OFFICIAL ORIGIN HINT BOOK

ARMADA™

WING COMMANDER®

PLAYTESTERS' GUIDE

ORIGIN®

ARMADA

WING COMMANDER

Playtesters' Guide

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SHIPS

HUMAN OR KILRATHI?

The first question that comes up when you sit down to play any game of *Wing Commander Armada* is whether to play the Confederation or the Kilrathi.

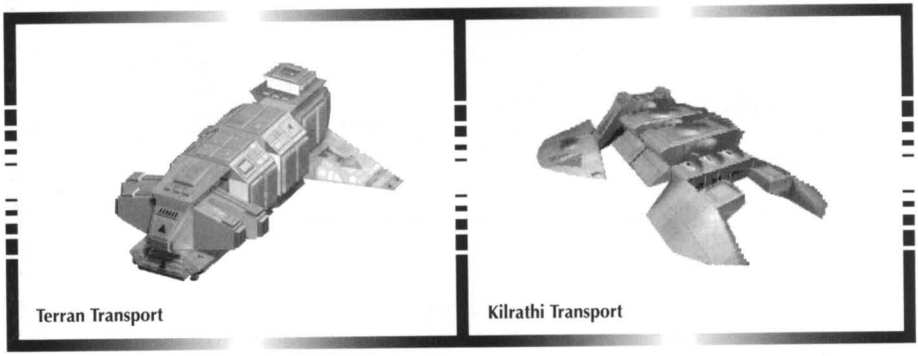
Strategically speaking, neither side is "better" than the other. The designers of *Armada* have gone to great pains to insure that both sides have a balanced suite of fighters to choose from. This is not to say that which side you select will have no bearing whatsoever on whether or not you win. However, the important question is not, "Which side is best?" but "Which side is best for *me*?" In the end, your choice will probably come down to a question of which fighter best suits your fighting and playing style. Once you find the fighter that works best for you, you'll probably want to stick with the side that makes that fighter. Or you may just want to decide whether you find it cooler to imagine yourself as a human or a Kilrah pilot ... ultimately, that's probably as valid a reason as any.

Each side has five different fighters available, with each fighter specifically designed to go head-to-head with the fighter of the same size on the opposite side. Although balanced in general terms, the different pairs of fighters do have certain strengths and weaknesses relative to one another.

TRANSPORTS

As the name implies, transports are used to move resources around between planets. Only the carrier can actually build new mines, shipyards or fortresses, but a few well-placed transports can allow the carrier to amass the resources it needs for its building projects much faster. Transports are also useful when you capture an enemy planet with stockpiled resources, to pick those resources up and get them back to your carrier behind your lines.

If all a transport's fighter escorts are destroyed, any enemy fighter can come along and take possession of the transport, turning it (along with any resources it may carry) into an enemy ship.



Terran Transport

Kilrathi Transport

Ship-to-Ship Comparisons

Arrow

Slightly better shields, fore and aft, worse armoı

Slightly better speed.

Regenerates shields slightly faster than any othe

Gun has much better speed and range, but dan

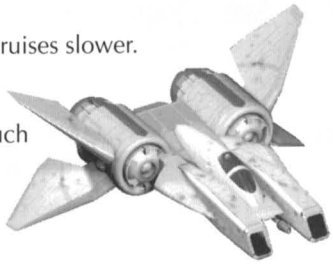
Dralthi

Gun packs a little more punch, but range is much shorter.

Slightly worse shields fore and aft, better armor and side shields.

Notes	*Arrow*		*Dralthi*	Notes
Front and Back	✔	Shields		
		Armor	✔	
		Gun Damage	✔	
	✔	Gun Range		
	✔	Speed		
Smaller silhouette	✔	Evasive potential		

PHANTOM



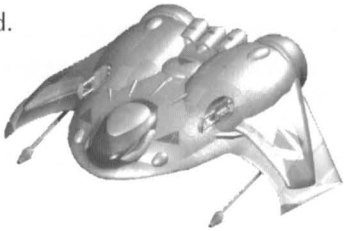
Better acceleration. Slightly better top speed, but cruises slower.

Inferior missiles.

Laser cannon has slightly better range but does much less damage than sonic accelerator. Mass driver completely inferior to the neutron gun.

Better armor (especially sides), slightly worse shields.

SHOK´LAR



More missiles, all self-targeting. Mounts a chaff pod.

Sonic accelerator give better damage, nearly equal range to laser cannon.

Matter disrupter gives better damage than the mass driver, at far greater range.

Slightly better shields, weaker armor.

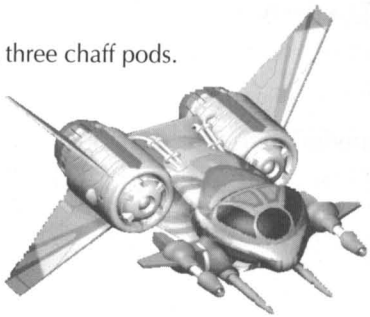
The only fighter in the game with a cloaking device.

Notes	*Phantom*		*Shok´lar*	Notes
		Shields	✔	
	✔	Armor		
		Gun Damage	✔	
		Gun Range	✔	
		Missiles	✔	
		Cloaking Device	✔✔✔	Unique to *Shok´lar*
Slightly better top speed	✔	Speed	✔	Cruises faster

Wraith

Overwhelming missile superiority — two Leeches, three chaff pods.

Better armor.



Jrathek

Only four missiles, but all self-targeting. One chaff pod.

Shields equal, but armor worse.

Although individually the Wraith's guns are slightly superior, the *Jrathek*'s centered photon cannons are deadly — if you're hit by one, you will be hit by the other. This "double whammy" makes the *Jrathek* one of the best marksman's fighters in the game.

Equal speed and acceleration.

Notes	*Wraith*		*Jrathek*	Notes
	✔	Shields	✔	
	✔	Armor		
		Guns	✔	
	✔	Speed	✔	
Unique to *Wraith*	✔✔✔	Leech		
	✔✔	Dumbfire Missiles		
		Targeting Missiles	✔	
	✔	Chaff Pods		

Gladius

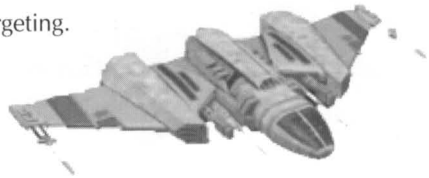
Faster, better acceleration.

More missiles overall, but only one self-targeting.

Three different types of gun.

Particle cannon outperforms flux cannon.

Slightly better armor front and rear.



Kor-larh

Not as fast.

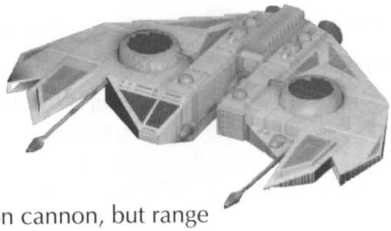
Slightly better side-shields.

Two self-targeting missiles.

Extra torpedo and chaff pod.

Only two types of guns.

Phase blaster does better damage than tachyon cannon, but range is slightly shorter.



Notes	*Gladius*		*Kor-larh*	Notes
Three types of gun	✔	Guns		
	✔	Dumbfire Missiles		
		Targeting Missiles	✔	
	✔	Torpedo	✔	
	✔	Speed		
	✔	Armor		
		Shields	✔	Side

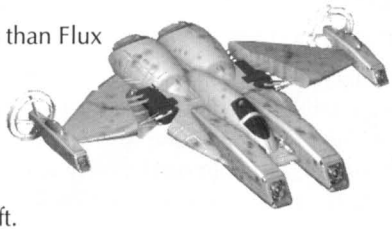
Banshee

Slightly faster.

Ionic pulse cannon does much better damage than Flux cannon, at only slightly reduced range.

Photon cannon outperforms electron gun in every way (but watch out for energy depletion).

Inferior shields and armor, except right and left.

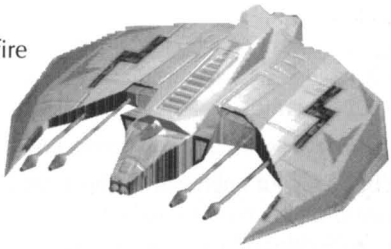


Goran

Two extra targeting missiles. Two extra dumbfire missiles.

Neutron gun does much more damage than laser cannon at only slightly reduced range.

Superior shields and front and rear armor.



Notes	*Banshee*		*Goran*	Notes
	✔	Speed		
	✔	Guns		
		Gun energy efficiency	✔	
		Missiles	✔	
		Armor	✔	
		Shields	✔	

Confederation Fighters

Arrow

Flying *Arrows*

Your only assets are your speed, maneuverability and small size. As the fastest ship in the game, the *Arrow* is a pilot's fighter, and your survivability will be gauged directly on how adroit you are at staying out of the enemy's sights. Your defensive capability is enhanced by the fact that you're also the smallest fighter in the game. Your armor and shields, however, are frankly puny. The moral to this story — don't get hit.

With a little practice, you can learn to fly the *Arrow* "sideways" — perpendicular to the enemy fighters. By turning sideways, you can often fly *between* the most powerful guns of a larger enemy.

Keep behind your enemy and chip away at his rear armor. You don't have much firepower, so you have to make those shots count if you want to chip through the enemy's shields and use your missiles.

Avoid collisions at all costs. This is harder than it sounds, because your speed can sometimes run you into a slower ship before either you or your enemy realizes what happened.

Sometimes an *Arrow* can go *too* fast, moving so quickly that it's almost impossible for the pilot to get a steady shot at the enemy. Therefore, some *Arrow* pilots prefer to keep the basic speed low, and accelerate and maneuver by occasional taps on the afterburners, relying on size, rather than speed, to keep the enemy from hitting.

Fighting *Arrows*

Don't waste missiles on an *Arrow*. Your guns should have plenty of power to take him out (but don't let him flip sideways and fly between your main guns). Realistically, the *Arrow* shouldn't have much of a chance one-on-one against anything larger than a *Dralthi*, but this doesn't mean they can be taken for granted! An *Arrow* can do serious damage with it's two missiles if you're not on your toes.

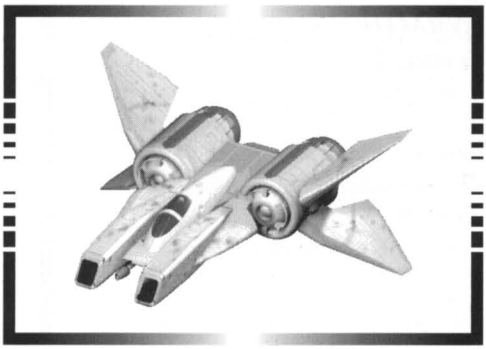
Speed, size and maneuverability make the *Arrow* hard to hit and even harder to tail. Fortunately, with the *Arrow*'s light armor you don't need to hit too many times.

Sometimes when the *Arrow* flips you get a moment of zero motion — watch for those moments and time your shots to take advantage of them.

Phantom

Flying *Phantoms*

Run and strafe. You combine small size and speed with an effective offensive gun array for a ship your size.



Your IR missiles can often take out a smaller foe in a single shot. This is important, because *Dralthi* (or *Arrows*) can outrun you, and it's in your best interest to take them out quick rather than let them chip away at your defenses during a running dogfight.

Your best bet against a larger foe is to break his rear shields with your guns, then finish him off with your missiles. Keep moving and don't get hit — if you fail to effectively use your speed against a larger opponent, you're toast.

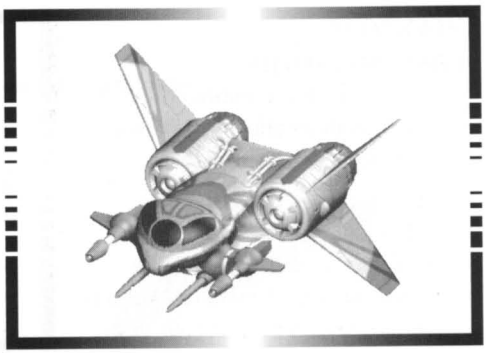
Fighting *Phantoms*

Phantoms aren't as quick to kill as *Arrows*, but with patience and good flying you should be able to take one out with guns only — save your missiles. Try to target the side shields when the *Phantom* is sliding.

A *Shok´lar* has a stronger advantage against a *Phantom* than any other matched pair of fighters. The *Phantom* simply has nothing that comes close to the *Shok´lar*'s cloaking device. Even without the cloaking device, the *Shok´lar*'s guns are markedly superior to the *Phantom*'s.

Wraith

Flying *Wraiths*



The *Wraith*'s Leech missiles make it a serious threat against all other fighter types. The *Wraith* is the smallest Confederation fighter capable of mounting a serious threat against opponents of any size.

Start your attack by locking and firing Leeches, then finish the enemy with your guns or dumbfires. But save those IRs for emergencies. The Leech-IR one-two punch is a potent and seductive combination, but use it sparingly, or you might find yourself fresh out of IRs just when you need them most. The dumbfire is much more powerful than the IR, and you have a lot of them. If you can aim your dumbfires accurately, always try to use them for the kill. (Dumbfires are also your only real hope of taking out a cloaked *Shok´lar* with a missile.)

After you've used up your Leeches, run and strafe. Don't be afraid to use your dumbfires at the end of your strafing run — you have lots. Your offense is definitely superior to your defense, so keep pounding. But remember, your *Wraith* can turn faster than its afterburners can change direction. Watch out for collisions on those strafing runs.

Be careful with your long-range cannon — it's an excellent gun, but if used carelessly it can shoot down your own missiles.

Fighting *Wraiths*

Don't let yourself get lured into going head-to-head with a *Wraith* ... its overwhelming dumbfire loadout means that engaging a *Wraith* head-on is playing right into its hands, regardless of what you're flying.

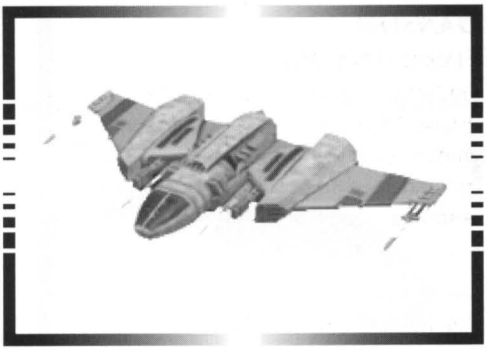
The *Shok´lar* is the bane of the *Wraith*'s existence. If the *Shok´lar* pilot uses his cloak effectively, there's virtually no way for the *Wraith* to lock on with either his Leeches or his IRs. The *Wraith* can, however, take out a *Shok´lar* with a lucky (or smart) shot from his dumbfires or his long-range cannon, so the *Shok´lar* pilot can't rely on his cloak exclusively — he's also got to use his speed and maneuverability to the best advantage.

The *Wraith* is definitely oriented towards offense. Its shields and armor are, at best, adequate, and its speed and maneuverability are not particularly outstanding. Therefore, the goal when fighting *Wraiths*, particularly with smaller fighters, is to maneuver constantly to keep out of its sights, while hammering it continuously.

When fighting multiple opponents, it's always a good idea to take out the *Wraith* first. Ideally, you want to destroy the *Wraith* before it can fire its Leech at you. Failing that, you want to keep the *Wraith* in your sights so if it does fire a Leech at you, you can have the best chance to shoot the missile down before it hits. Your best bet is to target the *Wraith*'s side shields when it slides.

Gladius

Flying the *Gladius*



The *Gladius* is a marksman's fighter. If you can make your extensive dumbfire loadout count against the enemy, you can take on absolutely anything.

Turn and roll, don't let your profile remain exposed to the enemy. Aside from the *Arrow* and *Dralthi*, you're the fastest fighter in the game, so use it. Keep the pedal to the metal.

You have lots of firepower. With good shooting and intelligent gun usage you can pound an opponent virtually continuously. All those guns drain a lot of energy, however, so time your shots carefully.

You have lots of dumbfires ... don't be afraid to use them, particularly at the end of your strafing runs. But try to save your HS missile for emergencies.

Your lack of self-targeting missiles can be a liability against smaller, hard-to-hit fighters like the *Shok'lar* and the *Jrathek*. The solution? Improve your aim. If you are a dead shot, the *Gladius'* dumbfires are an excellent answer to the *Shok'lar*'s cloaking device.

Because of its speed, the *Gladius* is an excellent choice for carrier attacks.

Fighting the *Gladius*

Like the *Wraith*, the *Gladius* has a plethora of dumbfire missiles, so avoid head-to-head engagements at all costs.

With the *Gladius'* strong defenses, there are no quick kills against this fighter. To take out a *Gladius* you have to be a good enough pilot to avoid its dumbfire missiles, or a good enough marksman to shoot them down. Preferably both.

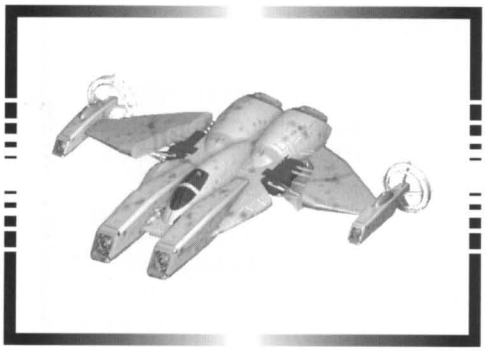
With its three types of guns, the *Gladius* can pound you from virtually anywhere. Keep moving and rolling — don't let it concentrate its fire on any one of your quadrants.

Sometimes the *Gladius* flips just like an *Arrow*, exposing the top or bottom for a vulnerable instant.

Avoid collisions. The *Gladius* is tough enough to shrug off most rams, but you might not be so lucky.

Banshee

Flying *Banshees*



You're too big and slow for any fancy maneuvering. You have to trust your shields and try to take out the enemy quick before he can ram through your defenses.

Since you're so slow, you can't run down the enemy and strafe him. You have to wait for him to come at you, then blast him as he approaches.

You have lots of self-targeting missiles, more than any other Confederation fighter.

You can save a little precious time by maneuvering with roll-and-turn. This can also give you a little extra defensive edge. It's not much, but it's virtually the only evasive tactic you have.

You're just a little faster than the *Goran,* and sometimes you can get behind one in a dogfight. This is important, because head-to-head the *Goran*'s defenses are stronger than yours.

You have a lot of offensive potential, but all those powerful guns drain a lot of power, so time your shots.

Fighting *Banshees*

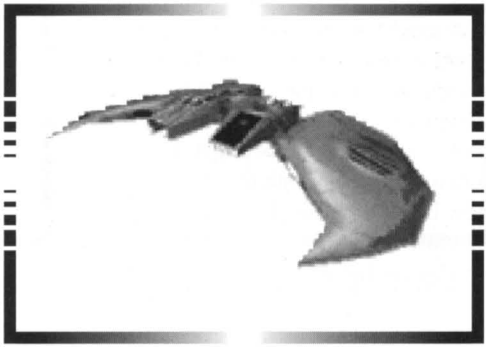
Think of the *Banshee* as basically a floating bunker. It's big, effectively immobile, hard to crack and just bristling with all kinds of unpleasant and painful objects. There's really only one way to take out a *Banshee* — stay out of its sights and keep pounding it until it pops.

Try to tail it and break its rear shields. Sometimes, however, the *Banshee* can be almost too easy to tail ... it's so slow that you might find yourself crashing into its rear before you realize it. The *Banshee* can probably take it, but you probably can't, so avoid collisions at all costs.

Kilrathi Fighters

Dralthi

Flying *Dralthi*



Practice rolls to get used to your offset cannons. Once you've mastered the art of rolling while staying on target, you'll present a much smaller, more confusing target yourself.

Your flat profile makes you hard to hit. To get the most advantage from it, avoid flips or head-to-head charges.

Your best assets are your speed and maneuverability. Try to tail your enemies and take out their rear shields.

Fighting *Dralthi*

They're hard to tail because of their speed and maneuverability. Make certain of your aim and time your shots.

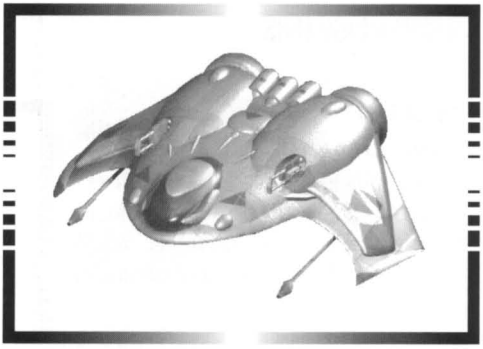
The extremely flat profile of the *Dralthi* makes them hard to hit when they're coming straight at you, but their large wingspan can make them a much easier target than the *Arrow* if you can get slightly above or below them.

Sometimes they flip, giving you a shot at their top or bottom, and sometimes giving you an instant of motionlessness.

Watch out for collisions, particularly if the *Dralthi* is flipping. A *Dralthi* will usually survive a collision with an *Arrow*, due to its heavier armor. Collisions with other ships will probably destroy the *Dralthi*, but may do serious damage to the other ship in the meantime.

SHOK´LAR

FLYING *SHOK´LAR*



Your best weapon is your cloaking device. You're the only ship in the game that has one. You can't fire while cloaked, nor will your targeting missiles target under cloak. Therefore, your best bet is to use the cloak to get in close, uncloak long enough to squeeze off a few blasts or a missile at your opponent at close range, then re-cloak and re-maneuver before the enemy can return fire.

You will regenerate shields and repair damage while cloaked, making the cloaking device an excellent bolt-hole when you're in trouble.

Your cloak makes you the smallest fighter in the game capable of mounting a serious threat to enemy fighters of all sizes. It does not, however, make you invulnerable. The enemy can't lock his missiles on a cloaked *Shok´lar*, but he can hit you with gunfire or dumbfire, if he's lucky, or if he foresees your tactics.

Your primary tactic is always to run and strafe. Conserve your missiles — save them for certain kills, after you've punched a hole in the enemy's shields.

Your defenses are substandard, so keep moving and stay on the offensive. If you must take damage, try to take it on your strong fore-and-aft shields. Don't let the enemy fire at your sides, and don't let him get through to your armor.

FIGHTING *SHOK´LAR*

His cloak will keep your targeting missiles from getting a lock, so you have to rely on good shooting with guns and dumbfires to take him out.

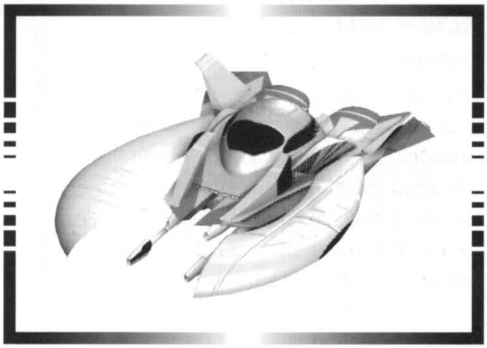
Their armor is weak, so once the shields are down, don't hesitate to let a missile fly — it will probably finish him for you.

For all its tiny size and puny armor, the *Shok´lar* is a serious threat to every other fighter in the game, due to it's cloaking device. Even without the cloak, the fighter is fast and so are it's guns, and if you don't fly sharp it can do a lot of damage before you can finally take it out.

