops using shuttles and set a deployment waypoint at the desired location.

Use an Orbit To Surface, OTS, weapon to destroy the target from space - assuming you have OTS missiles on board.

Click on the OTS tab from the TACOPS menu. If you have OTS missiles on board and loaded in the weapons bay, the SetPos button will be lit.

Click on the SetPos button and move the mouse over the desired target area. The reticule size will depend on the weapon characteristics. This size also determines the weapons

coverage. Depending on the type of OTS weapon used, everything within that reticule will either be damaged or destroyed, when the weapon detonates at the center point of the reticule location.

Once the missile has a positive lock, the reticule will change color. You can then click on the LAUNCH button to fire the weapon.

DEPLOY/EXTRACT TROOPS ON A PLANET/MOON

To deploy troops on a planet, e.g. marines on combat orders, would send the crew to the transporter, using the TACTICAL system, wait until they get there, and then use TACOPS to deploy them.

Send the crew members to the transporter and wait until they get there. Then activate TACOPS.

Use the zoom to icon to zoom to the planet/moon.

Click in the small box at the center of the planet and select Observe.

Click in the desired location on the global map. Then again on the local map to find a spot to deploy them on.

Click on the Transporter button, then the SetPos button.

Click on the Deploy button to deploy the crewmembers.

To later evacuate personnel, click on the person's TTD and check the "evacuate" box from the orders menu. Then activate the transporter "evac" button and all tagged personnel will be beamed back to the CC.

You can also use shuttles to deploy/extract troops.

Select the crew and give them the HALT order. Then mark them for evacuation as indicated above. NOTE: You can use the HOLD button in TACOPS to halt all updates, making it easier to select units.

Set waypoints for the shuttle with the deploy or extract orders as appropriate, and place the waypoints near the crew to be evacuated.

Launch the shuttle and it will evacuate the crew (if found) and return to the CC (unless it has other waypoint orders)

DEPLOY/EXTRACT FIGHTERS/VEHICLES ON A PLANET/MOON

To deploy support crafts on a planet/moon, use the above methods to create waypoints for them, then launch as normal. The closer your CC is to the planet/moon, the quicker the crafts will get to the surface.

One thing you should also remember is that you must set at least two waypoints when deploying crafts and the second waypoint should be at least 5 - 10 km from the previous. This is because once they get to the planet and intercept the first waypoint, they will automatically return to base. So, if you want a craft to do an order around on the planet, use something like this:

Waypoint1 - Proceed To Next
Waypoint2 - Search And Destroy
Waypoint3 - Repeat Actions

You can set other waypoints between 1 and 3, the most important thing is that there is more than one waypoint if you want the craft to remain on the planet. And the distance between waypoints should be at least 2km. The number displayed on the waypoint line is the distance from the previous waypoint.

To extract fighters, simply give them the RTB order. If they are inoperable to too damaged, then send a shuttle down with a Tow order.

To extract a vehicle, use waypoints and orders similar to the methods used for deploying/extracting a mining drone. If there is space in the shuttle, it will collect the vehicle.

DEPLOY/EXTRACT A MINING DRONE ON A PLANET/MOON

You can deploy mining drones on a planet so that they can mine for minerals that you can later sell or use for repairs and fuel.

Check TACTICAL and ensure that there is a drone in the shuttle you wish to launch.

Send at least one crewmember to the shuttle and wait until the crew member is in the shuttle. Then activate TACOPS.

Use the zoom to icon to zoom to the planet/moon.

Click in the small box at the center of the planet and select Observe.

Click in the desired location on the global map. Then again on the local map. You may have to use the HOME, END, PAGEUP, PAGEDOWN keys to zoom to the ground. Even though you can use the arrow keys to orient the map, setting waypoints is best done from a top down view. The numeric 5 key also resets the view to the global map view.

Click on the Waypoint button, then the CC button to display the list of crafts. From this list, select the shuttle.

Click on the Add button and then on the 'Proceed To Next' button to display the list of orders and select this order.

Click on the SetPos button, pick a location (you may need to zoom in/out a bit) and click to place the waypoint. Try for relatively flat terrain.

Create a second waypoint as before, but make sure that it is at least 5 -10km from the previous waypoint. Give this second waypoint the Deploy Drone order.

If you want the shuttle to hang around, rather than return to base, then create another waypoint with Halt orders. To have it return later, just select this same waypoint and change its orders to RTB.