*Shok´lar*s often take a long time to stalk and kill. It often takes longer to finish off a *Shok´lar* than to destroy a much larger fighter. Therefore, when fighting mixed groups that include *Shok´lar*, it's usually a good idea to take out the other fighter types first, just to reduce the enemy firepower arrayed against you, before you settle down into your *Shok´lar* hunt.

Jrathek

Flying *Jrathek*



The *Jrathek* is another good all-purpose fighter. It doesn't have any fancy tricks like the *Shok´lar*'s cloak or the *Wraith*'s Leech. It does have an excellent balance of speed, defense and offensive punch.

Because your guns are powerful but short-ranged (and your missile supply is strictly limited), the *Jrathek* has to be flown aggressively. Don't try to fight a defensive battle with a *Jrathek* — go in for the kill.

The *Jrathek*'s missiles are all self-targeting, but it only has four of them. Therefore, it's important to make every missile shot count. Don't waste your missiles against an opponent's shields. You have good guns — use them to punch a hole in the shields, then send a missile through it to finish him off.

Try to get behind the enemy, if you can, and punch through his rear shields. Don't let yourself ram him.

Be careful with your missiles. But your guns also take a long time to recharge, so if you're in close and you're recharging, that's probably a good time to let a missile go.

The *Jrathek* have a strong offensive asset in the centered placement of their twin photon cannons. Because they're so close together, the cannons are almost one double-strength gun. Because of the photon cannons' power, some pilots like to turn off their flux cannons entirely, to save power, making the *Jrathek* the most common exception to the "always use all guns" rule-of-thumb.

Fighting *Jrathek*

J´ratheks have excellent speed for a fighter of their size, so stay sharp.

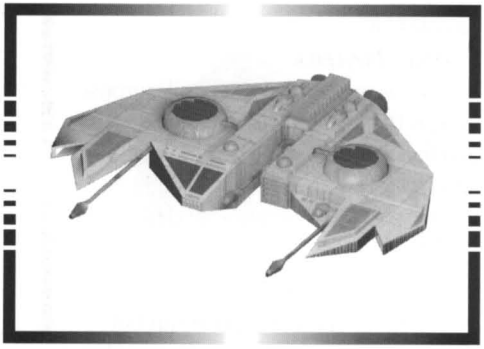
J´ratheks are very good at avoiding your shots, but their guns take a long time to recharge, so your locked missiles have an excellent chance of getting through between salvos.

The *Jrathek* has few missiles, and its guns, while quite powerful, are very short range. Therefore, if you're smaller and faster than a *Jrathek*, try to stay at extreme range and pick at him from a distance.

The *Jrathek*'s centered photon-cannon make it impossible to fly between his guns with a small fighter.

Kor-larh

Flying *Kor-larh*



Like the *Dralthi*, it takes some practice to get used to rolling with your offset cannons, but it's a skill well worth learning. It can make you a much more confusing target, and heavy fighters need all the edge they can get when it comes to maneuverability.

You don't have as many guns as the *Gladius*, but the guns you do have have slightly more firepower. Your biggest disadvantage is the extremely short range of your guns.

Think of the *Kor-larh* as a flying battering ram. You come in, pound the enemy once hard, back off and do it all over again.

With two torpedoes and its relatively high speed, the *Kor-larh* is an excellent fighter for carrier attacks.

Fighting *Kor-larh*

The *Kor-larh* can flip, giving you a quick shot at his top or bottom.

Kor-larh are tough. Avoid colliding with one.

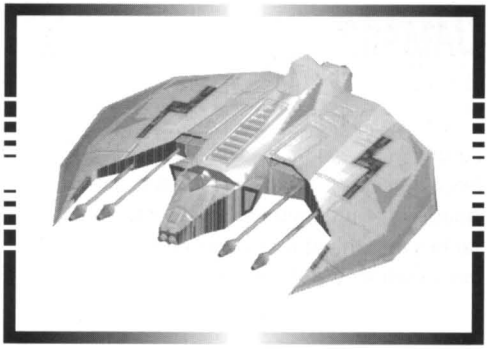
Kor-larh aren't quite as fast as the *Gladius*, but their speed at least equals that of any other fighter in the game except the *Arrow* and *Dralthi*. Keep moving, don't let a *Kor-larh* run you down and strafe you — with its firepower, a strafing run from a *Kor-larh* is extremely deadly.

Kor-larh are most deadly up close. A good marksman will always try to keep them at arm's length.

The *Kor-larh's* two long range guns are mounted on his front lower left corner. Therefore, try to engage a *Kor-larh* from above or from his right side.

Goran

Flying *Goran*



You have the potential to do more damage than any other ship in the game, but you have to be patient. Time your shots, then use your missiles for the kill.

Your best defensive tactic is to roll and flip. Don't think you have to just sit still and let them come to you — your maneuverability isn't your strongest asset, but you can still surprise an enemy with a well-timed dodge or jog. *Gorans* are excellent ships to maneuver with afterburners.

You have the best armor and shields in the game, particularly in the front. If they want to ram you, let them ram you — you'll win. If you go head-to-head with a *Banshee*, odds are your armor superiority will allow you to come out on top — assuming both sides are hitting with equal efficiency.

Fighting *Goran*

The *Goran* is the slowest ship in the game, but it can surprise you with its maneuverability.

The *Goran* is also the most heavily-defended ship in the game. Because of its low speed and heavy defenses, the best place to be is behind a *Goran*.

It has a lot of missiles that don't require a lock, meaning it can fire them at you fast.

If the computer is flying a *Goran* against you, and you can avoid its guns early in the battle, it will usually drop to two laser cannon to conserve energy.

Damage

A winning fighter pilot needs to understand how his ship takes damage in battle. This section describes how the computer allocates damage during a dogfight.

Ships have four quadrants for damage purposes — fore, aft, right and left. Each quadrant is independent of the others for defense purposes — this is why it's good tactics to concentrate your fire on a single enemy side whenever possible, and to keep your own ship rolling and turning.

Shields

The first line of defense are the ship's shields. Shields start out at maximum efficiency, and deteriorate as they take damage. Damaged shields are constantly being repaired by the ship's repair systems. The current status of the shields is displayed on the shield gauge.

Armor

When a shield has been completely eliminated from a given side, damage starts going to armor. Armor cannot be replaced by the ship's repair systems (though it is replaced anytime the fighter sets down on the carrier during Gauntlet, or between battles in Armada/Campaign). If armor is completely stripped from a given side of the ship, any further hits to that quadrant will destroy the ship.

Internal Components

Whenever armor takes damage, that damage also affects the internal components of the ship. Internal components include radar, autopilot light, fuel gauge, energy gauge, armor gauge, set/actual speed gauges, weapon VDU, repair system, battery, engines, target VDU and lock light. Each instrument has a specific location in one or more of the four quadrants, and *could* take damage if the armor on that side is hit.

For example, if the lock light gauge is located in the right quadrant, then when the right quadrant is hit, that gauge could be damaged. If the left quadrant is hit, however, the lock light will not be affected.

When a quadrant is hit that has more than one component in it, it is possible for any given component in that quadrant to take all the damage, or for the damage to be spread among multiple components.

Components can be either damaged or destroyed by enemy fire. Damaged components work, but not at full efficiency (gauges, for example, will flicker when damaged). Damaged components can be repaired by the ship repair systems. A destroyed component, obviously, does not work at all. Furthermore, destroyed components can

not be repaired by ship repair systems (although they are repaired by docking with the carrier in Gauntlet, or between turns in Armada or Campaign).

Some components are located in more than one quadrant. For such large systems, all damage from any quadrant it's in is counted against the whole component, giving them a much higher chance of being destroyed.

Components are destroyed when their quadrant takes more than 100 points of damage. This means that when a given side takes 100 points of damage, all the components located on that side are destroyed. The percentage chance for any given armor hit to damage a component is equal to the number of points of damage the quadrant(s) holding that component have sustained. Thus, if right armor sustains 15 points of damage, there is a 15% chance for each component located on that side to also be damaged.

Critical Components

Below are the effects of damage to certain critical components. The location(s) of the component is given in parentheses:

Engines. Maximum speed decreases as damage accrues (rear).

Battery. Repair rate and shield recharge rate are retarded (rear).

Repair system. Repair rate decreases (all).

Fuel system. Fuel is expended more rapidly (right, left, rear).

Component Locations

Below are the locations for all interior components. These locations are the same for all fighters, human or Kilrathi.

Cockpit Instruments	
Afterburner gauge	rear
Armor gauge	right
Energy gauge	right
Fuel gauge	rear
Fuel light	rear
Left MFD (Target VDU)	rear
Lock light	right
Radar	all
Right MFD (Weapon VDU)	right
Set speed gauge	rear
Shield gauge	left

Ship's Systems	
Battery system	rear
Engine	rear
Fuel system	right, left, rear
Missile launcher	right, left
Repair system	all
Shield regenerator	separate unit for each side
All guns	front

Damage Points

The program in *Wing Commander Armada* sets numerical values for the attacks and defenses of all the fighters in the game. These values are given below, to allow for easy comparison of, for example, whether a given missile can penetrate the armor of a given fighter in one shot, or how many shots with a certain gun array it will take to punch through the armor of a certain ship-type.

The third column lists each ship's regeneration rate, in energy units per second. This is the rate at which both shields and blaster energy regenerate (assuming the ship's battery has not been damaged).

Ships (Armor and Shields)

Ship	Shields		Regeneration	Armor		Max. Blaster
Type	Front/Rear	Right/Left	Rate/Second	Front/Rear	Right/Left	Energy
Arrow	170	150	12	120	120	200
Phantom	260	260	20	210	200	250
Wraith	400	300	24	325	225	270
Gladius	500	400	28	400	375	300
Banshee	700	700	32	500	500	400
Dralthi	150	160	12	150	150	250
Shok'lar	270	240	24	200	150	275
Jrathek	400	300	20	275	250	350
Kor-larh	500	500	28	375	375	400
Goran	800	600	28	650	450	450

Missiles

Type	Damage
Dumbfire	200
Image Recognition	190
Heat-Seeking	180
Friend-or-Foe	100
Leech	Special
Chaff pod	Special
Torpedo	Special

Guns

Note that if a gun is followed by a letter in parenthesis, as "Laser Cannon (C)," a (C) indicates the Confederation model of that weapon, and a (K) the Kilrathi. Note that these are the *full-power* values — firing a blaster with less than full blaster power reduces the damage of a hit.

Gun	Damage	Energy Used
Laser Cannon (C)	13	15
Neutron Gun	18	22
Mass Driver	20	18
Particle Cannon	23	25
Tachyon Cannon	25	30
Ionic Pulse Gun	33	37
Reaper Cannon	40	50
Photon Cannon (C)	37	43
Laser Cannon (K)	10	15
Mass Accelerator	15	18
Sonic Accelerator	18	22
Flux Cannon	20	28
Electron Gun	25	30
Phase Blaster	30	25
Matter Disrupter	33	37
Photon Gun	37	43
Photon Cannon (K)	40	50
Cloaking Device	n/a	15

For example, it takes ten full-power mass accelerator blasts (at 15 per blast) to temporarily eliminate the right shield of an *Arrow* (150). It takes another eight to destroy the right armor of the *Arrow* (120). Of course, the *Arrow's* shields might be regenerating during this time, so additional shots are often required. Any single missile (other than the FF) can completely take out an *Arrow's* right shield or the right armor.

Tactics

There are three components to winning ship-to-ship combat in *Wing Commander Armada,* all equally important. They are *positioning, weapon fire* and *gun melee.*

Positioning

A successful pilot has to learn to always be aware of where he is in relationship to the enemy. This is the art of positioning.

The first thing you have to be able to recognize is where the computer has placed your fighter at the start of the battle. If you're dropped in close range to the enemy (anywhere that he can get a radar lock on your ship), you need to defend yourself immediately. Face the target and attack with all guns. Take the initiative and immediately begin either a gun pass or a missile pass (discussed below).

If you're out at long range from the enemy (he shows up on your radar screen, but you can't make out his ship visually or get a missile lock on it) you have a little extra time to optimize your attack. Turn off the cockpit display on your screen, to give you a wider field of view. Switch to the missile type you most prefer and power up to the speed you like best. Once everything is arranged to your satisfaction, you can then begin your attack pass.

As you approach the enemy, try to keep him on the edge of your view-screen, centering him in your sight only when actually firing. Doing this makes it harder for him to shoot down your missiles, and also makes you that much harder for him to target.

Try to keep your fighter's horizontal axis perpendicular to that of the fighter you're attacking. In other words, your "wings" should be at 90 degrees to your opponent's. This makes you much harder to hit. In fact, the smallest fighters can actually place themselves to fly *between* the main guns of a larger fighter. The exception to this is the *Jrathek,* whose two main guns are centered in the nose, rather than being placed out in the wings of the craft.

Weapon Fire

Attacking with missiles is a very different proposition from attacking with guns.

There are basically three steps to a successful missile lock:

1. Acquire. Face the target and check your distance — try to stay beyond 4000 meters.

2. Lock Missiles. If you're attacking with dumbfires, this is just a matter of selecting your target and engaging your missile lock.

If attacking with any self-targeting missile, veer off from target, putting the enemy ship on the outer portion of the combat display. Avoid going head-to-head with the enemy, as that makes it to easy for him to destroy your missile with his guns while he's firing at you. By releasing the missile while the enemy is at the edge of your screen, you force the missile to approach his fighter in an arc, rather than a straight line, making it harder to zero in on and destroy.

3. Launch. The most effective tactic for dumbfire missiles is to use them in conjunction with a gun pass. The best time to release your missile is at the very end of your pass, when you're at extreme close range (the target fills your entire head-up display and you're about to collide), just before you veer off. If you prefer not to get that close, you can keep your missile out of the direct line of fire between your two ships by slightly angling your launch so that the dumbfire is heading for the outer extremities (the "wings") of the enemy.

With locking missiles, keep the enemy in the corner of your view, and launch the missile just as the enemy starts to leave your screen as he passes you. This will put the missile on his tail. If you time it right, even if the enemy turns to shoot your missile, the missile will impact while he's still turning.

When the Program Cheats

In general, *Wing Commander Armada* sticks very, very close to common-sense realism. There's really only one area where realism is sacrificed for playability.

For collisions, the impact area for a fighter is much smaller than the size of the ship on-screen. This makes it much harder to ram or collide with another ship (although rams and accidental collisions remain a very real threat, particularly when you're charging directly at an enemy). If you just brush "wings" with another fighter, there won't be any collision. For ships to collide they have to come together at the center of mass.

Remember that the effective "size" of the ship is reduced only with regards to collisions with other fighters. For purposes of gun or missile fire, if you can hit anywhere within the ship's on-screen image, your shot will hit and do damage normally.

As an offensive tactic, ramming is *not* recommended. In brief, if you're enough faster than the enemy to be able to catch him and ram him, he's enough bigger than you that you'll come off worse from the collision.

Gun Melee

The basic gun attack is the strafing run, where you fly directly at the enemy, firing full guns, and veering off at the last moment. It should be obvious that it's always preferable to attack the enemy's rear, when possible, rather than running down the throat of his guns.

Timing is very important in gun melee. If you fire too frequently, you start to lose power to your guns, so the trick is to fire as often as you can while still maintaining maximum punch. In general, a good marksman is better off attacking with all guns and spacing his shots out a bit more than sticking with a single set of guns to get more, less powerful shots (though some pilots like to make an exception for the *Jrathek* — its twin photon cannons are a powerful offensive configuration, and some prefer to turn off the flux cannons in order to squeeze a couple more shots out of the Photon cannons). Don't open up with full guns until you're within 3000 km of the target. Beyond that range some of your most powerful guns won't reach the enemy at all — they're just draining your energy for the end of the run, when you really need it.

Most fighters can fire at least six to eight times before they start to lose power to the guns. Some pilots prefer to space these six to eight shots out evenly over the duration of the run, others like to take them as two or three quick three-round bursts. Either way, however, it's vital to remember that you'll need full guns more at the end of the strafing run than you do at the beginning, so *know how many shots your fighter can fire,* and *don't exhaust your firepower before the end of the run.*

Wing Commander Armada can tempt novice players to rely on their missiles and forget about their guns in combat. Resist this temptation. Not only do you have only a limited missile loadout, while guns recharge themselves continuously, but missiles can be targeted and blasted before they hit the target — gunfire can't.

Even if you favor missile attacks, you still need to know how to make a successful gun pass. The purpose of strafing with guns is to wear down the enemy's shields so you can use your missiles to full effect. That is, so the missile can go directly to killing the enemy ship, rather than just bouncing off its shields.

Avoid afterburners while approaching the enemy for a strafing run. The afterburner slide can throw your guns off center, and in a strafing run accuracy is everything. Save your afterburners until after you're at the end of the run and ready to turn away from the enemy. If timed right, the afterburner slide can be the quickest and most efficient way to avoid collision with the enemy at the end of the run. Using an afterburner slide at the last possible moment can give you that extra split second you need to get off that last burst of gunfire or missile that will finish off the enemy, or open him up to your next attack.

At the end of your strafing run, once you're past the enemy, you can either hit your afterburners to put some distance between you and him, or turn quickly for another

short pass. Both options are viable tactics — which one you'll come to prefer depends on your personal fighting style, and on the type of fighter you're flying. If you're flying a fast fighter with a few low-power, quick-charging guns, the quick turn is an attractive option. If you turn fast enough, you may even be able to get on your opponent's tail and stay there! If you're flying something with bigger guns and a heavier energy drain, you want to use afterburners at the end of the run to give your guns a few seconds to recharge.

A winning pilot has to learn how to lead the target. Guns are fast, but not instantaneous, and by the time the shot gets to the enemy, he'll no longer be where he was when the trigger was pulled (and this is even more true when trying to shoot down missiles). The only way to learn how to lead a target effectively is through constant practice.

A good marksman also learns to recognize the difference between good and bad angles of attack. A good angle of attack for gunfire is when the enemy is facing you, turning to face you, or while you're in pursuit directly behind him. Bad angles are when he is afterburning away from you, passing you at high speed, or flying along a vector perpendicular to your own.

Tips

Below are a few important general tactical principles:

- One important tactical difference between *Wing Commander Armada* and earlier *Wing Commander* games is that when the computer is playing the enemy, taunting does *not* provoke any change in tactics. (Whether it does so against a human opponent, of course, depends on who you're playing against.)

- Don't fire your missiles directly into enemy gunfire — veer off.

- Beware of the *Wraith*. It's missile power is overwhelming, and the Leech missile can be devastating.

- There's an art to hitting with dumbfires, but if they hit they're the most devastating attack in the game. If you're fighting an expert marksman, watch out for dumbfires.

- The more sophisticated and quick a targeting missile's targeting mechanism, the less damage it does. The FF is the weakest missile in the game, the dumbfire the most devastating — if you can hit with one.

- Remember to look for good angles when firing. For missiles, look for an oblique rear angle. For gunfire, try to get on his tail, go head-to-head or hit him while he's turning.

- Don't waste gun fire when the enemy is more than 3,000 km away.

- Don't let one side take all the damage. If the enemy opens a hole in your shields on one pass, try to force him to concentrate his fire on a different side on the next pass, while the original vulnerable side is recharging.

- With sharp piloting, it is sometimes possible to fly so close to an enemy that the missile pursuing you hits him instead. Sometimes you can even get a missile to go off against the ship that fired it.

- Fast ships can avoid missile hits by hitting the afterburners and flying away at a hard angle.

- Your best friend against targeting missiles is your chaff pod. Chaff pods are particular life-savers against the deadly Leech missile.

- When you're fighting multiple opponents, and you kill one, do *not* turn directly towards your next target. Instead, assume he's firing a missile at you and take evasive action — fly perpendicular to your next enemy for a second or two before turning to begin your attack.

- If you're playing with a sound card, there's a specific sound effect when the enemy gets a missile lock on you, and another when he fires a missile at you. Learning to recognize these sounds and react appropriately will save you from kills.

- The word "lock" also appears just above your sensor display when the enemy gets a missile lock on your ship. You should always be aware when that indicator is on, and take appropriate defensive measures.

- The very best fighter pilots know how many targeting missiles the enemy has, and he'll stay on the defensive and count them as they fire, much like an old-west gunslinger counting shots from a six-shooter. When the enemy has expended most of his targeting missiles, that's when the ace pilot will move in for the kill.

Remedial Flight School

If you're having trouble coping with the learning curve of the tactical portion of *Wing Commander Armada*, you can just stick to quick combat as you play an Armada or Campaign game. If you have an effective overall strategy, you should have a numerical superiority in enough battles to carry you through to victory using quick combat.

However, if you want to experience the thrill of dogfighting first-hand, and just can't seem to get the hang of it, here's a couple of exercises that can allow you to improve your piloting performance.

Set your game to two-player, split screen. Your fighter will be controlled from your joystick, and the second "player" will be controlled from the keyboard. You can use the "second player" ship as a practice dummy. Set the target's speed to wherever you want it — go ahead and make him stationary, to start out. Practice your maneuvers and approaches until you feel you have a good feel for your ship. Fire on the target ship until it's destroyed — that will provide you with target practice, and also give you a feel for how much damage it takes to destroy that particular enemy ship. Practice strafing runs — try to get as close to the enemy as you can before pulling out, without colliding. Practice avoiding collisions at the last second using the afterburner slide.

The split screen effect also has the advantage of letting you see how your fighter responds to a given joystick command.

As you get a feel for your ship, you can make these practice sessions more challenging by increasing the target's speed. You can even make him maneuver randomly by letting the fingers of your off-hand occasionally play over the control keys of the target ship. (But if you actually get to the point where you can fly two ships against each other simultaneously, you certainly have no need for remedial flight training.)

Once you feel comfortable flying your ship and using basic tactics, you can move on to Gauntlet. One way to simplify tactics in the early Gauntlet missions is to keep your speed down. This allows you to concentrate more on targeting and timing your shots (of course, in the long run, the faster you can get your ship going and still be effective, the better your odds of survival).

The best way to control your speed during practice is to reduce your cruising speed to zero, then maneuver by occasionally tapping your afterburners. Do keep your fighter moving — otherwise the enemy will quickly zero in on you for the kill — but a split-second tap of the afterburners every few seconds should be plenty to keep you from coming to a stop. At least in the early waves of the gauntlet, the targeting stability you gain from your low speed should provide enough of an offensive advantage to compensate for the defensive loss you take from low speed.

Don't get discouraged when your fighter is destroyed in the Gauntlet. Just go back and run the same mission again until you can beat it. If the Gauntlet throws a new kind of ship at you that you have trouble beating, go to split-screen mode to find that ship's weakness against your fighter.

Gauntlet

The Gauntlet is a high-intensity series of 15 fighter missions. Each mission consists of three waves of opponents, after which you return to the carrier, where your ship is either repaired or you're reassigned.

The 15 missions in the Gauntlet represent a single fighter pilot's experiences in a running battle between a Confederation and Kilrathi carrier. The 15 missions are pre-set — you'll play the same missions every time you play Gauntlet on a given side.

Gauntlet may be played two-player. In two-player Gauntlet both players are on the same side. The number of enemy fighters in the various missions do not change, so the odds will shift noticeably towards the players' side. However, on most missions where you have a wingman in one-player, the wingman will be replaced by the second player. (The exception is Confederation mission #11, where both players start out in *Arrows,* and on the second wave they pick up two *Banshee* wingmen.)

General Principles

You will always have to fight three waves of enemies in each mission. You move from one wave to the next by engaging your autopilot. Shields will always regenerate between waves, while lost armor or components that are reduced to 0% effectiveness are lost until you return to the carrier. You may, after completing one wave, wait awhile before autopiloting to the next wave, to give your repair subsystems some time to regenerate components that are still reparable. If you do decide to take some down time for repairs, it is strongly recommended that you reduce your speed to 0, to save fuel.

Missiles, once fired, are gone until you return to the carrier.

The very best fighter pilots know the enemy's ships so well that they can count enemy missiles as they're fired. When you're overmatched, counting lets you know when to go from defensive to offensive mode. Missiles can't always be seen, but they make a distinctive noise when fired at you. Learn to recognize that noise, and use it to keep track of your opponents' ammo.

In general, target *Wraith*s first, *Shok´lar*s last. *Wraith*s should be eliminated first because of their Leeches. Ideally a *Wraith* should be eliminated before it fires all its Leeches, but failing that, engaging the *Wraith* and keeping it in your sights allows you to have the best chance at shooting down a Leech if one is fired at you. *Shok´lar*s should be targeted last, because their cloaking device virtually guarantees that each one will take a long time to stalk and kill. Therefore, it's better to eliminate all the other fighter types first, to cut down on the total firepower arrayed against you as much as possible before settling down to your *Shok´lar* hunt.

Pilot Ratings

In Gauntlet combat, each fighter under computer control (including all opposing fighters and your computer wingmen, if any), are given a pilot rating of 0 to 5. The pilot rating determines how intelligently and aggressively the program will cause that fighter to fly. The higher the number, the tougher the pilot.

Pilot ratings for all enemy fighters and wingmen are given below in parenthesis following the fighter type. For example, if an entry for a given wave of a certain mission reads:

First wave opponent: *Goran* (4), 2 *Kor-larh* (4, 3)

That means that in the first wave of that mission, you'll be facing one *Goran* with a pilot rating of 4, one *Kor-larh* with a pilot rating of 4, and one *Kor-larh* with a pilot rating of 3.

Confederation Missions

Mission 1

"Kilrathi light fighters have penetrated our defenses. Intercept and destroy all enemy resistance. You will be flying an ARROW, a fast recon ship for this mission. It is equipped with only two dumbfire missiles, so use them sparingly."

You're flying	*Arrow*
Your wingman	none
First wave opponent	none
Second wave opponent	2 *Dralthi* (1, 0)
Third wave opponent	3 *Dralthi* (1, 1, 0)

Tactical Advice

- Your first checkpoint has no enemies. Take a minute to make sure you have everything in your cockpit set to your preferences (and coordinate with your wingman, if you're playing 2-Player Gauntlet), then hit Autopilot.

- On this mission you're small and fast, and so is the enemy. With such a small, quick target it can be awfully frustrating just trying to get a bead on the enemy. Watch for flips, and try to catch him with a shot then — this is practically the only time a *Dralthi* pauses for even an instant.

- The *Arrow* has lots of energy in relation to the size of its guns, which means you can probably get off 7 to 9 shots in a given pass before you start skipping. Time your shots to take full advantage of this. After an attack run, don't turn directly back towards the enemy. Instead, turn in a random direction and put a little distance between you and him, to give your guns a chance to recharge.

Mission 2

"Kilrathi light fighters are launching from an unknown location. Your mission: Overtake and destroy them before they reach the LEXINGTON. You will be flying an *Arrow* for this mission."

You're flying	*Arrow*
Your wingman	none
First wave opponent	2 *Dralthi* (1)
Second wave opponent	3 *Dralthi* (2, 1, 1)
Third wave opponent	*Jrathek* (0)

Tactical Advice

- Turn as soon as you finish an attack run, but *don't* turn directly towards the enemy. Instead, turn in a random direction and let yourself run for a few moments along your new vector. Frequent, random direction changes make it harder for the enemy to line up more than one ship against you when you're outnumbered.

- Likewise, don't try to tail the enemy as long as you're outnumbered, even if he gives you an opening. If you tail the enemy, his wingman will start to tail *you*, and you can't afford to let him get behind you even for a moment.

- There's no short cut in the third wave. There's only one enemy, and he's slower than you, so try to get on his tail. You can fire more shots in a burst than the *Jrathek*, and with your lower-powered guns you'll need to make every shot count.

- One maneuver that takes practice, but that's well worth the effort, is to tap your afterburners lightly at the end of your attack run and avoid collision with the enemy with the afterburner slide. This allows you to take full advantage if you're faster than he is.

Mission 3

"Kilrathi Medium fighters have just been detected by our long range sensors. Your mission: Engage and destroy. You will be piloting the new medium class PHANTOM fighter. It has better armor and shields and is equipped with two IR missiles as well as two Dumbfire missiles."

You're flying	*Phantom*
Your wingman	none
First wave opponent	*Jrathek* (2), *Dralthi* (2)
Second wave opponent	2 *Jrathek* (2, 1)
Third wave opponent	4 *Dralthi* (2, 2, 2, 3)

Tactical Advice

- In the first wave take out the *Jrathek* first, to nullify his IR missiles. If he does get a missile locked on to you, try to shoot it down in flight. The worst thing that can happen to you here is for the *Jrathek* to get a missile lock on you from your flank.

- The *Jrathek*'s FF missiles don't need a lock to target you, but they do less damage than an IR and are slower. If you can evade the FF on it's first pass, it probably won't have enough juice to come around for a second. Furthermore, at full shields your *Phantom* can take an FF hit with nothing lost but shield energy. An IR hit, on the other hand, will be able to punch through your shields and do physical damage.

- In the final wave the only thing to remember is to keep dodging at random. The *Dralthi* are only a serious threat if you allow them to gang up on you.

Mission 4

"The LEXINGTON has just detected the movement of a large carrier deep in the Jakal System. It is launching fighters towards us. Your mission is to intercept them. Report back if you ID the enemy carrier. You will be flying the PHANTOM. LiteSpeed will be your wingman for this mission."

You're flying	*Phantom*
Your wingman	*Phantom* (2)
First wave opponent	2 *Jrathek* (2), *Dralthi* (2)
Second wave opponent	*Jrathek* (2), *Jrathek* (1)
Third wave opponent	2 *Jrathek* (2), 2 *Dralthi* (3)

Tactical Advice

- Watch out for your wingman. Don't tag him with a stray shot or — heaven forbid — accidentally collide with him.

- The enemy will usually engage your wingman first. Look for a chance to get on the enemy's tail while he's making an attack pass at your wingman.

- Tailing the enemy is safer than jousting with him, but it takes longer. Your call.

- If you're wondering why one of the enemies in Wave 2 is ID'ed by name rather than ship type, It's because in the Kilrathi missions, that ship would be your wingman at this level. There's nothing special, tactically, about Danthrax.

Mission 5

"The enemy carrier has left our sensor range. This mission will be a standard patrol. Enemy units are not showing up, so this should be a cake walk, therefore you will be flying a PHANTOM."

You're flying	*Phantom*
Your wingman	none
First wave opponent	2 *Shok'lar* (2)
Second wave opponent	3 *Shok'lar* (1)
Third wave opponent	2 *Shok'lar* (1, 2)

Tactical Advice

- Oh those happy, happy little *Shok'lar*! Concentrate your fire against one enemy at a time. This is always a good general principle to follow, but when you're fighting *Shok'lar*s it's imperative.

- If one of the *Shok'lar*s gets a missile lock on you, try to turn and attack that ship. That way, if he gets his missile off, it will be conveniently in your sights. Also, if the *Shok'lar* has a missile lock on you, that means he can't use his cloak unless he either fires his missile or gives up the lock, so the time when a *Shok'lar* is getting a missile lock on your ship is the time when it's most vulnerable.

- Notice that in this mission, the second wave is the tough one. If you can get through that, the final wave is a bit of a breather.

Mission 6

"With the emergence of the cloaked ship, designated SHOK'LAR, command has issued us the production model of the WRAITH, a medium fighter equipped with Leech missiles, able to completely drain all but the most powerful ships' shields in one hit. Your mission: Search for enemy fighters and the Kilrathi carrier then return to the LEXINGTON."

You're flying	*Wraith*
Your wingman	none
First wave opponent	*Shok´lar* (2), 2 *Dralthi* (3, 3)
Second wave opponent	*Jrathek* (3), *Shok´lar* (3)
Third wave opponent	2 *Jrathek* (2, 3)

Tactical Advice

- Whether they're flying with *Dralthi* or *J´ratheks*, target the *Shok´lar* last. See **General Principles**, p. 30, for an explanation of this tactic.

- When's the best time to use your Leeches? That depends on your personal fighting style. If you have more trouble with *Shok´lar* than with *Jrathek*, use the Leech on the second wave to take out the *Jrathek* quick and give you more room to concentrate on the *Shok´lar* (don't even bother to try to hit the *Shok´lar* with a Leech). If you're more worried about *Jrathek* than *Shok´lar*, save the Leeches for the last wave, to try for a quick kill before the enemy can gang up on your (probably battered) fighter.

- Your *Wraith* mounts enough dumbfires to fire one at every ship you see on this entire mission. If you can make your dumbfires count, you have a good chance at a quick, decisive victory. If you waste your dumbfires, or never get around to using them at all, you're looking at a long, exhausting and punishing series of dogfights.

Mission 7

"In preparation for the jump into the Teragon system, Admiral Hancock has issued orders that all pilots are to engage enemy patrols that are near the jump point. You must ensure our safe passage into Teragon. Search and destroy all Nav points in your WRAITH."

You're flying	*Wraith*
Your wingman	none
First wave opponent	*Kor-larh* (2)
Second wave opponent	*Kor-larh* (2), *Jrathek* (3)
Third wave opponent	2 *Kor-larh* (3, 2)

Tactical Advice

- Stay on your toes against the *Kor-larh's* IR missiles. Listen for the lock-tone and try to count his missiles. Once he's used up all his IRs, you can step up your offense.

- The *Kor-larh* is big and slow, with very short-range heavy guns. Against the *Wraith*, the *Jrathek* might well be the greater danger. So if you're having trouble getting past this level while concentrating on *Kor´larh*s first, try to turn your early attention to the *J´ratheks* and see if that helps. (Again, however, you might want to wait until the enemy's used most of his IRs before taking on the *J´ratheks* — keeping the *Kor-larh* in your sights is your best bet to shoot down an inconvenient IR.)

- This is another level where you can use an afterburner slide to evade the enemy ship at the end of an attack pass, to fully exploit your speed advantage.

Mission 8

"After arriving in Teragon, Kilrathi forces seem to be preparing a massive strike against the LEXINGTON. Your mission: Repel the attack by disabling their fighters that are in the staging area. The GLADIUS heavy fighter will be your ship. It is a heavily armored gun ship that should keep you fully protected and packs enough fire power to take down nearly any ship the Empire can throw at us."

You're flying	*Gladius*
Your wingman	none
First wave opponent	2 *Jrathek* (3)
Second wave opponent	2 *Kor-larh* (3), *Jrathek* (3)
Third wave opponent	3 *Kor-larh* (4, 3, 2)

Tactical Advice

- When fighting *Kor-larh* with the *Gladius*, there's a trick that can greatly enhance your survivability. Turn your ship 90-degrees in relation to the enemy, so that your "wings" are perpendicular to his. This makes you harder to hit, and easier for the enemy to expose his top and bottom. (You can tell you're perpendicular to the enemy's formation when most of his ships are in the left and right quadrant of your radar screen, rather than the top and bottom quadrants.)

- When flying perpendicular, remember to turn to your left and right when maneuvering, to avoid exposing your top or bottom to the enemy.

- Flying perpendicular works better against the *Kor-larh* than the *Jrathek*, since the *Jrathek*'s guns are centered, rather than placed out on the "wings." Even against a *Jrathek*, however, flying perpendicular can make you a more confusing target.

Mission 9

"Scouts have given us the location of the Kilrathi Carrier SHIRAAK. This is the carrier we detected earlier in the Jakal System. Your mission: Fly your GLADIUS on a standard patrol to weed out as many fighters as possible before the main attack."

You're flying	*Gladius*
Your wingman	none
First wave opponent	3 *Dralthi* (4, 3, 3)
Second wave opponent	3 *Shok´lar* (4, 3, 3)
Third wave opponent	3 *Jrathek* (4, 3, 3)

Tactical Advice

- This level is gimmicked against you, so the enemy's firepower increases exponentially with each wave. Don't be fooled into wasting your missiles too early.

- Let the *Dralthi* come down your throat, and hammer them on the approach. Watch out for one that will try to get on your tail while you're jousting with his wingman.

- Against the *Shok´lar*, turn 90 degrees to make yourself a harder target to hit. Then pick one *Shok´lar* and stay on him until he's out, then move on to the next.

- It's tempting to think that you can take out the *J´ratheks* by saving your targeting missiles, but *J´ratheks* are often too fast to get a reliable missile lock. Therefore, even on the last wave your strongest offensive advantage remains your guns. For this same reason, if you do happen to get a missile lock on *Shok´lar*, don't hesitate to use it. Your heat-seeker probably can't kill a *Jrathek* unless it's already heavily wounded, but it can do serious damage to a *Shok´lar*, if it can find it.

Mission 10

"The previous mission's success has enabled our officers to determine the location of the SHIRAAK, however, enemy fighters are in larger numbers than anticipated. Your mission: Finish up the Kilrathi heavy fighters. The GLADIUS should prove more than a match against anything you should come up against."

You're flying	*Gladius*
Your wingman	none
First wave opponent	3 *Kor-larh* (4, 3, 3)
Second wave opponent	2 *Kor-larh* (3, 3), *Shok´lar* (4)
Third wave opponent	3 *Kor-larh* (3)

Tactical Advice

- This mission is mostly a repeat of the eighth mission, only there are a more heavy fighters than medium fighters, and the average piloting level is a little higher. All the same tactics discussed under Mission Eight still apply.

- You may actually find this level to be easier than Level 8, since *Kor-larh*, while tough, aren't as tricky as *J´ratheks* or *Shok´lar*.

Mission 11

"Prior to attacking the SHIRAAK, Confederation Command is sending two BANSHEE heavy bombers for use against the Kilrathi. A fast ship is required so you will be flying the ARROW. Your mission is to fly to Nav 2 and escort the ships and return to LEXINGTON. Do not lose these ships."

You're flying	*Arrow*
Your wingmen	2 *Banshee* (3, 3) — second and third waves only
First wave opponent	*Shok´lar* (4), *Shok´lar* (3)
Second wave opponent	*Jrathek* (4), *Shok´lar* (4)
Third wave opponent	2 *Jrathek* (4, 3)

Tactical Advice

- This is the oddball mission. You're much tinier than the enemy but your wingmen are much tougher, and there are two of them, only you don't get wingmen until the second wave.

- This is the only mission where you still have computer-controlled wingmen in the two-player game.

- The first wave is, by far, the hardest to survive. All you can do is keep dodging. Stay on the defensive until the *Shok´lar* use up their missiles, than try to get on their tail and break down their rear shields. If you get a good shot with your dumbfire, by all means take it.

- After you pick up the *Banshees*, expect long, torturous combats. The *Banshees* will draw the fire, and they should be able to withstand it for a long time, but your opponents will be hard to hit. Try to tail. If you have a missile left, take any shot that presents itself, but only if you're very sure you can hit.

Mission 12

"With the BANSHEE heavy bomber in our arsenal we are preparing for our final strike, but sensors are detecting a large squad of ships that seem to match the signatures of SHOK´LAR that aren't cloaked. Fly the BANSHEE and ensure that the Kilrathi do not reach the LEXINGTON."

You're flying	*Banshee*
Your wingman	none
First wave opponent	3 *Shok´lar* (3, 3, 4)
Second wave opponent	3 *Shok´lar* (3, 3, 4)
Third wave opponent	3 *Shok´lar* (3, 4, 4)

Tactical Advice

- There's only one thing to do here — wait until they come down your throat, then blast them all the way down.

- There's no point in trying to evade or outrun, so reduce speed to zero and just keep moving with an occasional afterburner tap, giving you maximum targeting stability.

- You have a couple of dumbfires, so go ahead and use them any time the enemy is in close and you think you have even the haziest chance for a hit. If you miss, no big deal, but if you hit you'll probably take him out, so go ahead and gamble.

- You might be able to tag a *Shok´lar* with your FF, which doesn't need to lock. Release the missile when the enemy is right at the end of his attack run, to give him as little time as possible to engage his cloak or shoot down your missile.

Mission 13

"The SHIRAAK seems to be preparing to jump out. This could be our last chance to successfully neutralize the enemy. Fly your BANSHEE and get a torpedo lock. Launch the torpedo and you should have no problems. Be sure to watch out for the fighters though."

You're flying	*Banshee*
Your wingman	none
First wave opponent	2 *Kor-larh* (4, 3)
Second wave opponent	*Kor-larh* (4), *Jrathek* (4, 3)
Third wave opponent	3 *Jrathek* (4, 4, 3)

Tactical Advice

- There is no way to destroy the *Shiraak* at this level. It escapes before you reach it.

- Don't be afraid to go head-to-head with the *Kor-larh*, but do watch out for his missiles. It helps to know that when you're at full shields, your shields can probably absorb a single hit from most sizes of missiles.

- Don't waste your locking missiles against the *Kor-larh's* shields. Instead, save them for a time when you *know* a hit will go straight to the armor and do real damage.

- Locking missiles can also be used as a diversion. If you're down to one enemy, and you're badly hurt, sometimes launching a locking missile will cause him to turn away from you and try to evade the missile. If he takes the bait, that gives you precious seconds to repair and regenerate. Your repair time can be maximized by afterburning away in the opposite direction from the one the enemy dodges towards.

Mission 14

"We have lost the SHIRAAK in Teragon, however their jump signatures tell us they went to the Evian System. We are preparing to jump but enemy fighters have been detected near Jump Point Zulu-3. Clear it so we can continue our mission. You will be flying the WRAITH medium fighter. Quarters will be your wingman for this mission."

You're flying	*Wraith*
Your wingman	*Wraith* (4)
First wave opponent	3 *Dralthi* (4, 4, 3)
Second wave opponent	*Goran* (3)
Third wave opponent	2 *Goran* (3, 3)

Tactical Advice

- The *Dralthi* in the first wave are just there to try to annoy you into wasting your missiles. Don't be fooled. Just keep dodging and don't let them line up more than one at a time against you.

- The *Goran* are slow and easy to hit with dumbfires, so on the second wave try to get a quick kill by pounding the enemy with dumbfires. Save your Leeches.

- On the final wave, use your Leech against one of the *Gorans* right away, then try to finish him off quick. After the first one is out, you and your wingman can gang up on the one that's left.

Mission 15

"After jumping into the Evian system sensors detected the SHIRAAK several jump points away. All remaining BANSHEE are to launch immediately. Your mission is to destroy the Kilrathi Carrier SHIRAAK!"

You're flying	*Banshee*
Your wingman	none
First wave opponent	2 *Goran* (4, 4)
Second wave opponent	3 *Goran* (4, 4, 4)
Third wave opponent	2 *Goran* (4, 0), *Jrathek* (4), Carrier

- When fighting heavy fighter vs. heavy fighter, one unconventional tactic that sometimes works is to use your targeting missiles against the enemy's shields. This will sometimes cause him to turn and run, to try to regenerate his shields before going back on the offensive. If he does run, you can get on his tail and finish him with your guns.

- On the last wave, ignore the escorts and go straight for the carrier kill.

Kilrathi Missions

Mission 1

"We have to penetrate Human defenses. Attack and destroy all of the cowardly Humans before they can retreat. You will be flying the DRALTHI light fighter, the fastest in our fleet. It holds two dumbfire missiles, so use them only if necessary."

You're flying	*Dralthi*
Your wingman	none
First wave opponent	none
Second wave opponent	*Arrow* (1, 0)
Third wave opponent	3 *Arrow* (1, 1, 1)

Tactical Advice

- Your first checkpoint has no enemies. Take a minute to make sure you have everything in your cockpit set to your preferences (and coordinate with your wingman, if you're playing 2-Player Gauntlet), then hit Autopilot.

- There's not much difference between fighting *Arrows* with *Dralthi* and fighting *Dralthi* with *Arrows*, so the tactics for the early levels of the Confederation missions work equally well for the Kilrathi.

- Your biggest vulnerability versus the *Arrow* is your larger silhouette, which makes you easier to hit. To minimize this, train yourself to roll as you fly at the enemy. Rolling a *Dralthi* while keeping your ship on target requires a bit of adjustment, due to the Dralthi's offset guns, but if you can master the art you'll find your odds for survival materially enhanced.

Mission 2

"We are preparing a recon patrol in an attempt to locate the enemy carrier. Prince Thrakhath himself has bestowed upon us his blessing for this mission. Do NOT fail the Empire! You will be flying the DRALTHI."

You're flying	*Dralthi*
Your wingman	none
First wave opponent	2 *Arrows* (2, 1)
Second wave opponent	3 *Arrows* (2, 2, 1)
Third wave opponent	*Phantom* (1)

Tactical Advice

- The only tactic to this mission is to think defensively and stay out of the enemy's sights. Be particularly careful of any enemy you don't happen to be fighting at the moment — as with the Confederation missions, the biggest danger from large numbers of light fighters is that they might line up and fire at you all at once.

- Try to get behind the *Phantom*. Once you do, use your guns — he's probably too fast to be taken with a Dumbfire.

Mission 3

"We have detected the location of a large radar reading. This is quite possibly the location of the Confederation carrier. You will launch immediately in the medium class JRATHEK to attempt a visual of the carrier. After patrolling three Nav points return to the SHIRAAK."

You're flying	*Jrathek*
Your wingman	none
First wave opponent	*Phantom* (1)
Second wave opponent	2 *Wraiths* (2, 1)
Third wave opponent	4 *Arrows* (2, 2, 2, 2)

Tactical Advice

- As always when flying against *Wraiths*, try to take them out fast, before they can get their Leeches off.

- On this wave you may not even need your missiles, if you can keep your guns on target. The *Jrathek*'s two centered photon cannons are one of the most effective offensive arrays in the game (they're particularly handy at shooting down inconvenient incoming Leeches).

- Some pilots, in fact, like to make the *Jrathek* the exception to the "always use full guns" rule-of-thumb. They prefer to use photon cannons only, using the extra energy they get from turning off their other guns to get off a couple extra photon cannon bursts.

Mission 4

"One of the other patrols has found the Humans' base. The carrier is known as the LEXINGTON. Your flight group will be a ruse to make them commit ships. Take out as many as you can and return. You will pilot the JRATHEK once again. Danthrax will be your wingcat."

You're flying	*Jrathek*
Your wingman	*Jrathek* (2)
First wave opponent	2 *Wraith* (2), *Arrow* (3)
Second wave opponent	3 *Wraith* (3, 2, 2)
Third wave opponent	2 *Wraith* (3, 2), 2 *Arrow* (3, 3)

Tactical Advice

- Watch out for your wingman. Keep him out of your sights and don't collide!