Click on the SHUTTLES icon, select the shuttlecraft and launch it. It will now fly to the planet, establish planetfall, deploy the drone and return to base (if you opted not to create the second waypoint)

To later retrieve the drone, you can either use the same steps above, but set a Extract Drone waypoint near the drone, or manually fly a shuttle and retrieve the shuttle yourself, using the shuttle HUD menu.

You can monitor the drone's storage levels via the TACTICAL computer. This way, you know when to extract it.

EXIT/ENTER AN ASSET IN FIRST PERSON MODE

Press **ALT+E** to exit the craft. To get back on board, target the craft (using the DIE unit) and press **ALT+D**

You can use this method while in control of any vehicle or craft on the planet - however, the craft must be on the ground, or in float state when on water. In space, you cannot exit while flying a fighter.

You can also exit your CC when in space. To get back into the CC, fly to within 1m and press **ALT+D** to dock and enter it.

SWIM IN FIRST PERSON MODE IF I END UP IN WATER?

If you end up in water, you can also float or swim. If you run out of air (watch your O2 sensor) while submerged, you will die once your LF reaches 0. To gasp for air, simply swim to the top, so that your head is above the water line. Your rebreather will replenish your air supply.

Note that your weapon will be automatically holstered and you cannot equip it unless you are standing on the seabed. The swimming controls are different from the normal movement controls.

Holding the **SHIFT** key switches to swim state (which moves your character much faster) automatically moves you forward. Releasing this key returns you to floating state.

To eliminate the need for additional roll control keys when swimming, an auto-roll mechanism is active. This is transparent and prevents you from swimming inverted or at a strange roll angle. This can otherwise result if you pitch to a steep angle and then turn left or right through 90 degrees. When floating, another leveling system is used to keep the character upright.

The **BACKSPACE** key is also used as a toggle for swim/float. i.e. if you are in water and you turn it on, you will remain in swim mode and must press the **SHIFT** key to float. While in this mode, you can use the **W** and **S** keys to pitch down/up.

If while floating or swimming you touch the seabed, your character reverts to walking state. You can resume floating/swimming by pressing the **F** key to float upward clear of the seabed. While on the seabed you can run as if you were on dry land. You can also equip your weapons.

In swim and float states the mouse POV handling switches to a different state in order to assist you while swimming.

DITCH MY CRAFT IF I LAND IN WATER

If you are flying a shuttle, it can land on water without sinking. It can also takeoff. Any other craft that lands on water will slowly sink to the bottom after a few minutes. Once it touches the seabed, it will self-destruct.

If you find yourself in water, you can simply exit the craft with **ALT+E** and swim to shore as normal.

Be very careful about landing near a coastal shoreline. Some areas are so shallow and have soft soil that the ship will sink as if it were out in the deeper ocean.

JUMP TO ANOTHER PLANETARY BASE USING A DJP

Most bases have DJPs that are used to go from one part of the base to another – or to a completely different base on the same planet. These operate like standard jump anomalies but can only transport personnel.

The map display at the top right of your first person view is of the current mission zone you are on and is similar to the map in the NID. Around the display is a compass showing your heading. Around the map are also three indicators that show the range (m) to and

heading of the nearest supply station (S), nearest DJP (D) and the current target (T). Using this map, turn in the direction of the DJP and head toward it.

To activate a DJP, stand in front of it and press the **U** key. A menu will then pop-up and display all valid destinations which you can choose from. A DJP will de-activate for five minutes after it is used. As such, you will have to wait for five minutes before you can use that one again. You can use the map display to locate the nearest DJP.

If you have marine escorts, when you use the DJP, they will jump after you.

HEAL, REARM, REPAIR ETC DURING COMBAT IN FIRST PERSON

If your armor takes damage you can use your toolkit to repair it. The toolkit can be used to repair your body armor. Each application will boost your armor integrity by 10 units. Each Toolkit can be used 4 times. To use the toolkit, press the **K** key.

The medkit can be used to increase your health stats. Each application will boost your LF by 10 units, reduced your FF by 15 units and clear any radiation or infection condition instantly. Each medkit can be used 2 times. To use the medkit, press the **M** key.

Most bases and starstations have supply stations and an MFB where you can perform various operations such as rearming, repairing your body armor and healing your injuries. To activate a station or MFB, stand in front of it and press the **U** key. A menu will pop-up and display the available options. You can use the map display to locate the nearest station.

NPC personnel (e.g. marines) can also use supply stations if ordered to do so via the Team Orders Menu.

== THE END ==