- As always, take out the *Wraith* first, as quickly as possible.

- Take on the *Wraiths* with your photon cannons. Save your missiles for the end — you can use them to take out the *Arrows* fast, particularly if you're hurting. You're slower than an *Arrow*, but your missiles are faster. Also, an *Arrow* can often be taken out by a single hit from a self-targeting missile, but a *Wraith* can probably absorb the damage.

Mission 5

"The Humans have sent out several patrols. Most likely they are just trying to locate us. We will surprise them by sending a wing of SHOK'LAR to meet them. The SHOK'LAR contains a cloaking device. Use it wisely and do not let this technology fall into Human hands!"

You're flying	*Shok´lar*
Your wingman	none
First wave opponent	3 *Phantom* (2)
Second wave opponent	4 *Phantom* (2)
Third wave opponent	3 *Phantom* (3, 2, 2)

Tactical Advice

- Even without the cloak, a *Shok´lar* can take out a *Phantom* easy in a head-to-head fight. Your guns are much better than the *Phantom's*, so joust with the enemy. Stick to your guns — he's fast enough to dodge your missiles.

- Use your cloak at the end of your attack run, to cover you during those vulnerable moments while you're turning.

Mission 6

"Having gained the upper hand by surprising the Humans with our advanced technology, we will be sending you on another stealth run. This time you need just destroy all ships at three Nav points. Return as soon as possible because we will be jumping out of this system in 3/8ths of an hour."

You're flying	*Shok´lar*
Your wingman	none
First wave opponent	2 *Phantom* (3, 3), *Arrow* (4)
Second wave opponent	2 *Wraith* (4, 3)
Third wave opponent	3 *Wraith* (3, 3, 3)

Tactical Advice

- This is the mission where your cloaking device really comes into its own. Use it early and use it often to keep the *Wraiths* from getting a lock on you with their Leeches (or IRs, which aren't nearly as dangerous as a Leech, but can still do significant damage to a ship your size).

- Forget about your missiles. Use your cloak for defense and your guns for offense. Joust with the enemy. You can take the *Phantoms* easy head-to-head, and with a little bit of evasive action you're even a match for the *Wraith*.

Mission 7

"Jump sequence occurred one hour ago. You will be flying the KORLARH to intercept all fighters that near the jump point. It is assumed that the Human carrier is falling for our trap and following us through the jump point."

You're flying	*Kor-larh*
Your wingman	none
First wave opponent	*Gladius* (3)
Second wave opponent	2 *Gladius* (3, 2), *Wraith* (4)
Third wave opponent	3 *Gladius* (4, 3, 3)

Tactical Advice

- The *Kor-larh's* big drawback is its tiny range. You can do massive damage to the enemy, but only when he's within 500 km. So *time your shots.* You have to get off as many shots as possible in the tiny time-window when the enemy is in range.

- You're in the greatest danger in the second wave, when you're trying to take out his *Wraith* fast. As the *Wraith* approaches, keep him on the edge of the inner circle of your radar screen. This is so if he gets a Leech off, it won't have a straight shot at your front. If the Leech misses you on the first pass, there's a good chance that it will run out of juice before it can make another pass. At the last possible moment, zero in on the *Wraith* and fire. You'll have, at most, one three-round burst, so it has to count.

- Once the *Wraith* is safely out of the way, you can settle in to jousting with the *Gladius.* They'll be able to get more shots off, but you'll do more damage, so it should be an even match. The *Gladius* doesn't have any targeting missiles that can seriously hurt you, but watch out for dumbfires.

Mission 8

"The Teragon system is such a resource rich system that Prince Thrakhath has deemed it worthy of our presence. Confederation forces are massing a large scale attack though we should repel them with ease. Fly the JRATHEK and fly with honor!"

You're flying	*Jrathek*
Your wingman	none
First wave opponent	3 *Wraith* (4, 3, 3)
Second wave opponent	2 *Gladius* (4), 2 *Wraith* (4, 3)
Third wave opponent	3 *Gladius* (4, 4, 3)

Tactical Advice

- You might want to use your targeting missiles in the first wave, when the *Wraiths* are heaviest. For the best chance of success, first reduce his shields with your guns, then release the missile at the last possible second before the *Wraith* turns away. Your targeting missile probably can't kill even an unshielded *Wraith,* but it can still do some serious damage.

- Against the *Gladius,* strafe them and try to stay out of their sights. If you turn immediately after finishing your attack run, you can sometimes get a shot off at the enemy's rear, before he can turn back at you.

Mission 9

"A rival faction is trying to gain control of the Empire. Admiral Nik'Ras has sent a wing of SHOK'LAR at us. Prince Thrakhath has demanded the death of the traitors. Claw their throats and make an example of those that would defy the Emperor."

You're flying	*Shok´lar*
Your wingman	none
First wave opponent	2 *Shok´lar* (3), *Dralthi* (4)
Second wave opponent	2 *Shok´lar* (4, 3), 2 *Dralthi* (4, 4)
Third wave opponent	3 *Shok´lar* (4, 4, 3)

Tactical Advice

- Since everybody should have the joy of fighting *Shok´lar,* this mission gives you the privilege of going up against renegade Kilrathi in cloaked fighters.

- Forget about your cloak, unless you hear the missile lock tone, in which case you might want to cloak up for a second or so to break the lock (or you can just take evasive action).

- This mission will be decided by speed and precision. When jousting with other *Shok´lar,* use your afterburner slide to evade, to give you maximum firepower at close range.

- If you can get a quick missile lock on a *Dralthi,* and use it to take it out fast, great. But remember, if you've got time to lock on a *Dralthi,* another *Shok´lar* has time to lock on *you.*

Mission 10

"Scanners show that the location of the Human carrier is behind us at nearly 50,000 octomaks. A large number of Human heavy fighters is approaching. Fly a KOR-LARH and destroy the enemy fighters."

You're flying	*Kor-larh*
Your wingman	none
First wave opponent	*Gladius* (4), 2 *Wraith* (4, 4)
Second wave opponent	2 *Gladius* (4, 3), *Phantom* (4)
Third wave opponent	3 *Gladius* (4, 4, 3)

Tactical Advice

- This mission is more or less a repeat of mission 7. Once again, your greatest threat is the *Wraiths* in the first wave, and the exact same tactics are needed to take them out quickly. It's a break for you that the *Wraiths* come in in the first wave, ensuring that you'll be at full defensive and offensive strength as you take them on.

- Ignore the *Phantom* in the second wave until he comes to you, then try to blast him at the end of his attack run. Other than that, the only thing you have to worry about is not letting him get on your tail.

- Against the *Gladius,* it's once again just a matter of jousting, and outlasting the enemy.

Mission 11

"The Humans fall before our might. Continue their slaughter and you will bring honor to your house. The Confederation is receiving a convoy of a new class of "ships which you must intercept and destroy before they can use them. Be wary of this new ship—it has claws! Kar-Pak will be your wingcat."

You're flying	*Kor-larh*
Your wingman	*Kor-larh* (4)
First wave opponent	2 *Wraith* (4, 4)
Second wave opponent	2 *Wraith* (4, 4), *Phantom* (4)
Third wave opponent	2 *Wraith* (4, 4)

Tactical Advice

- This is probably the single toughest mission anywhere on the Gauntlet, regardless of whether you're playing Confederation or Kilrathi. Only a true ace pilot has even a ghost of a chance of surviving here.

- You must start out each wave in full defensive mode. Try to spot the enemy's Leeches as they come at you and shoot them down. Keep dodging often and randomly, to make it easier for a Leech to miss on the first pass.

- If you do get Leeched, turn away from the battle, hit those afterburners and *run away* until your shields start to return. This is where your wingman can save you ... let him cover for you while you're vulnerable.

- Once the enemy has used up most (preferably all) of his Leeches, then you can start thinking offense. Lure him in close where your big guns can take him out. But watch out for those dumbfires.

Mission 12

"Because of the failure of other wings to destroy the new Human heavy fighters, we are sending you out in the SHOK´LAR. You must destroy all of these deadly ships."

You're flying	*Shok´lar*
Your wingman	none
First wave opponent	*Banshee* (2, 0)
Second wave opponent	*Banshee* (3), 2 *Arrow* (4, 3)
Third wave opponent	2 *Gladius* (4, 4), *Phantom* (4)

Tactical Advice

- This mission is mostly an exercise in piloting and patience. On the first wave, get behind the *Banshee* and stay there. Use your speed to stay out of his sights, and your cloak to keep him from tracking you.

- Once you've reduced his shields with your guns, go ahead and send a HS up his tailpipe. It won't take him out, but it will give you a good start on the job.

- On the second wave, ignore the *Arrows* and get on the Banshee's tail again. The only danger from the *Arrows* is if they can line up on you, and that's hard for them to do when you're behind a *Banshee*.

- On the final wave, run and strafe the *Gladius*, using your speed as your primary defense. Your cloak can help, but your speed is your best bet.

Mission 13

"We have jumped out of Teragon and into the Evian system in an attempt to lure the Humans to the testing site of our most heavily armored fighter ever, the GORAN. There seems to be few Human pirates and renegades in this sector. They will need to be eliminated if we wish to destroy the Human carrier."

You're flying	*Kor-larh*
Your wingman	none
First wave opponent	2 *Gladius* (4)
Second wave opponent	*Gladius* (4), 2 *Wraith* (4)
Third wave opponent	2 *Gladius* (4)

Tactical Advice

- The first and final waves here play like Mission 10, which played like Mission 7. By now, you should have your anti-*Gladius* tactics down.

- The *Wraith*-heavy second wave is your biggest danger. Use the defensive techniques from Mission 11, but remember, this time you don't have a wingman to draw their fire if you get Leeched. Fortunately, you only have one wave of Leech-dodging on this mission.

Mission 14

"The Human carrier has jumped into the Evian system right on schedule. Our first attack will be just a feint. Fly the GORAN and destroy as many of the recon patrols as possible then return for repairs. Then we will be ready for our final assault!"

You're flying	*Goran*
Your wingman	none
First wave opponent	3 *Arrow* (4, 4, 4)
Second wave opponent	3 *Banshee* (4, 4, 3)
Third wave opponent	2 *Banshee* (4, 4), *Gladius* (4)

Tactical Advice

- The *Goran* is a fort. Trust your defenses.

- On the first wave, let them come to you and blast them on the way down. Don't waste your missiles.

- The *Banshee* is a little faster than you are, but you have a definite armor advantage. If both you and the *Banshee* are low on shields, you can probably take him out. Under no circumstances whatsoever can you let a *Banshee* get behind you. If you do, you're a sitting duck.

- On the third wave, the *Gladius* is a smaller, faster target, but if you can hit it, you can probably take it out. Concentrate on the *Gladius* first, just to reduce the enemy's overall firepower. Against the *Gladius* is probably a good time to use your targeting missiles, since they'll probably just shatter against the Banshee's cannon barrage.

Mission 15

"The Humans have been weaned. Give the Human carrier a cowards death! Your GORAN is equipped with torpedoes that are capable of penetrating the phase shield surrounding the carrier. We are sure that the Humans will launch all their ships to defend themselves, so don't forget about them. As always, fly with Honor!"

You're flying	*Goran*
Your wingman	none
First wave opponent	3 *Banshee* (4, 4, 4)
Second wave opponent	2 *Banshee* (4), *Gladius* (4)
Third wave opponent	2 *Banshee* (4, 4), *Wraith* (4), Carrier

Tactical Advice

- Tactically, this mission is virtually identical to the previous one. Once again, it's simply a matter of blasting his *Banshee* before they blast you.

- On the final wave, as always, take out the *Wraith* first. Keep it in your sights, so if he gets a Leech off you can blast it with your guns. Once the *Wraith* is out of the way you can take on the *Banshee* at your own pace, or just dive straight for the carrier.

Kilrathi Carrier

Resources

Planets

The things that really matter when exploring planets are *resource count* and *rate of production*, and the only way to discover those stats is to explore each planet.

There are three different planet sizes — small, medium and large. A planet's size gives some indication of its resources. The following table lists the percentage chance of a planet's resources falling within each of several ranges, based on its size. (Note that columns add to 100%, not rows.)

Resources	*Small*	*Medium*	*Large*	*Overall*
0-49	9%	6%	—	5%
50-99	35%	24%	—	20%
100-149	28%	20%	28%	25%
150-199	28%	20%	28%	25%
200-249	—	24%	35%	20%
250-299	—	6%	9%	5%

These values will always hold true in Armada, where the planets are generated randomly. However, in Campaign there are a few atypical planets which do not fall within these values. These atypical planets have been placed there by the designers, just to keep things interesting.

Planets with more than 175 resource points are the treasure chests of *Wing Commander Armada* — grab them fast, hold on to them and use them.

Planets with more than 100 resource points are workhorses. Develop them as soon as you can, after building mines on the most valuable planets.

Planets with less than 100 resource points are small potatoes. Leave them alone until you've got *all* the more productive planets in your reach up and running.

Mines

Mines are the foundation on which your whole strategy is built. Any world within your control with 150 resources (or maybe even 100) deserves a mine. You do, however, need to carefully pick the order in which you mine your worlds — always try to develop the most productive worlds first, and look for clusters of productive worlds where you can move easily from one to another, to hasten resource transfers and shipbuilding.

In general, avoid strip mining. Strip mining will vastly speed up fighter production, but it cuts the world's overall productivity by half. In the long run, this waste of resources can easily prove a fatal disadvantage.

There are four reasons to strip mine — to get yourself started (see **Getting Started — One Approach**, pp. 50-51), to give a shipyard that extra four or five resources it needs, to keep a low-resource world productive and as a last resort. One more approach (The Early Bird) works for a few.

For a Few Resources More. At times, it will be worth strip mining, just for a turn, to keep a shipyard from losing a turn of production. If a shipyard won't have quite enough to produce the next stage of the ship it's building, consider strip mining for a turn to give it that extra bit it needs. This usually isn't a good long-term strategy, but doesn't cause a lot of damage for just a turn. If you adopt this strategy, *don't forget to switch the mine back to normal production.*

Keeping the Home Fires Burning. Once a world's fallen below 60 resources, it is rarely useful to keep slowly drawing out its resources. Switch its mine to a strip mine, take 6 resources per turn for five turns, then 4 per turn for three or four turns, then leave it alone. Salvage it if you don't expect to be back with a transport or your carrier.

Last Resort. At times you're facing an overwhelming enemy assault, and must strengthen your defenses immediately. Even then, don't strip mine any longer than you absolutely have to to repulse the enemy offensive and re-establish your defensive line.

The Early Bird. If you're a very good pilot who likes to mount a strong offense early, and have the skill to make such a strategy work, a bit of early strip mining can make the sector fall a good deal faster than it otherwise might — but such an aggressive and extravagant strategy is always a risk.

SHIPYARDS

Establish as many shipyards as you can as quickly as you can, but don't shoot yourself in the foot. Once you build a shipyard, every resource that you divert to your carrier from that planet will slow down ship production by that much.

One strategy is to wait until your carrier has at least *30* resource points before building your shipyard. That way you can leave your new shipyard alone to produce at full efficiency while your carrier slips off to start a mine on a fresh world and start the whole process over again.

Regardless of the fighters you're building, the key is to make sure that each shipyard has enough resources to continue building ships at the maximum rate. That means anywhere from 7 resources per turn (for *Phantoms*, *Shok'lar* and *Gladius*) up to 10 resources per turn (for *Arrows*, *Jrathek* and *Goran*). Every turn a shipyard fails to build, you've wasted that shipyard for a turn.

Strip mining is one obvious way to ensure that a shipyard has enough resources to stay in production, but doing so exacts a cost. Obviously, you lose half its total resources. However, you also lose time — once a world has less than 60 resources, it can't produce enough per turn, even strip mining, to keep building fighters every turn. (Note that a stripmined world that begins with 200 resources has less than 60 remaining after just 8 turns!)

A more efficient method is to set up a network of mines, shipyards and transports. There are several ways to do this. The most obvious is to pair two bountiful worlds, mine both of them and build a shipyard on one. The first ship the shipyard produces is a transport, after which the transport runs back and forth between feeder mine and shipyard, delivery 8 or 10 resources every two turns. (See **Getting Started — One Approach**, pp. 50-51.)

There are several variations on this theme. One feeder mine can almost supply two shipyards with enough resources to stay in constant production. Either a transport makes a loop (feeder, shipyard 1, shipyard 2) or it swings back and forth between the two shipyards (feeder, shipyard 1, feeder, shipyard 2). If the three worlds are strip mined once every few turns, all three worlds can continually produce enough resources to keep both shipyards in production for quite a while.

Getting Started — One Approach

You begin the game with 20 resources, a shipyard and a mine. You want to get as many worlds into production as you can, as quickly as you can. What's the best way to do so?

One answer is to pair shipyard and feeder worlds (see **Shipyards**, p. 49). Consider the following approach. (In each case, the worlds being developed should have at least 150 resources, so they produce 5 resources per turn, 10 if being strip mined.)

Turn	Action	Carrier Movement	Carrier Resources
Turn 1	Start your home world (A1) building a transport	Go to A2	20
Turn 2	Build a mine on A2 (stripmine)	Go to B1	20 - 10 = 10
Turn 3	Build a mine on B1 (stripmine)	Go to A2	10 - 10 = 0
	A1 produces a transport		
	A1 switches to fighter production		
Turn 4	Pick up 20 R on A2	Go to B1	0 + 20 = 20
	Switch A2 mine to normal production		
	Transport goes to A2		
Turn 5	Pick up 20 R on B1	Go to B2	20 + 20 = 40
	Switch B1 mine to normal production		
	By this time, A1's transport has begun ferrying resources from A2 to A1		
Turn 6	Build a mine on B2 (stripmine)	Stay	40 - 10 = 30
Turn 7	Pick up 10 R on B2	Go to C1	30 + 10 - 20 = 20
	Build a shipyard on B2 (transport)		
	Switch B2 mine to normal production		
Turn 8	Build a mine on C1 (stripmine)	Go to C2	20 - 10 = 0
Turn 9	Build a mine on C2 (stripmine)	Go to C1	10 - 10 = 0
	B2 produces a transport (switch to fighter)		
Turn 10	Pick up 20 resources on C1	Go to C2	0 + 20 = 20
	Switch C1 mine to normal production		
Turn 11	Pick up 20 resources on C2	Go to D1	20 + 20 - 20 = 20
	Build a shipyard on C2 (transport)		
	Switch C2 mine to normal production		
Turn 12+	Continue building shipyard and feeder pairs		

By Turn 13, you've got three worlds producing fighters at maximum efficiency, regardless of what fighter type you want. Each pair has a transport, so your carrier doesn't ever have to revisit those worlds. The cost was two turns of strip mining at each world — 20 resources lost. If each world began with 175 resources, it still has 135 left when ship production begins. If you strip mine each world once or twice more, each pair will produce enough to continually build any fighter for over 20 turns. If you strip mine each world continually once it falls below 60 resources, each pair can continue to steadily produce ships for another 5 turns beyond that.

A sample sector where this approach works is Campaign Sector 1 (see the map on p. 67). For the Kilrathi and Confederation players, the corresponding worlds are:

Example	Kilrathi	Confederation
A1	Eurox	Raha I
A2	Kain	Vehati
B1	Lufer	Tiedye
B2	Monguer	Crystal
C1	Rasta	Yanebba
C2	Pladar	Qatar I

Of course, not every sector will have a continuous string of worlds with 150+ resources. In that case, it will take longer to get each pair established, but you won't have to strip mine each world for that first couple of turns. If your carrier can't get back to pick up resources/build a shipyard for 4 (or more) turns, rather than the 2 turns in the example, you don't need to strip mine to collect 20 resources.

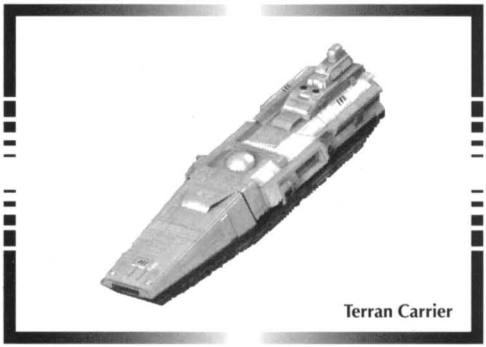
Transporting and Managing Resources

Always think positionally! Keep your jump lines in mind. Try to develop your core worlds in a way that maximizes your efficiency and defensive potential. Try to develop the worlds farthest from your defensive line first — that way, if the enemy manages to send an early sortie through your line, it'll take him longer to get to your developed worlds, and you'll have more time to organize an effective counter-attack.

If you have a choice between heading for a planet with 200 resources, but which is 'way out in an isolated corner of your territory, or concentrating on a planet with only 130 resources, but which leads to a cluster of other high-yield undeveloped planets ... it's probably worth your while to develop the less productive planet first.

As much as is possible without jeopardizing other development projects, store stockpiled resources on your carrier, not on the planet. If the enemy captures a planet with stockpiled resources on it, he gains control of all those resources.

Transports can be built and used to gather and move resources more quickly and efficiently. For more on transports, see p. 4.



Terran Carrier

Fighters

Although the exact balance of fighters produced will depend on your personal style of play, you're well advised to try to produce a mixed fleet of fighters of all available kinds. In general:

Medium fighters balance offense, defense and economy and will probably form the backbone of both your offense and defense.

Heavy fighters greatly strengthen your defenses, and their torpedoes are also needed in the final assault on the enemy carrier.

Light fighters can be produced rapidly — they give your fleet raw numbers and extend your reach and scope.

If you wish to produce roughly the same number of medium and heavy fighters, a good rule of thumb is to have three shipyards building heavy fighters for every two building medium fighters.

One final reminder — you start out any new sector with one planet with a mine and shipyard already built, but your shipyard won't actually produce ships until you tell it what fighter to build. *Don't forget* on your first turn to start your shipyard producing your favorite fighter (or a transport). There's nothing worse than seeing the first enemy ships appear on your screen, and suddenly remembering that you forgot to start your first shipyard.

Fortresses

A fortress gives its planet a permanent, stationary defense that will last as long as you retain control of that world. This defense takes the form of three extra fighters which will appear any time your fortified planet is attacked by the enemy. You can pilot these fighters personally, or use them as wingmen, just as if they were part of your regular fleet. The two differences are that fortress fighters can't be moved away from the planet they protect, but they also regenerate automatically. If your fortified planet is attacked and one or more of your fortress fighters are destroyed (but you defeat the attack), all three of your fortress fighters will be back next turn, in perfect condition.

This means that it's a good strategy to let your fortress fighters take the brunt of any attack, and hold your fleet fighters back in reserve. It doesn't matter if your fortress fighters survive or are destroyed, as long as you retain possession of the planet. On the other hand, if fleet fighters are destroyed, they're gone for good.

Fortresses are expensive, and in the early phases of the game those resource points can usually be better spent building fighters. Later in the game, however, as your enemy's fleet grows and he starts pushing harder against your defenses, it's time to start thinking of building fortresses.

The first place to build fortresses is along your main line of defense. The next place is on any natural bottlenecks that lead to your territory. Resist the temptation to fortify a world just because it's a favorite. In the later stages of the game fortresses can be used to fence in the enemy fleet and carrier while you mass your forces for the final assault.

If you can spare it, it might be good planning to leave at least one fairly productive planet in your core world without a shipyard — just let it stockpile resources that can be used to buy fortresses when you need them. Just make sure that such a world is well-defended — if the enemy takes it, you lose all those precious stockpiled resources, and he can recover half of them.

Sector Strategy

Chess, Anyone?

For anyone who's ever studied the underlying strategy of chess, it's easy to see that conquering a sector in *Wing Commander Armada* and winning a game of chess are, in many ways, the same process.

Chess games begin with an opening. The first two or three moves determine the whole subsequent emphasis in the game. In *Armada* this preliminary phase comes when both sides find and establish their preliminary defensive line.

Once a general opening has been chosen in chess, there follows a period of time when both concentrate on optimizing their defenses and future offensive options. The equivalent in *Armada* is the time when the players seek and establish their forward line of defense.

In chess, it's said that the winner of the game is the player that can control the four middle squares. In *Armada*, the player who can first find and control a central line of planets has obtained a substantial, and usually decisive strategic advantage.

Once the middle game has been decided, the game of chess is effectively over. The end game can theoretically drag on for dozens of moves, but unless the side with the advantage makes a number of bad mistakes, the conclusion is not in doubt. Most experienced players simply resign if they know they've lost the middle game. In *Armada*, the endgame is not as precise as in chess, but it is similar in that it's a matter mostly of maintaining and increasing an already established advantage. In *Armada*, like chess, the only way to blow a middle-game advantage in the end game is to make some serious and fundamental mistakes.

Of course, there are several areas in which *Wing Commander Armada* is nothing at all like a chess game. In chess, for instance, the board doesn't change every time you play, and you start out with all your pieces in place and ready to move. The big difference, however, is that there's no tactical component in chess — the attacking piece always wins. In *Wing Commander Armada*, if you're an ace pilot who can reliably shoot down multiple enemies before the enemy can get you, it is possible to overcome a marked strategic blunder or disadvantage through simple sharp flying, even relatively late in the game.

Opening Strategy

Start Producing Ships

There are four things you should do every time you start a new sector. The first is start producing ships. You already own a shipyard, but it won't actually start making ships until you tell it which ship to build.

Eventually, you'll want to build up a diversified fleet incorporating all your various ships, but your first shipyard should probably be set to produce a medium fighter — something big enough to pack some respectable offensive/defensive muscle, but small enough to be produced relatively quickly. Avoid the temptation to start out producing light fighters so you can have more ships quicker. You'll usually have at least seven turns, and often several more, before the enemy can come within striking range of your starting planet. With that time buffer you're usually better off building a few medium ships than a larger squadron of light fighters.

Release Your Fighters

The second thing to do (while you're still on your first turn) is release your fighters. Do not keep the two light fighters back for carrier defense — remember, you have about seven turns at the start of the game before the enemy can possibly reach your carrier. Use that time to explore. Send both your fighters out from the original world to explore the planets around you. If you have three jump-lines from your original world, you can send out your carrier to do a little exploring, too ... but don't let your carrier get too far from your starting planet.

Find Your Line of Defense

The third thing you want to do is find your line of defense. This is primarily the job of your fighters (though your carrier can help a little bit at the start). At some point, usually within five jumps of your starting world, there will be a line of one to four planets that the enemy will have to pass through to get to your carrier. These worlds will form the core of your defensive game. The fewer planets in your line of defense, the better — if you're lucky enough to start the game in a cluster of six or seven productive worlds behind a one-planet bottleneck, you're virtually guaranteed a victory with a bit of careful planning.

Keep Your Carrier Busy

While your fighters are looking for your line of defense, you also need to keep your carrier busy building mines and shipyards. Planets that produce five resources per turn and have more than 200 total points should be sought out and developed immediately, planets that produce three or fewer points per turn or have less than 100 points total can be ignored or saved for later in the game. Don't build your shipyards until you have at least 30 resource points stored on your carrier — that will ensure that you can get your new shipyard producing immediately, and still have enough resources on your carrier to build a mine as soon as you get to the next planet. Don't let your carrier sit idle, especially not with resources onboard. Keep it moving, keep it building.

Don't keep ships back to escort your carrier — your ships can protect your carrier better on your front lines. Get your new ships out to your frontier as soon as possible.

Midgame Tips

As your fleet increases, shore up your defensive line until you have two to five ships defending each planet on the line. The number of ships per planet depends on how good a pilot you are — if you can take out several enemy fighters with one of yours, you'll only need a couple defensive ships at each planet on the line. However, if the enemy is getting you about as often as you're getting him, a stronger defense is called for.

Once you've reached a point where you feel your line is secure, you're ready to start sending out offensive/exploratory sorties in groups of three to five ships. As should be obvious, the more resistance you encounter while trying to advance in a given direction, the more likely it is that you're heading in the direction of the enemy carrier.

It's likely that your defensive line will change at least once, and probably twice in the course of the game. In many sectors you'll find your first defensive line in the first half dozen moves of the game, and defend it, then in the course of the next dozen moves or so discover a new potential line which is just as easy to defend as the old one, and which adds several fertile worlds to your territory. When you find such an advanced position, by all means move your defenders up and increase your territory.

In *Wing Commander Armada*, the whole point of strategic play is to control productive worlds. Even if you can't get a fertile world producing right off the bat, it's still worth controlling, for the simple reason that as long as that planet's in your control, you're denying it to the enemy. Therefore, never put off advancing your territory because you still have worlds that you want to develop before you move on to new worlds. If you wait until you're ready to develop it before taking a promising new world, you may find that the enemy has already moved in and set up housekeeping.

In most sectors, there's a band of three to five worlds that more or less divide the sector in half. Control of this middle line will decide the game. The player who can win and hold it will go into the endgame with an overwhelming strategic advantage. Therefore, in a game between skilled players, the most intense and dangerous part of the game will come when the two sides settle down to a pitched battle for the middle line.

If you gain control of the middle line, fortify it to the point where you're absolutely sure it can hold, then start flooding the enemy territory with fighters. Your first priority in this phase of the game is to find and isolate the enemy carrier, but this is also the best time to send some side-expeditions to explore the corners of the sector. Such exploration is particularly important in Campaign play, where you get points for every planet visited. A fortunate side effect of late-game exploring is that it allows you to locate and shut down isolated enemy shipyards that could supply the carrier with reinforcements.

Once you find the enemy carrier, gauge the strength of its defenses. If it's effectively undefended and you can score a quick kill, fine. However, if the carrier is heavily defended, try to surround it and isolate it from potential sources of reinforcements. Once you've got control of the sector and the enemy carrier surrounded, there's no more need to rush, so take your time. Go ahead and wear down his defenses in a series of small sorties, rather than taking him out in a huge pitched battle — remember, your forces are renewing themselves constantly, while his are dwindling rapidly.

Turn Sequence

The sequence in which turns are programmed produces a few interesting notes.

- Combat is before production. If you're scheduled to finish building a *Goran* on the turn your shipbuilding world is invaded, the battle takes place without the *Goran*. If you lose the battle, your shipyard is destroyed, along with an all-but-finished *Goran* in its bay.

- The *Playguide* (pp. 28-29) addresses some of the ways in which movement conflicts are resolved. Here are a few more:

  Carriers attempting to jump past each other bounce back to their original worlds.

  However, if an undefended carrier and an opposing fleet without heavy fighters attempt to jump past each other, *they will.*

- The cost of most ships is evenly divisible by the number of turns it takes to build them. For example, a *Kor-larh* costs 24 resources and takes three turns — thus it costs 8 resources per turn. What about the four ships whose cost is not evenly divisible?

  In each case, the cost per turn rounds down for the initial turn(s). A *Gladius* (cost 22, turns 3) costs 7, then 7, then 8. A *Banshee* costs 8, 9 and 9. A *Jrathek* costs 9 and 10. A *Goran* costs 9, 10 and 10.

- Ship docking and undocking is a real-time process. If your opponent can see your carrier, he can see ships before you dock them and after you deploy them. If your carrier is meeting and docking a force that you want to keep secret, but your opponent has forces adjacent to your carrier, *get your fleet docked quickly*. If you're lucky, you'll have them onboard before he gets around to checking the forces on that world.

  Conversely, if you want to make a show of force, get your fleet deployed quickly, before he checks out your carrier and moves on. A show of force is much less impressive if no one notices it.

The Blitz and Smaller Sectors

An alternative strategy for conquest involves strip mining your initial worlds and getting them started creating medium and heavy fighters as quickly as possible. Once your fighters are created, you don't worry about any sort of defensive line ... instead, you send them out looking for the enemy carrier. The object here is the quick kill — with some luck, a blitz strategy can give you a conquest as early as Turn 17, even in the largest sectors.

Against the computer's lowest difficulty level, or an inexperienced human opponent, the blitz has a good chance of working, and if you're playing Armada with smaller sector sizes, it's virtually the only viable strategy. In a full-size sector, however, avoid the blitz against any opponent with any degree of experience or strategic know-how.

On the other hand, in the smaller sector levels of Armada, campaigns tend to be nasty, brutish and short. The enemy is often so close to you, even at the very beginning of the game, that your only defense is a strong offense. In these campaigns, strip mine your worlds right from the start, and send your fighters out in waves to find, isolate and destroy the enemy carrier.

In the smallest size sector, forget about building a defense. Build as much offense as you can as quickly as you can and go straight for the throat of the enemy carrier. Remember, his carrier is probably in the area where his fighters are thickest, so if there's one area where you're seeing a lot of action, concentrate your attack there — it's probably the most direct route to the carrier.

In a medium-sized sector, you may have a bit more time to build at least a preliminary defensive line to guard your offensive staging area. At this level, however, your focus should still be on a strong offense, with fast production leading to the quick isolation and elimination of the enemy carrier.

But in Campaign, or at the largest sector size in Armada, the enemy carrier will usually start far enough away from you that it will take you at least 16 to 20 turns to get to the enemy carrier with even the fastest blitz offense. This is plenty of time for your opponent to make at least a strong beginning on a solid offensive line, and if your opponent is playing any type of intelligent positional defense (like the one described above) your blitz is probably going to shatter on his frontier. Odds are that before you can amass a strong enough force to punch through his line, your strip mining will start to drain the resources of your core planets, allowing your opponent to overwhelm you at his leisure.

When You're Losing

No matter how carefully you set up your defensive line, the law of averages states that there's at least a chance that the enemy will, at some point, punch through your line and get to your core worlds.

When this happens, strategic thinking becomes more important than ever. Once he's inside your lines, the enemy's best tactic is to forget about engaging your fighters (particularly on the heavily-defended defensive line) and instead go into kamikaze mode, trying to disrupt production on as many of your core worlds as possible. Remember, all he has to do is touch an unfortified planet to eliminate both your mine and your shipyard. He's going to try to split up and raze as many planets as he can.

Therefore, it won't do you any good to just mindlessly hurl your defenders after him in a big clump. He'll just run ahead of them, destroying your worlds along the way. Instead, you have to plan ahead. Concentrate on surrounding his forces and pushing them back into a corner where they can be overwhelmed and eliminated. This will often take a few turns, during which you'll lose a few developed planets, but don't panic. Take your losses and get into position, then move in when you're good and ready. Your carrier can always come back later, once your line has been re-established, and re-start production.

Of course, at the same time you'll also have to plug the hole created by the penetration, and maintain your hold on the other planets in your defensive line as well. Your first priority, however, is to isolate and destroy the invaders, before they can cripple your production capacity. If it's still fairly early in the game, and it looks like the invaders are mostly an expeditionary force sent out to test your defenses, it will probably be sufficient to move a couple of fighters into the breech behind the invaders to hold it until all the invaders are cleaned up and you can concentrate on rebuilding your defensive line at your leisure. On the other hand, if it's late in the game and you're being battered hard by the enemy, restoring your line becomes a much higher priority. You may have to recall some expeditionary forces to seal the line while your defenders hunt down the enemy incursion.

One important question if the game is turning against you, is whether to switch to strip mining, and if so when. Strip mining is an important strategic tool when the situation is turning against you, but only if it's used at the right time.

If a few enemy fighters have broken through your lines and are trashing your core worlds, that's normally not the time to strip mine. It's better to just use available forces to surround and eliminate the invaders. The couple of extra fighters that strip mining will give you during such a short crisis probably won't prove decisive, and generally aren't worth the wasted resources.

Instead, the time to strip mine is if the enemy is pressing your entire defensive line hard and it seems to be crumbling. In that case do start strip mining, to produce reinforcements fast for your line. Hopefully, the extra fighters you can throw on the line through strip mining will strengthen it to the point that the enemy's sorties are

shattering on your defenses, and he's the one taking heavy losses. If so, he'll start to deplete his forces to the point where he has to relax his offensive, and at that point you can stop strip mining and return to a more conservative and efficient resource management strategy.

If the enemy manages to find and fortify the center line before you do, or he drives you back from the center and establishes a line, you're at a serious disadvantage. This doesn't mean you have to give up hope, but it does mean you have to pull out all the stops. Set all your mines to strip mining, and all your shipyards to producing your best offensive ship. Once the enemy has control of the center line you're living on borrowed time. His next move is going to be to push ahead into your territory in force, so you have to mount your counter-attack as quickly as possible.

In such a last-ditch counter-offensive, throw as many forces as you can as fast as you can against the center of his middle line. (Attacking the flanks of the middle line is an effective tactic only if the enemy has left them significantly less defended than the center of the line.) However, this is also the time in the game where you want to send a few of your best fighter type to defend your carrier. The enemy is going to be aggressively looking for the carrier, and a strong fighter escort is needed to keep your carrier from being picked off cheaply and prematurely by an enemy expeditionary force.

For an absolute last stand, try to put your carrier at a bottleneck with some productive worlds behind it. The bottleneck will keep the enemy from going around behind you and shutting down your shipyards, ensuring you a steady flow of reinforcements right up to the bitter end.

When the endgame has turned against you, that's the one time in the game when ace piloting is your only remaining hope. If the enemy takes control of the center line and starts a mass offensive into your territory, the only way to pluck victory from the jaws of defeat is to make every fighter you produce account for two or three of his.

Computer AI

There are only two strategic differences among the three levels of AI in Armada and Campaign play. First, if the computer is set to Ace level, it always knows the current status of every planet and location of every ship in the sector. However, as shown below, destroying your carrier isn't a prime objective for the computer, so it doesn't take the same advantage of this information that you would.

Strategic Objectives

In roughly priority order (within each category), the objectives for the computer's forces are as follows:

Carrier

- avoid engaging enemy
- mine planets till mining rate of all mines combined is 15/turn per shipyard
- make shipyards
- salvage mines that aren't generating anything useful
- make defense stations
- discover new planets

Light Fighters

- avoid engagements
- discover new planets

Medium and Heavy Fighters

- defend carrier
- defend mines
- defend shipyards
- escort transports
- engage enemies
- scout for enemies
- discover new planets

Transports

- pick up all resources at current planet
- avoid engagements
- pick up resources till reasonably full (about 20)
- drop resources off at shipyard

Shipyards

- never abort shipmaking
- begin by building a couple of light fighters
  then build a transport or two
  then build another light fighter or two
  then build a couple of medium fighters
  then build a couple of heavy fighters
- thereafter, alternate among all five fighter types

Mines

- mine normally unless total mining rate for sector is less than 6/turn

Starting Forces

The computer always starts with a mine and shipyard on its home world, plus 20 resources onboard the carrier. The initial fighters vary, depending on the sector's size and the AI you choose:

	Arrow or *Dralthi*	*Wraith* or *Jrathek*	*Banshee* or *Goran*
Novice			
All sector sizes	2		
Veteran			
Small sector	2		
Medium sector	4	1	1
Large sector	6	8	
Ace			
Small sector	5	2	2
Medium sector	12	6	6
Large sector	18	8	4

(Campaign sectors are all large sectors.)

Size Makes a Difference

A sector's size affects play in a couple of ways — in distance between home worlds and in the forces the computer begins with. (See **Computer AI: Starting Forces** p. 63, for more information on the computer's beginning forces.)

The Kilrathi always starts on a world toward the upper left corner of the map. The Confederation always starts on a world toward the lower right corner of the map. The smaller the sector, the shorter the average direct route to your opponent's home world. However, this isn't as great a variation as it might seem.

Small sectors have fewer worlds (obviously), but they also have fewer jump lines. A small sector might be little more than a string of worlds, with one home world at one end and the other home world at the other end. With such a layout, home worlds can be as many as 20 jumps away from each other. They can also be as close as 2 jumps from each other — if most of the worlds in a random small sector lie along a diagonal between the upper right and lower left corners, even the worlds closest to the upper left and lower right corners will be very close to each other. On average, the direct route between small sector home worlds is about 7 to 10 jumps.

Medium and large sectors share the same stats. The average direct route between sector home worlds is about 8 to 12 jumps. However, this might be as low as 5 or as great as 20.

Pickets

A well-placed picket can save your skin. Since ships detect movement on any adjacent world, a picket can warn you several turns in advance of an invading fleet. At worst, it can broadcast an exact ship count before dying nobly for the cause. At best, it can even delay the advance for several turns.

If the advancing fleet detours to eliminate this irritation, you've gained valuable turns in which to respond. If it splits up to chase the picket, you've reduced its size. Either way, your opponent has lost the element of surprise.

The best place for a picket is one jump off the most direct path, adjacent to a bottleneck. Campaign Sector 3 (map, p. 70) has several appropriate picket worlds.

A picket at Sivar or Paradoks detects any movement through Joplat.
A picket at Ingiro detects any movement through Grish, from any of three directions.
A picket at Mesepad detects movement through Sergry.
A picket at Luxy detects movement in any number of directions.

Transports can also serve as cheap pickets, but be prepared to have your transport pickets captured and used against you.

Mines or other facilities can serve as "stealth" pickets. Until your opponent sends a scout to check out a world with a mine, he won't even know he's been detected. However, once he has sent out a fighter scout, all facilities on the picket world are lost.

Campaigning

Armada vs. Campaign

In principle, the strategies used in Campaign and Armada (at least when full-sized sectors are used) are identical. However, in practice, there's one fundamental difference between the way the two are played.

In Armada, each sector is randomly generated and completely new. When you begin the game, everything more than one jump away is a complete mystery. In Campaign all the sectors are pre-determined. You'll play the same sectors, in the same order, every time.

This difference is important primarily in that it allows you to avoid red herrings. In Armada you are quite likely to settle down to build, for example, a four-world defense, never knowing that if you explore just a few more worlds you can get to a much easier two-world defensive line. Or, you might heavily defend a certain bottleneck world, never suspecting until much later in the game that it leads to a closed cul-de-sac of worlds that's already completely cut off from the enemy.

In Campaign, on the other hand, if you've already played through the sector a few times, or if you simply check out the sector map in **Campaigning**, you can know or remember the best defensive positions, and move directly to them without hesitation.

Likewise, in Armada you have to mine and build on the best world that you've explored at the moment, but in Campaign it's possible to learn in advance where the richest worlds are and move directly to them.

In simulation terms, Campaign can be thought of as an operation where detailed intelligence is there to be had, if the commander makes the effort to get it. Armada sectors are a complete mystery to both players, but Campaign sectors are knowable, and the player who wants to play to win will make it his business to know them in advance. Don't think of it as "cheating" to study the sector maps and strategies presented here; after all, you don't know how many times your opponent has already played through the campaign ... or whether he's already read this book.

Scoring

Killing the enemy carrier is worth 1000 points. This so outweighs the point value of any other part of campaigning that the player who wins six sectors automatically wins the campaign. If you only win five sectors, you're 1000 points behind your opponent before any other points are counted. You won't outscore your opponent by 1000 points in the other elements of the game. The moral? Don't worry about keeping fighters alive, or exploring worlds, or any of the other things that score points. *Kill the carrier!* That's the only thing that matters. If you do it more often than your opponent, you win.

Sector 1

Confederation

- You want to establish your defensive line at **Yanebba**, **Mimka** and **Quaser**.

- Notice the line of high-resource worlds that runs from **Raha I** through **Vehati**, **Tiedye**, **Crystal** and **Yanebba**. Obviously, your first goal is to develop these four planets. The problem is that if your defensive line is breached, it's very easy for the Kilrathi to chew their way down this line, undoing all your work.

- Therefore, a strong defense is important, particularly at **Yanebba**.

- Because of its isolation, and in order to protect the attractive cluster of worlds **Gestal**, **Swarm** and **Orange**, **Quaser** might be a good planet to defend with a fortress.

Kilrathi

- You want to establish your defensive line at **Sainz**, **Pladar** and **Liz**.

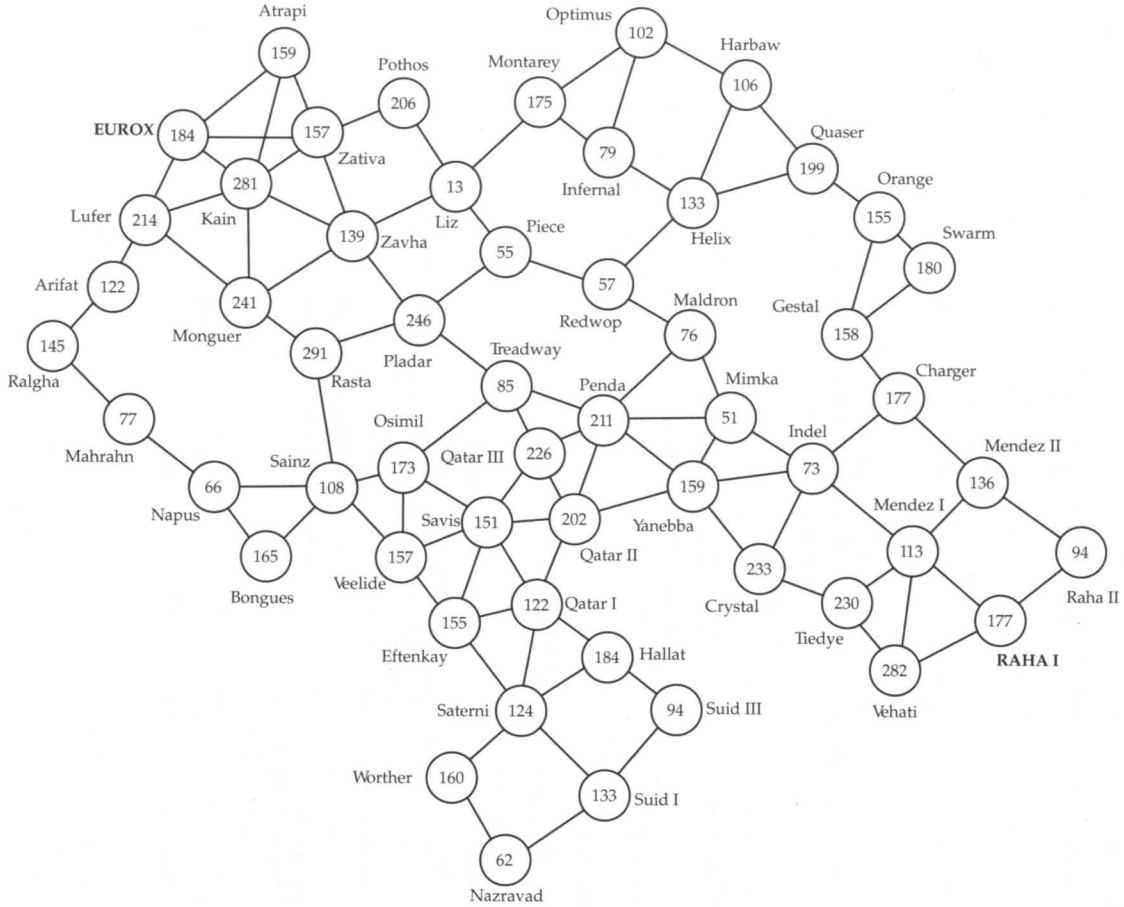
- You have a tremendously fertile cluster in worlds **Lufer**, **Monguer** and **Kain**, which you should develop first.

- There's another fast cluster (though shorter-lived) in worlds **Zavha**, **Zativa** and **Atrapi**, and this should be your second objective.

- When you have enough defensive ships, you may want to cautiously push your line out from **Sainz** to **Osimil-Savis-Eftenkay**, to give you control of the fertile cluster **Veelide-Osimil-Savis-Eftenkay**.

Midgame

- Both sides want to push their lines forward to take control of the line through **Qatar II-Qatar III-Treadway-Piece-Liz** in the middle game.


Atrapi
159
Optimus
102
Harbaw
106
Pothos
206
Montarey
175
EUROX
184
157
Zativa
79
Quaser
199
281
13
Infernal
133
Orange
155
Lufer
214
Kain
139
Zavha
Liz
Piece
55
Helix
Swarm
180
Arifat
122
241
57
Maldron
Gestal
158
Monguer
246
Redwop
76
145
291
Pladar
Treadway
Charger
Ralgha
Rasta
85
Penda
Mimka
177
77
Osimil
211
51
Indel
Mendez II
Mahrahn
Sainz
173
Qatar III
226
73
136
66
108
159
Mendez I
Napus
Savis
151
202
Yanebba
113
94
165
157
Qatar II
233
Bongues
Veelide
122
Qatar I
Crystal
230
Raha II
155
177
Tiedye
Eftenkay
184
Hallat
282
RAHA I
Saterni
124
94
Suid III
Vehati
Worther
160
133
Suid I
62
Nazravad

Sector 2

This is a peculiar and challenging sector, because it offers neither side an obvious or attractive defensive line.

Confederation

- Your best starting defensive line is **Menthal II-Drachir III-Telzey-Tayibad**.

- Because of the difficulty in establishing such a tenuous defense quickly, this is one time where you might be justified in strip-mining a planet out early (perhaps **Vesper V**, or more conservatively, **Menthal IV**), to produce enough ships to establish and hold the line.

- Once past the initial line, your only possible advanced position is **Funim-Wunch-Yelkin II-Eikel IV**, an extremely remote and attenuated line of defense. Therefore, speed and aggression are called for.

- Your only assets in this sector are two good lines of high-yield worlds: **Vesper V-Vesper II-Talgot III** and **Menthal IV-Drachir III**.

Kilrathi

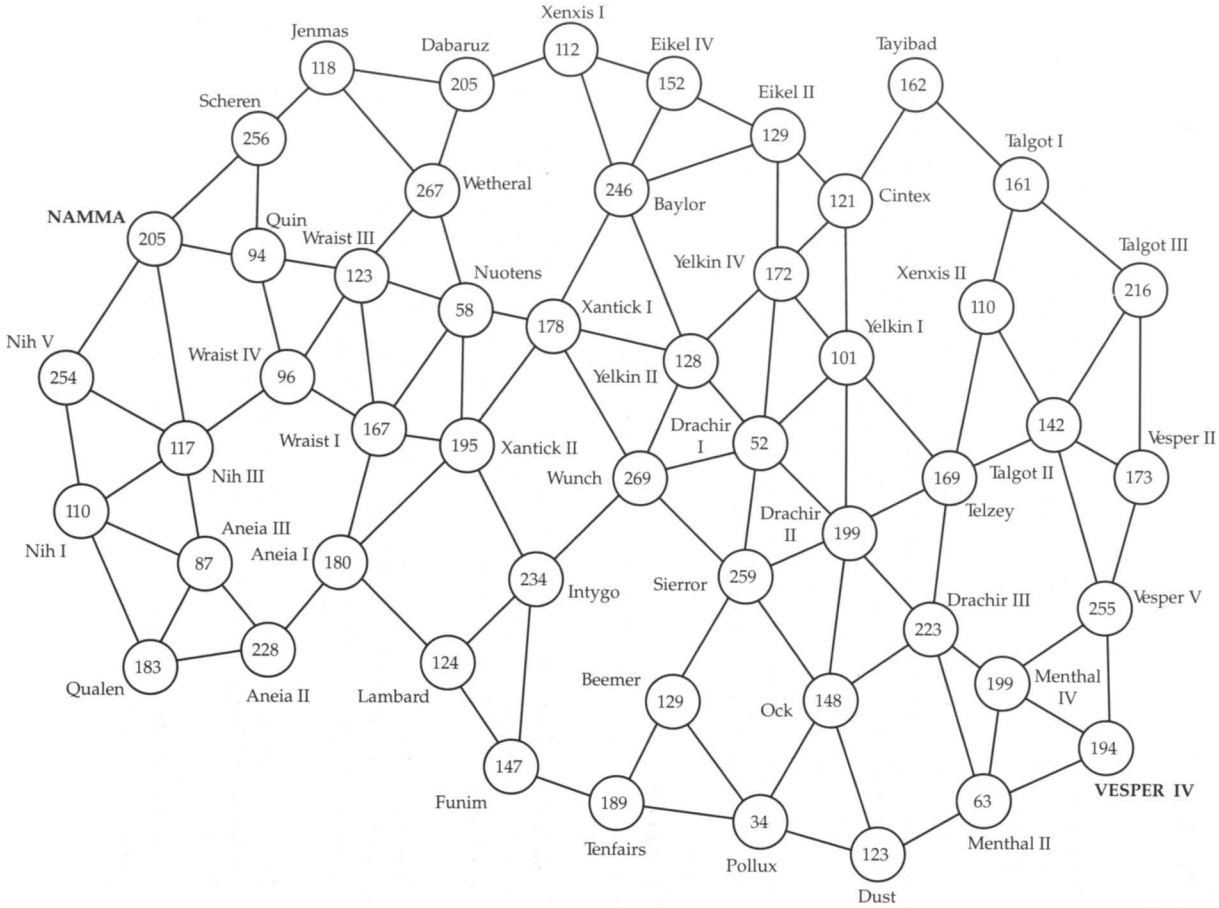
- Your initial line is **Aneia I-Wraist I-Nuotens-Xenxis I**.

- You don't need to strip mine as badly as the Confederation does (especially since it doesn't have nearly as good an early supply of resources), but you might want to anyway, particularly if you want to mount a strong offense early on.

- You should definitely develop **Nih V** and **Scheren** first. Then, if you do decide to strip-mine, you should look to **Nih III** or **Quin**, while leaving the high-yield worlds of **Nih V** and **Scheren** for more conservative and efficient exploitation.

- Once the starting line is firm, you can move **Wraist I** to **Xantick II**, **Nuotens** to **Xantick I**, and **Xenxis I** to **Baylor-Eikel IV**.

- **Intygo** and **Wunch** are attractive midgame targets, if they can be taken without over-extending the line.


Xenxis I
112
Jenmas
118
Dabaruz
205
Eikel IV
152
Tayibad
162
Scheren
256
Eikel II
129
Talgot I
161
Wetheral
267
246
Baylor
121
Cintex
NAMMA
205
Quin
94
Wraist III
123
Nuotens
58
Yelkin IV
172
Xenxis II
110
Talgot III
216
Xantick I
178
Yelkin I
101
Nih V
254
Wraist IV
96
Yelkin II
128
Drachir I
52
142
Vesper II
Wraist I
167
195
Xantick II
117
Nih III
Wunch
269
169
Talgot II
173
Telzey
110
Aneia III
Drachir II
199
Nih I
87
Aneia I
180
234
Intygo
Sierror
259
Drachir III
255
Vesper V
223
183
228
124
Qualen
Aneia II
Lambard
Beemer
129
Ock
148
199
Menthal IV
194
147
Funim
189
Tenfairs
34
Pollux
123
Dust
63
Menthal II
VESPER IV

Sector 3

Confederation

- You have two distinct defensive options in this sector. You can establish your line from **Pyrelia-Fortmosh-Grish-Joplat-Sivar**, which is an extended but unified front. This first option gives you control of the rich planet **Paradoks**.

- Or, you can defend **Mara II-Spandrel** and **Grish-Dewby**, giving you two short but widely separated fronts. This second option gives you control of **Mara II**, and puts you in easy reach of the equally valuable **Isilibt** (which can be defended from **Zartoff-Cartel**).

- Your eventual goal should be a line at **Zartoff-Cartel** and another at **Grish-Nomel-Trekath III**, but you have to be careful not to overextend yourself getting there.

- The Kilrathi carrier has lots of room to maneuver, so once the enemy's defenses are penetrated, you may find it more efficient to search in extended waves of fighters, rather than in compact sorties.

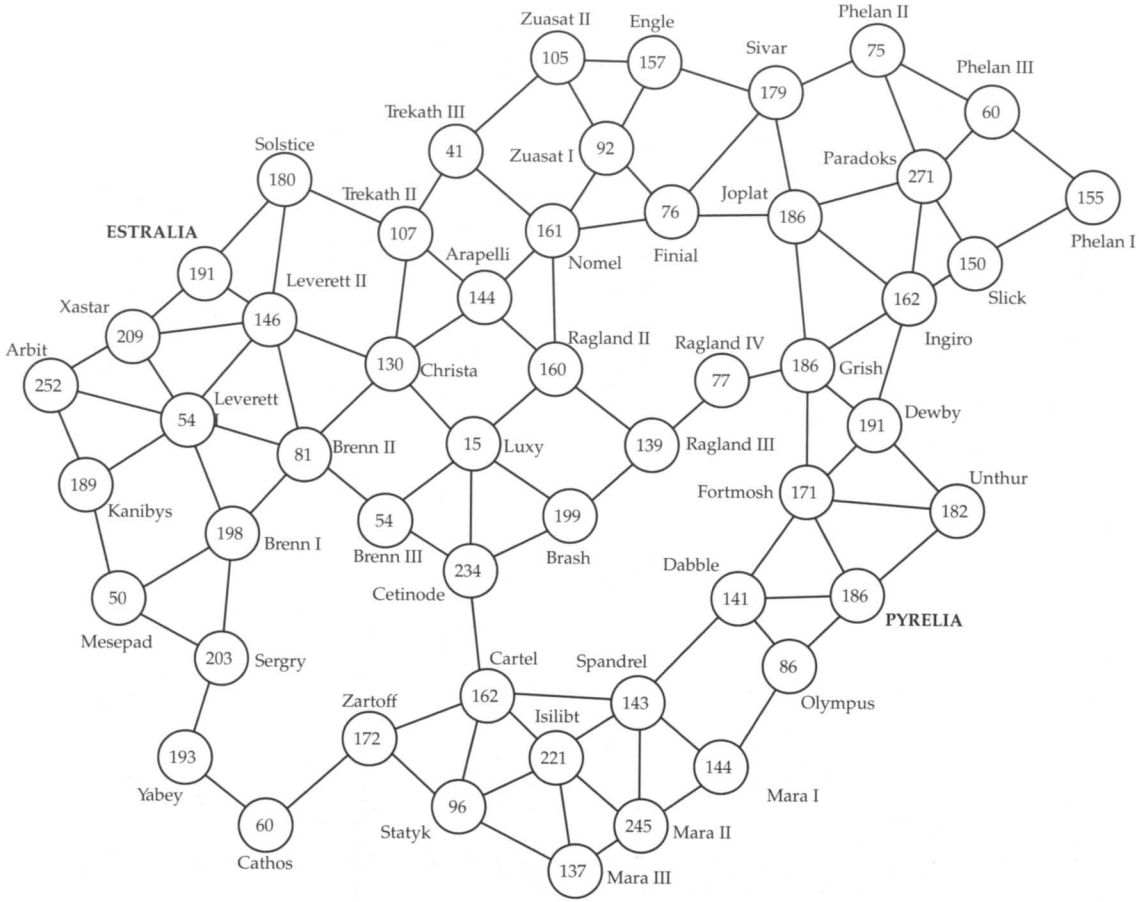
Kilrathi

- You should establish your first line at **Solstice-Leverett II-Brenn II-Sergry**. This gives you two good lines of high-yield worlds at **Arbit-Xastar** and **Brenn I-Sergry**.

- If possible, you should make it an early goal to advance from **Sergry** to **Zartoff**, and from there onward with the objective of taking the rich worlds at **Isilibt** and **Mara II**. This may result in a bloody pitched battle for control of those two worlds, but if you can take this region without unreasonable losses it's well worth the effort.

- Since **Isilibt** and **Mara II** will be in constant dispute, you might be well-advised to build *only* mines on these worlds, using transports to ferry resources back to shipyards at **Zartoff** or **Cartel**.

- Your best offensive tactic to win the game is to take your line at **Solstice-Leverett II-Brenn II** and steadily advance it across the sector. That is, from **Solstice-Leverett II-Brenn II**, advance to **Trekath II-Christa-Brenn III**, and then **Trekath III-Arapelli-Luxy**, etc. This strategy requires patience, but it has the advantage of letting you keep your offense and defense in a single line, thus maximizing the effectiveness of every fighter.


Zuasat II
105
Engle
157
Sivar
179
Phelan II
75
Phelan III
60
Trekath III
41
Zuasat I
92
Solstice
180
Trekath II
107
Paradoks
271
Joplat
186
76
Finial
161
Nomel
155
Phelan I
150
Slick
162
Ingiro
ESTRALIA
191
Leverett II
Arapelli
144
Xastar
209
146
Arbit
252
130
Christa
160
Ragland II
Ragland IV
77
186
Grish
Leverett
54
81
Brenn II
15
Luxy
139
Ragland III
191
Dewby
189
Kanibys
198
Brenn I
54
Brenn III
199
Brash
234
Cetinode
Fortmosh
171
Unthur
182
Dabble
141
186
PYRELIA
50
Mesepad
203
Sergry
Cartel
Spandrel
86
Olympus
Zartoff
162
143
Isilibt
172
193
Yabey
221
144
Mara I
96
Statyk
245
Mara II
60
Cathos
137
Mara III

Sector 4

Confederation

- You should establish your first defense at **Quartz II** and **Kyron I**.

- Your first developed planet should be **Cikker**.

- As soon as you can, you should expand your defense at **Quartz II** to **Kenjevec-Piglet**, giving you control of the medium-yield cluster beyond **Forest**.

- Next, you want to move your defense at **Kyron I** out along the line between **Rollins I** and **Rollins III**, to gain control of the high-yield planets **Rollins I** and **Kyron II**.

Kilrathi

- Establish your first defense at **Centar III** and **Grigor IV**.

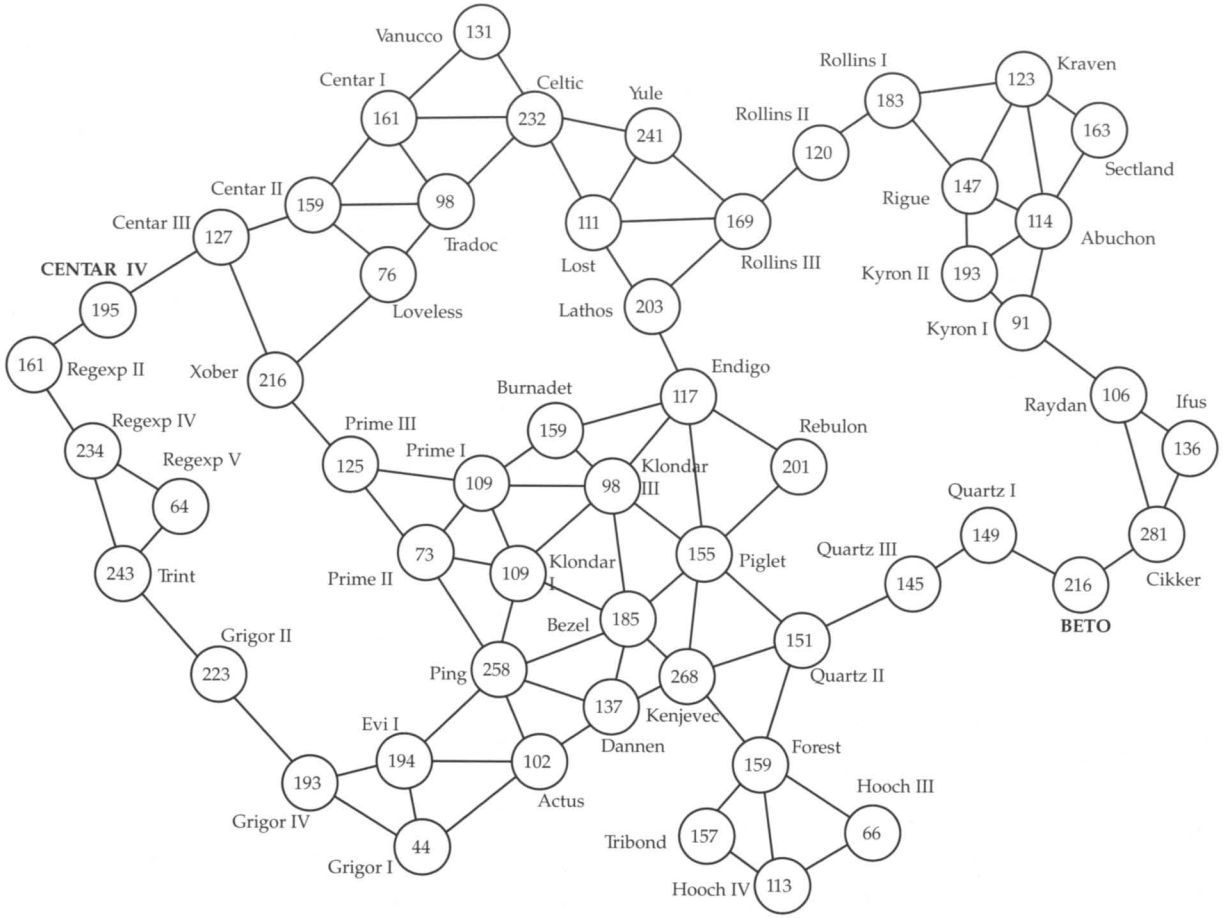
- You have a spectacular line of high-yield planets at **Regexp IV-Trint-Grigor II-Grigor IV**.

- Your next objective is to expand your defense at **Centar III** to **Celtic** and **Prime III**, giving you control of the valuable **Celtic** and **Xober**.

Midgame

- The midgame for both sides will be a mad scramble for planets **Dannen**, **Klondar III** and **Endigo**, and either **Celtic** or **Rollins III**. Whoever can control this line will have a decisive advantage.

- The endgame strategy for either side is to advance from the middle line to the opponent's starting defensive position, from which the carrier can be quickly pinned by a strong two-pronged assault and destroyed.


Vanucco
131
Centar I
161
Celtic
232
Yule
241
Rollins I
183
Kraven
123
Rollins II
120
163
Sectland
Centar II
159
98
Tradoc
Centar III
127
111
Lost
169
Rollins III
Rigue
147
114
Abuchon
CENTAR IV
195
76
Loveless
Lathos
203
Kyron II
193
Kyron I
91
161
Regexp II
Xober
216
Endigo
117
Burnadet
159
Raydan
106
Ifus
136
Regexp IV
234
Regexp V
64
Prime III
125
Prime I
109
98
Klondar III
Rebulon
201
Quartz I
149
281
Cikker
243
Trint
Prime II
73
109
Klondar I
155
Piglet
Quartz III
145
216
BETO
Grigor II
223
Bezel
185
151
Quartz II
Ping
258
268
137
Kenjevec
Dannen
Evi I
194
102
Actus
159
Forest
Hooch III
66
193
Grigor IV
44
Grigor I
Tribond
157
Hooch IV
113

Sector 5

Confederation

- Your first defense is **Lisacc-Kientith-Reno-Tepit I**.

- You have a lot of high-yield worlds to start, although they're not particularly well grouped. You should move to **Sunder** first, using it as a platform to reach the high-yield worlds at **Layter**, **Drundar** and **Dallas**.

- Once the starting line is developed, your strategy for the rest of the sector is all offense. You should move to **Endo** and **Moq** as quickly as possible, to block Kilrathi advancement, then if possible converge on and take **Donner**. This gives you an excellent line of attack through **Keltar**, and also denies the Kilrathi the high-yield worlds **Endo**, **Gundel** and **Repton**.

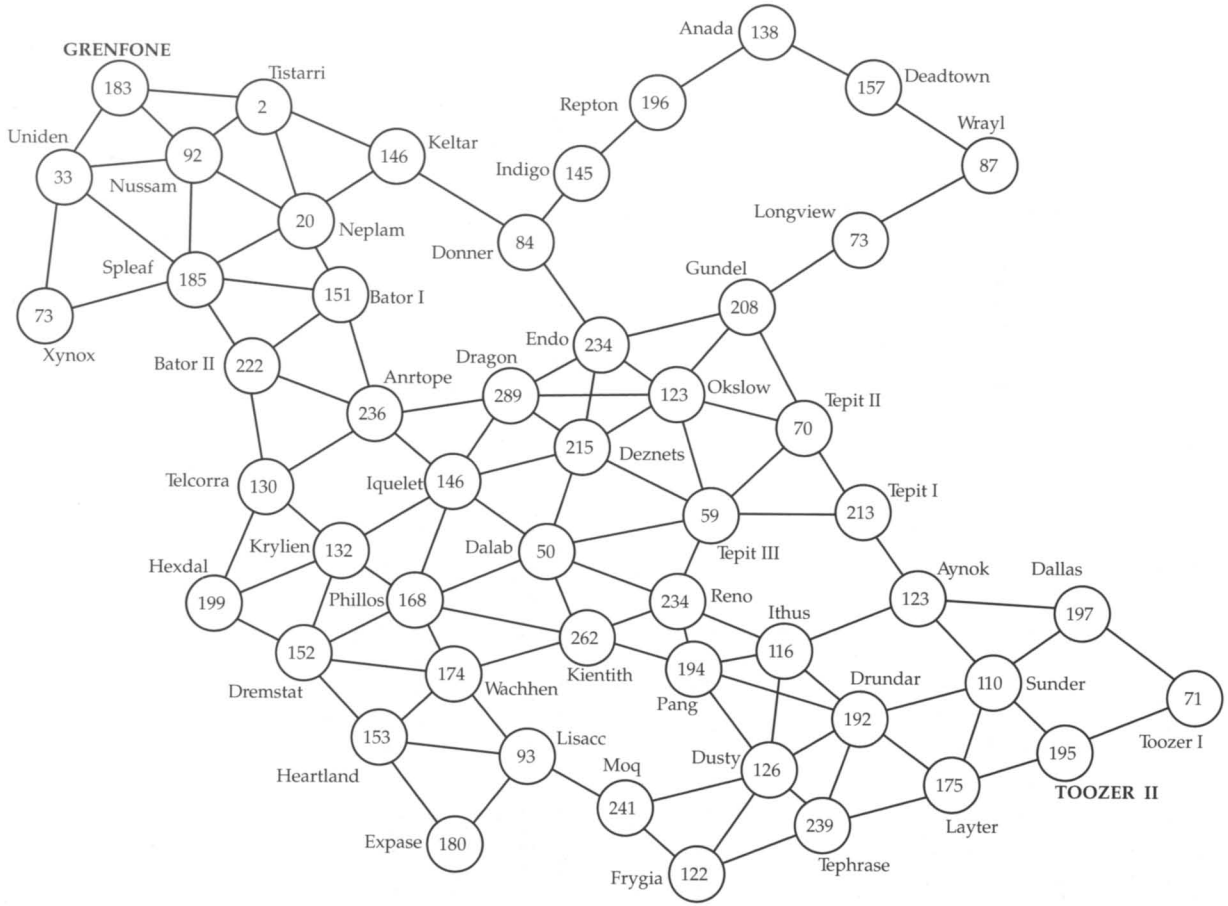
- If you can then take **Telcorra** and **Anrtope**, the Kilrathi is sealed up and ready for the kill.

Kilrathi

- Your defense starts at **Telcorra-Anrtope** and **Donner**.

- You should move your carrier directly to the high-yield line **Bator II-Anrtope**.

- As soon as possible, you must expand your defense at **Donner** to **Endo-Gundel** to get control of the rich arc of worlds behind that line. A pitched battle is likely to ensue for control of this arc, and the side that wins it will come out with a decisive advantage.


GRENFONE
183
Tistarri
2
Uniden
33
92
Nussam
146
Keltar
20
Neplam
Spleaf
185
151
Bator I
73
Xynox
Bator II
222
236
Anrtope
Telcorra
130
Iquelet
146
Hexdal
199
Krylien
132
Phillos
168
152
Dremstat
174
Wachhen
153
Heartland
93
Lisacc
Expase
180
Anada
138
Repton
196
157
Deadtown
Wrayl
87
Indigo
145
Donner
84
Longview
73
Gundel
208
Endo
234
Dragon
289
123
Okslow
Tepit II
70
215
Deznets
59
Tepit I
213
Dalab
50
Tepit III
Aynok
123
Dallas
197
234
Reno
Ithus
116
262
Kientith
194
Pang
Drundar
192
110
Sunder
71
Toozer I
195
TOOZER II
Dusty
126
Moq
241
175
Layter
239
Tephrase
Frygia
122

Sector 6

Confederation

- You start out by defending **Zokka V** and **Boyo**, and developing **Rostek** and **Zackra**.

- You can then push **Boyo** to **Fulder II**, and **Zokka V** to **Zokka IV** and **Pagan III**, giving you control of the high-yield **Pagan III**.

- From there, you can push **Zokka IV** to **Anterlay**, and **Pagan III** all the way out to **Choth**, giving you a fully developed defense.

- Eventually, you want to bottle the Kilrathi up by taking and holding **Mopac I**, **Ulvatta** and **Kronos II**, but it's important that you not over-extend yourself in the process. You need to build your offense carefully, then sweep patiently through the middle of the sector.

- Even after the enemy is sealed off, you can still expect a long and bloody endgame battle up the line from **Ferior** to **Cunning**.

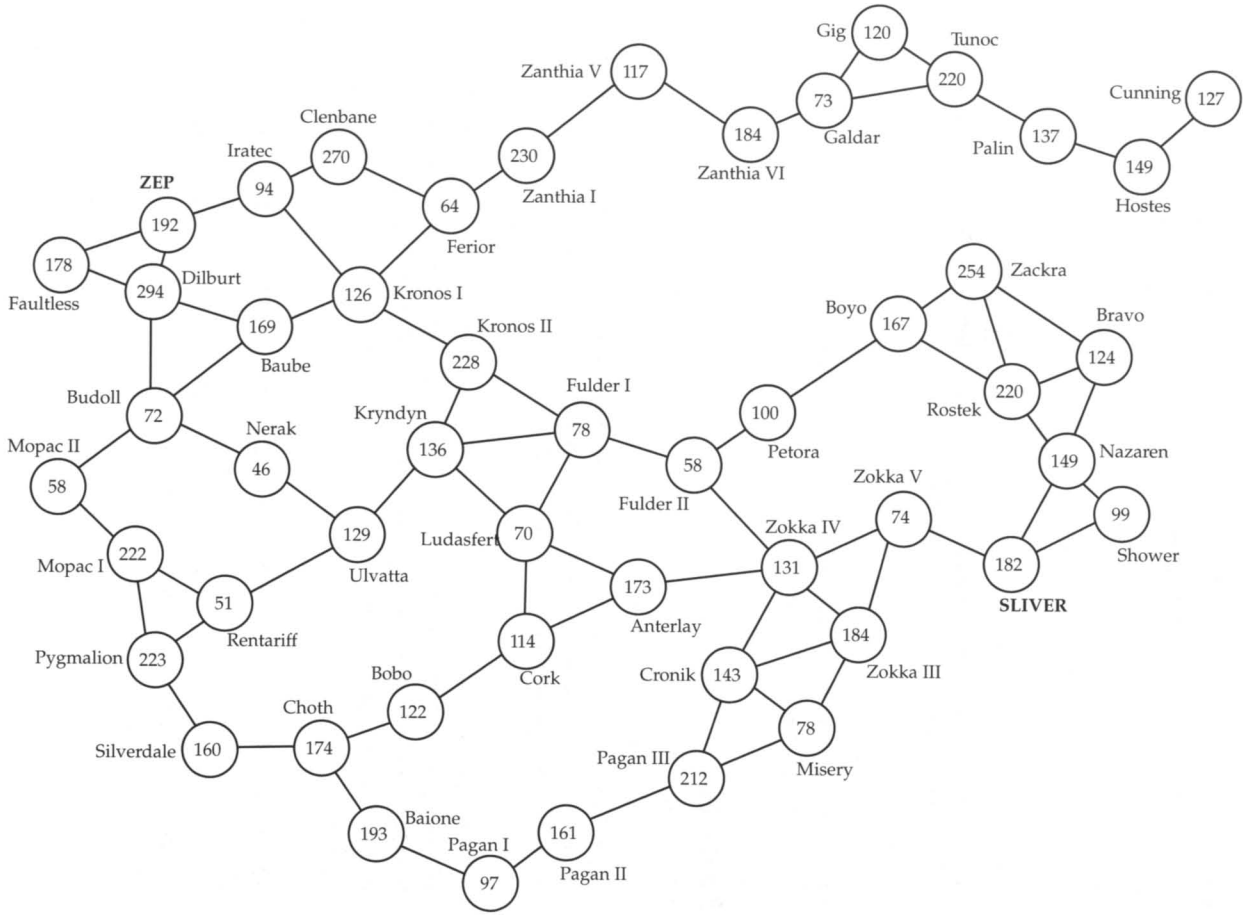
Kilrathi

- You have an easy starting defense at **Budoll** and **Kronos II**.

- From there, you can expand your defense at **Kronos II** to include **Kryndyn** as well, then move your defenders at **Budoll** up to **Pygmalion**, giving you a couple more high-yield worlds (**Mopac I** and **Pygmalion**).

- You have an excellent strategic advantage in control of the long, isolated string of planets between **Ferior** and **Cunning**. This includes several high-yield worlds, notably **Zanthia I**, **Zanthia VI** and **Turoc**. This arm should be the seat of your production, and can also be used as a bolt-hole if the Confederation mounts a premature assault against the carrier.

- To win against the Confederation, expect to have to steadily sweep through the sector. Fortunately, you have enough resources to successfully mount such an extensive offense. You have a definite strategic advantage in this sector, but only if you develop your forces steadily and patiently.



Gig 120
Tunoc
220
Zanthia V 117
73
Galdar
184
Zanthia VI
Cunning 127
Palin 137
149
Hostes
Clenbane
270
Iratec
94
230
Zanthia I
64
Ferior
ZEP
192
178
Faultless
294
Dilburt
126
Kronos I
169
Baube
Kronos II
228
254
Zackra
Boyo
167
Bravo
124
220
Rostek
Fulder I
78
100
Petora
58
Fulder II
149
Nazaren
Budoll
72
Kryndyn
136
Nerak
46
Mopac II
58
Zokka V
74
99
Shower
Zokka IV
131
182
SLIVER
Ludasfert
70
129
Ulvatta
222
Mopac I
51
Rentariff
173
Anterlay
184
Zokka III
Pygmalion
223
114
Cork
Cronik
143
Bobo
122
Choth
174
Silverdale
160
78
Misery
Pagan III
212
Baione
193
Pagan I
97
161
Pagan II

Sector 7

Confederation

- Your starting defense is **Clark-Daemon II-Muroq**.

- Because **Clark** is so far out from the home-world, aggressive Kilrathi explorers can sometimes get into the **Kluge I-Kluge III-Kluge IV-Kilmier** cluster before you gets your defense set up at **Clark**. Watch out for enemy fighters unexpectedly appearing behind your lines early on.

- You should develop the high-yield planets **Poxav**, **Fosterz** and **Muroq** first.

- When you're ready, you can expand **Daemon II** to **Frote** and **Yarra**, then complete your defense by moving **Muroq** to **Lister**.

- Your offense should consist of a drive to get control of **Luro II**, then using **Luro II** as a platform to mount a pitched battle for control of **Lambo**.

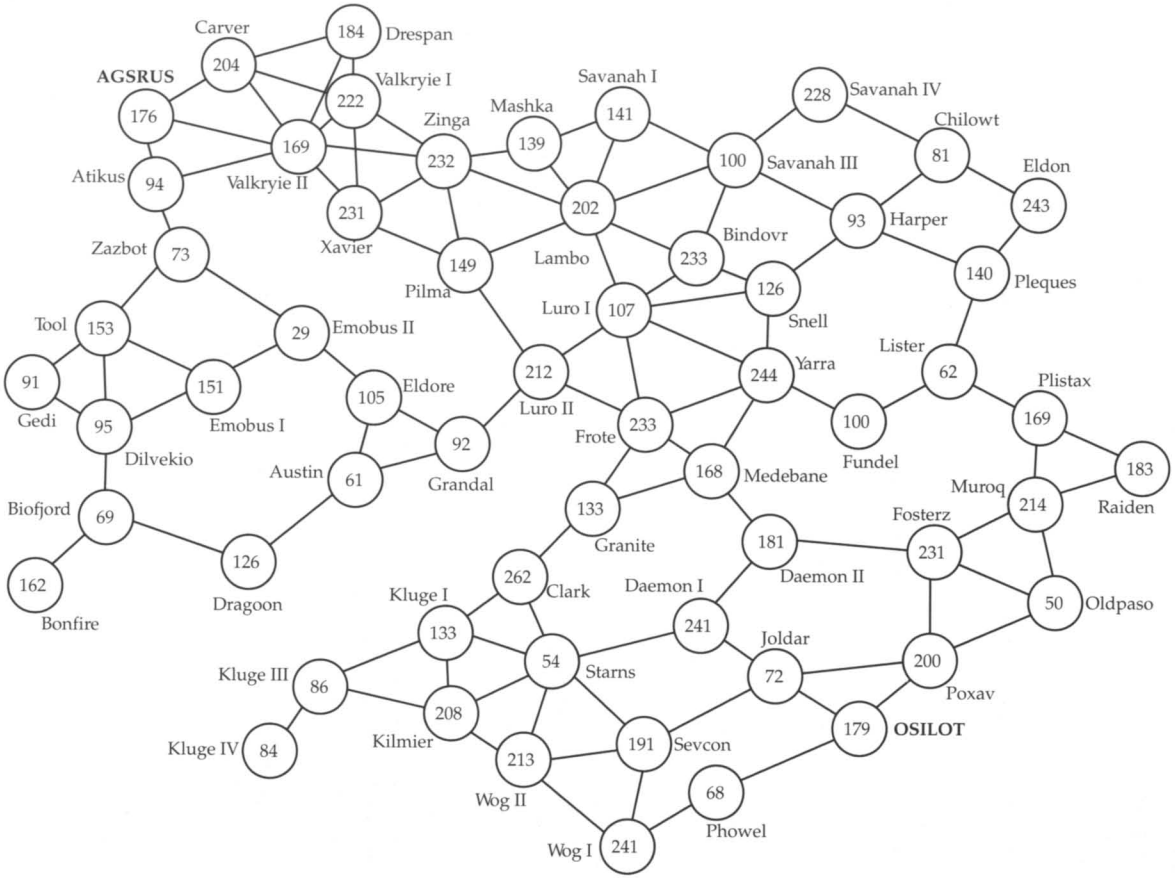
Kilrathi

- You start out by defending **Zazbot-Xavier-Zinga**.

- While it's attractive to quickly advance your defense from **Zazbot** to **Luro II** early on, it's really a low strategic priority (but if you don't secure **Luro II**, you should send out some ships to patrol around **Dilvekio** and **Austin**, to warn you if the enemy decides to attack through **Medebane**).

- The real meat of your defensive development — the cornerstone of your strategy — is the move from **Xavier** to **Lambo**. From there you can begin a strong, steady push to get control of **Luro II**, **Frote**, **Bindovr**, **Yarra** and **Savanah IV**. If you can take and hold that beachhead, it's only a matter of time.

- Once again, you have to push steadily and carefully into enemy territory, never over-extending yourself, and never letting up the pressure.


Carver
204
184
Drespan
AGSRUS
176
222
Valkryie I
169
Valkryie II
Atikus
94
Zinga
232
Mashka
139
Savanah I
141
228
Savanah IV
100
Savanah III
Chilowt
81
Eldon
243
93
Harper
231
Xavier
202
Lambo
233
Bindovr
Zazbot
73
149
Pilma
126
Snell
140
Pleques
Tool
153
29
Emobus II
Luro I
107
Lister
62
91
Gedi
151
Emobus I
105
Eldore
212
Luro II
244
Yarra
Plistax
169
95
Dilvekio
92
Grandal
Frote
233
100
Fundel
Austin
61
168
Medebane
183
Raiden
Biofjord
69
133
Granite
Muroq
214
Fosterz
181
Daemon II
231
162
Bonfire
126
Dragoon
262
Clark
Daemon I
50
Oldpaso
Kluge I
133
241
Joldar
Kluge III
86
54
Starns
72
200
Poxav
208
Kilmier
179
OSILOT
Kluge IV
84
213
Wog II
191
Sevcon
68
Phowel
Wog I
241

Sector 8

Confederation

- Your first defense centers on **Vantage** and **Abel I**.

- Expect some initial skirmishing to see how far up the line between **Gluon I** and **Emmit** each side can get. Try to get as far along the line as you can without getting stuck in a pointless pitched battle.

- The cluster at **Werdup-Rathman I-Witanek-Wretch** is your first development priority. The defensive strongholds of **Vantage** and **Abel I** are also resource rich. **Vantage** is a good planet for a mine, a shipyard *and* a fortress.

- This sector is all offense. You want to seal off the Kilrathi behind **Kalisto**, giving you control of the bulk of the sector. In order to win this sector, you'll have to seal off **Kalisto** and get control of the resources of **Abel II**, **Forist**, **Kalisto** and **Bariad**, plus the rich worlds beyond **Yoxa IV** and **Qillion**.

- If, late in the game, **Vantage** falls but **Kalisto** is secure, move your carrier near **Noged** and establish a new defense somewhere between **Abel I** and **Rathman I**.

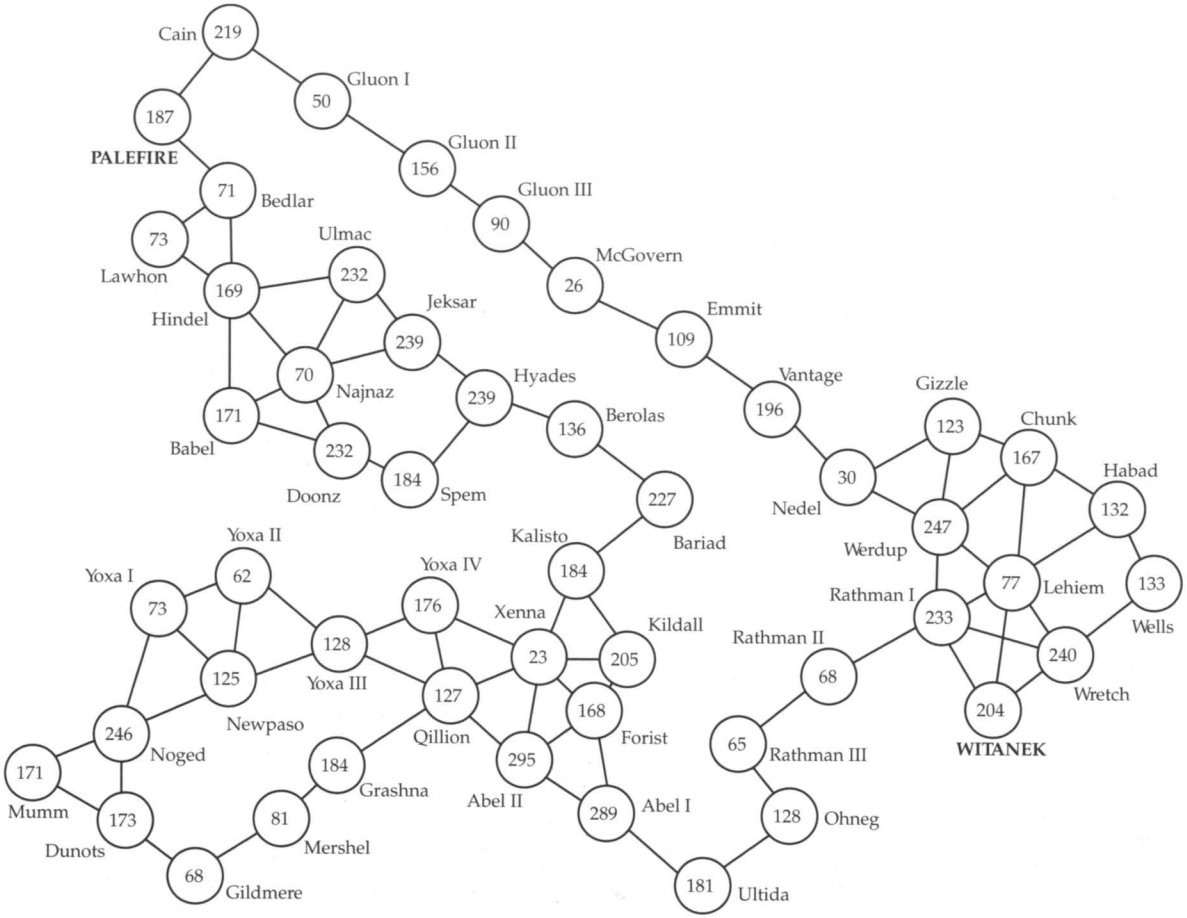
Kilrathi

- Your starting defenses are at **Kalisto** and as far up the line as you can get between **Cain** and **Vantage**.

- Your ability to win the sector depends almost entirely on your ability to hold **Kalisto** — it's a good place for a fortress!

- There are several short lines of high-yield worlds between **Palefire** (your home-world) and **Abel I**.

- Just as the Confederation *has* to take **Kalisto** to beat you, you *have* to take **Abel I** to beat the Confederation. In both cases, the winning side will be the one that can deny the enemy the rich cluster of planets to the "southwest" of the sector.


Cain
219
Gluon I
50
187
PALEFIRE
Gluon II
156
71
Bedlar
Gluon III
90
73
Lawhon
Ulmac
232
McGovern
26
169
Hindel
Jeksar
239
Emmit
109
70
Najnaz
Hyades
239
Vantage
196
Gizzle
123
Chunk
167
171
Babel
232
Doonz
184
Spem
136
Berolas
227
Bariad
30
Nedel
Habad
132
247
Werdup
Yoxa II
62
Yoxa I
73
Yoxa IV
176
Kalisto
184
Xenna
23
Kildall
205
Rathman I
233
77
Lehiem
133
Wells
128
Yoxa III
125
Newpaso
127
Qillion
168
Forist
Rathman II
68
240
Wretch
204
WITANEK
246
Noged
171
Mumm
173
Dunots
184
Grashna
81
Mershel
68
Gildmere
295
Abel II
289
Abel I
65
Rathman III
128
Ohneg
181
Ultida

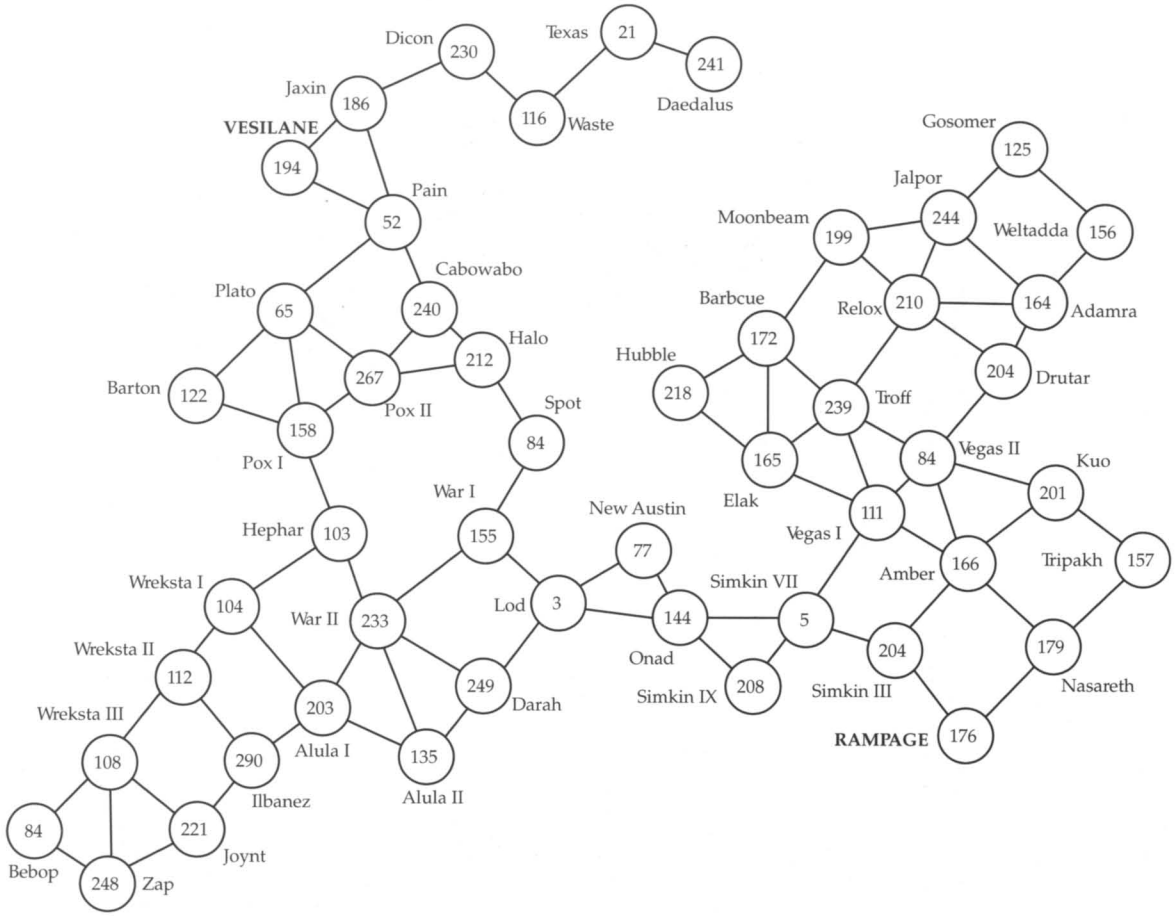
Sector 9

Confederation

- This sector is a defensive dream. You only need to defend the bottleneck that begins with **Simkin VII**.
- If possible, you want to quickly advance your defense to **Lod**.
- You have lots of fat, juicy high-resource worlds behind your lines. The **Moonbeam-Relox-Jalpor** cluster is particularly attractive.
- Your offensive goal is to control **Hephar** and **War I**, pinching off the Kilrathi and giving you an overwhelming resource advantage.
- Once **Hephar** and **War I** are secure, you can go ahead and move your carrier into the fertile worlds behind **Hephar** and **Darah**, to quickly build an overwhelming offensive force.
- Even after **Hephar** and **War I** are secure, however, you still need to maintain a defense at **Lod**, perhaps by building a fortress.

Kilrathi

- You'll establish your first defense at **Halo** and **Pox I**.
- You need to quickly develop the high-yield **Pox II** and **Cabowabo**, then **Dicon** and **Daedalus**.
- You must move as quickly as you can to **Darah** and **War I**.
- If you can take and hold **Lod**, you'll have effectively crippled the whole Confederation offense (those bottlenecks cut both ways!).
- Since the Confederation has to pin you in behind **Hephar** and **War I**, obviously your chief mission is to deny the enemy those objectives. Even better for you if you can bottle up the Confederation behind **Darah** and **War I** and take the fertile worlds out past **Alula I** and **Wreksta I** for yourself.


Dicon
230
Texas
21
241
Daedalus
Jaxin
186
116
Waste
VESILANE
194
Pain
52
Cabowabo
240
Plato
65
Halo
212
267
Barton
122
Pox II
158
Spot
84
Pox I
War I
155
Hephar
103
Wreksta I
104
War II
233
Lod
3
Wreksta II
112
249
Darah
203
Wreksta III
108
290
Alula I
135
Alula II
Ilbanez
84
221
Joynt
Bebop
248
Zap
New Austin
77
144
Onad
Simkin VII
5
208
Simkin IX
Gosomer
125
Jalpor
244
Moonbeam
199
Weltadda
156
Barbcue
172
Relox
210
164
Adamra
Hubble
218
239
Troff
204
Drutar
165
84
Vegas II
Elak
111
Kuo
201
Vegas I
Amber
166
Tripakh
157
204
179
Simkin III
Nasareth
RAMPAGE
176

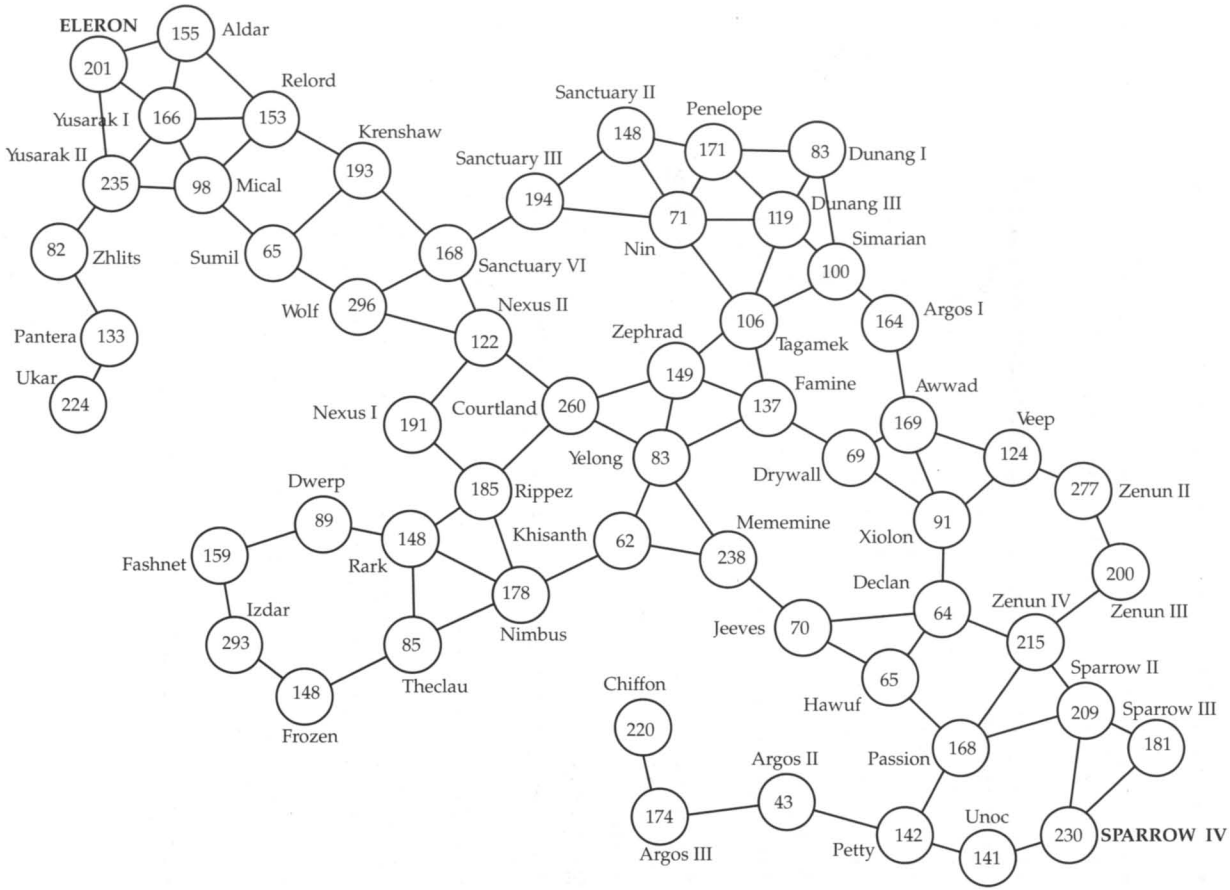
Sector 10

Confederation

- Your first line of defense is **Passion-Zenun IV**.
- Develop planets **Sparrow II** and **Zenun IV** first, then work your way out to **Chiffon**.
- As soon as possible, you need to expand your defense out to **Mememine-Declan-Veep**, giving you control of **Mememine**, **Zenun II** and **Zenun III**.
- You can confuse the enemy by moving to **Rippez** and **Nimbus**, and building a fortress on **Rippez**. (The carrier should *not* try to enter this area until it has been thoroughly swept by fighters.) Once the fortress is established move the carrier back to your original area (perhaps after building a shipyard on **Izdar**). The fortress will concentrate the enemy's attention on the worlds behind **Rippez** and **Nimbus**, giving you a chance to mount an assault in another direction.
- Another way to create confusion is to mount sorties and feints through **Sanctuary III**. This is particularly effective if the fortress at **Rippez** is holding.
- All this confusion is designed to distract the enemy long enough for you to build up a sufficient force from your original territory to sweep through the entire sector.

Kilrathi

- You start out by defending **Nexus II** and **Sanctuary III**.
- You should develop **Yusarak II** first.
- Build a fortress on **Sanctuary III** (develop **Wolf** on your way there), so you can concentrate your fleet on expanding from **Nexus II** to **Nimbus-Courtland**.
- Once you've secured that line (**Nimbus-Courtland**), you have more resources than the enemy, so go on the offensive.
- Watch out for the Confederation feints and tricks listed above.


ELERON
155
Aldar
201
Relord
Yusarak I
166
153
Krenshaw
Yusarak II
235
98
Mical
193
82
Zhlits
Sumil
65
168
Sanctuary VI
Wolf
296
Nexus II
Pantera
133
122
Ukar
224
Nexus I
191
Courtland
260
Zephrad
149
Yelong
83
185
Rippez
Dwerp
89
148
Rark
Khisanth
62
Fashnet
159
178
Nimbus
Izdar
293
85
Theclau
148
Frozen
Sanctuary II
148
Penelope
171
83
Dunang I
Sanctuary III
194
71
Nin
119
Dunang III
Simarian
100
106
Tagamek
164
Argos I
Famine
137
Awwad
169
Veep
124
Drywall
69
277
Zenun II
Mememine
238
Xiolon
91
200
Zenun III
Declan
64
Zenun IV
Jeeves
70
215
Sparrow II
65
Hawuf
209
Sparrow III
Chiffon
220
Passion
168
181
Argos II
43
174
Argos III
Petty
142
Unoc
141
230
SPARROW IV

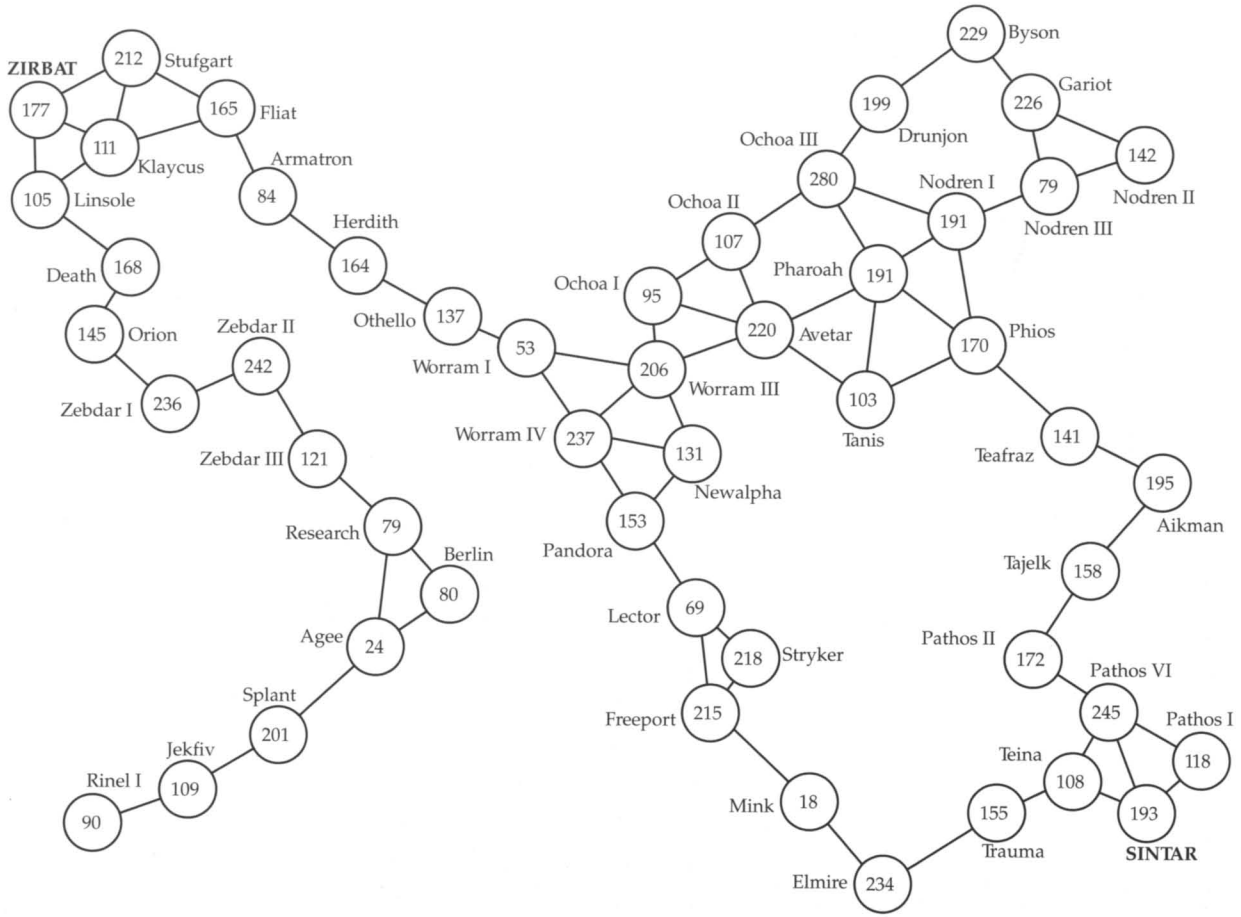
Sector 11

Confederation

- You start out defending **Freeport** and **Phios**.
- Develop **Pathos VI** first, then move out towards **Elmire** and **Freeport**.
- As soon as possible, you should move your defense at **Phios** up to **Worram III**. This gives you control of five more high-yield worlds.
- If you must, you can pull back from **Freeport** to **Elmire**, but **Elmire** should be defended vigorously.
- If you can hold **Freeport** and **Worram III**, you'll be in excellent position to throw a strong assault at the enemy bottleneck at **Worram I**.

Kilrathi

- Defend **Fliat** first, then rapidly advance your defense to **Worram I**.
- You should quickly work out to the high-yield pair **Zebdar I** and **II**.
- **Splant** is an excellent fallback position in an emergency.
- In order to win the sector, you *must* take and hold **Worram I**, **Worram III** and **Pandora**. Once you have those three planets secure, it's your choice whether to sweep up through **Worram III**, or thrust down past **Pandora**.


ZIRBAT
212
Stufgart
177
165
Fliat
111
Klaycus
105
Linsole
Armatron
84
Herdith
164
Death
168
145
Orion
Zebdar II
242
Zebdar I
236
Zebdar III
121
Research
79
Berlin
80
Agee
24
Splant
201
Jekfiv
109
Rinel I
90
Othello
137
Worram I
53
206
Worram III
Worram IV
237
131
Newalpha
153
Pandora
Lector
69
218
Stryker
Freeport
215
Mink
18
Elmire
234
155
Trauma
108
Teina
245
Pathos VI
Pathos I
118
193
SINTAR
Pathos II
172
Tajelk
158
195
Aikman
141
Teafraz
170
Phios
103
Tanis
220
Avetar
191
Pharoah
95
Ochoa I
107
Ochoa II
280
Ochoa III
199
Drunjon
229
Byson
226
Gariot
142
Nodren II
79
Nodren I
191
Nodren III

Quick Combat

Quick Combat is an option that may be used in Armada or Campaign. When the player doesn't wish to play out every dogfight and battle by hand, quick combat can be used to let the computer resolve battles.

The table below gives the percentile odds used to resolve quick combat. Each number is the percent chance of the fighter in the left column defeating the fighter above that column. For example, a *Kor-larh* has a 25 percent chance of defeating a *Banshee*, and a *Wraith* has a 10 percent chance of beating a *Goran*.

	Arrow Dralthi	*Phantom Shok´lar*	*Wraith Jrathek*	*Gladius Kor-larh*	*Banshee Goran*	Transport
Arrow, Dralthi	50	25	10	5	2	100
Phantom, Shok´lar	75	50	25	10	5	100
Wraith, Jrathek	90	75	50	25	10	100
Gladius, Kor-larh	95	90	75	50	25	100
Banshee, Goran	98	95	90	75	50	100
Transport	0	0	0	0	0	50

To resolve quick combat, the computer randomly selects one fighter on each side of the battle. The two selected fighters are then pitted against each other at the odds given above. The loser is eliminated, while the winner goes back into the pool where it may be selected for the next combat. This process continues, one battle at a time, until one side or the other is completely eliminated.

There are no "pilot levels" or any other modifiers of any kind in quick combat. All ships are assumed to be at full effectiveness for each battle — a *Jrathek* will roll at the same odds against the fourth *Arrow* it's matched against as it did against the first. The only way for the player to effect the odds of winning in quick combat is to have more and/or larger ships than his opponent. There are no distinctions among AI levels when the computer is playing.

Note that there is another small but significant difference between quick combat and normal combat. In quick combat, transports are as likely to be drawn into combat as any other ship. If so, the transport automatically dies unless it's facing another transport. Once all fighters on one side are eliminated, any surviving transports belong to the victorious opponents. In normal combat, however, transports cannot be destroyed — the winning side of the battle simply takes control of all transports at the battle's end.

Example

A *Phantom* and two *Wraiths* attack three *Dralthi* and a *Kor-larh*:

Phantom Wraith Wraith / Dralthi Dralthi Dralthi Kor-larh

For the first battle, the computer randomly selects *Wraith* vs. *Kor-larh*: The *Kor-larh* wins and the *Wraith* is eliminated:

Kor-larh beats *Wraith* >> *Phantom Wraith / Dralthi Dralthi Dralthi Kor-larh*

Second battle, *Phantom* vs. *Dralthi*:

Phantom beats *Dralthi* >> *Phantom Wraith / Dralthi Dralthi Kor-larh*

Third battle, *Wraith* vs. *Kor-larh*:

Wraith beats *Kor-larh* >> *Phantom Wraith / Dralthi Dralthi*

Fourth battle, *Wraith* vs. *Dralthi*:

Dralthi beats *Wraith* >> *Phantom / Dralthi Dralthi*

Fifth battle, *Phantom* vs. *Dralthi*: *Dralthi* beats the odds and wins.

Dralthi beats *Phantom* >> / *Dralthi Dralthi*

All the Confederation fighters have been eliminated. The Kilrathi win the battle, with two *Dralthi* surviving.

Tactics

There are an infinite number of subtleties that go into tactical combat that simply don't apply in quick combat, but the biggest single difference is probably as follows:

In tactical combat, heavy fighters are hard to kill, but they're also attractive targets. Big, slow and menacing, most players will, given the choice, gang up on the largest fighters first. Meanwhile, the poorly-defended light fighters are prone to fall to incidental fire in the course of the battle. In tactical combat between mixed groups of fighters, the most likely survivors are the medium fighters like the *Wraith*, *Jrathek* or *Shok'lar*.

In quick combat, things are not nearly so subtle. Fighters are paired up at random, and in any given pairing the largest fighter is much more likely to survive. The combat odds for a heavy-heavy fighter (a *Banshee* or *Goran*) are 3:1 against even a light-heavy fighter (a *Gladius* or *Kor-larh*). (The heavy-heavy fighter wins 75% of the time; the light-heavy wins 25% of the time.) That means that, on the average, three light heavy fighters die for every heavy heavy fighter that is destroyed.

Shipbuilding

Three light-heavy fighters cost about 70 resources, and take nine shipyard-turns to construct. One heavy-heavy fighter costs 26 or 29 resources, and takes three shipyard-turns to construct. It is obviously more efficient to build heavy-heavies rather than light-heavies.

The efficiencies of heavy-heavies are even more dramatic when compared with medium or light fighters. It takes 10 or 20 medium fighters to balance one heavy-heavy fighter; it takes *fifty* light fighters to offset a heavy-heavy.

Adding to the value of heavy fighters, remember that only heavies can kill a carrier. The result is that there is little reason to construct light, medium or even light-heavy fighters. When playing Armada or Campaign games with quick combat, concentrate on building *Banshees* and *Gorans*.

Pickets

Note that pickets are even more useful in quick combat games than in regular games. Since defense, and defensive lines, play so little part in quick combat games, it helps to post a picket so that you'll have advance warning of enemy attacks. Since light fighters have little other use in quick combat games, assign your original two as expendable scout craft, to help you map the sector and stand as pickets.

STRATEGY

Against the computer (which doesn't modify its shipbuilding strategy for quick combat), the best strategy is to build as many heavy-heavy fighters as quickly as possible and send them to seek out and destroy the enemy carrier. Since the computer starts by building light and medium fighters, you can often put heavy-heavy fighters on the carrier before it has begun building any itself. (Remember, though, that the Veteran and Ace AI levels begin with one to six heavy fighters. You'll usually have to deal with them before you can take out the carrier.)

Against a human opponent who is just as aware of the odds as you are, the same strategy applies. Armada and Campaign games often become a race to see who can put heavy-heavies on the enemy carrier first. However, as noted in **Resources: Mines** and **Shipyards** (pp. 48 and 49), strip-mining worlds and building a shipyard on every world with a mine is not the most cost-effective way to produce fighters (of any sort) in the long run. If you develop your worlds efficiently, you usually have enough fighters to hold off the first rush of enemies produced by strip-mining — especially since they have to fly across the sector to reach you. For example, if your opponent can build two fighters by Turn 5, but then needs eight turns to reach you, you have until Turn 12 to produce an equal number of fighters.

Note that since all combat is resolved as one-on-one "jousts", a single heavy-heavy fighter has the same odds by itself as it does with several other heavy-heavies. That is to say, it will (on average) take out just as many opponents by itself as it will when part of a fleet of heavy-heavies. Thus there is no need to wait and assemble an overwhelming fleet of heavy-heavies before sending them out. The sooner you send each one out, the sooner it can start disrupting enemy plans.

Fortresses are also of little value in quick combat games. A medium fortress (cost 100) will take out a single heavy-heavy opponent (cost 26 or 29) only 27% of the time. A light fortress (cost 50) takes out a single heavy-heavy about 14% of the time. Of course, it doesn't take three turns or require a shipyard to build a fortress, but if there's a choice at all, spend 30 resources to build a heavy-heavy, rather than 50 or 100 to build a light or medium fortress.

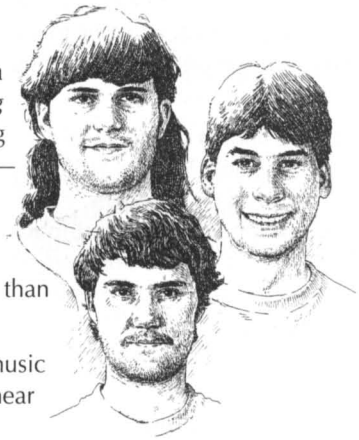
What about heavy fortresses? They are garrisoned with heavy-heavy fighters (a definite plus), but cost almost twice as much as three heavy-heavies. Since the objective in a quick combat game is to take your fighters to the enemy carrier, a fortress's immobility is the deciding negative in most cases. However, if your carrier is being pressed and can collect 150 resources, building a heavy fortress and hiding with it can occasionally protect you until you can build a few heavy-heavies of your own to attack the enemy carrier.

PLAYTESTERS

WRITTEN BY THE PLAYTESTERS AND ACCESSORIES.

JEFF "LITESPEED" EVERETT, JEFF "JEFFTEP" GRILLS AND CHUCK "SIXTH SENSE" KARPIAK

DESIGN TEAM



More adept at ZAP-ing enemy pilots than at actual flying, Jeff Everett's previous credits in his two and a half years at ORIGIN include *ORIGIN/FX* and *Wing Commander Academy*. Known for his lack of typing skills, Jeff dazzled everyone with the use of 4DOS — particularly in his ability to use the arrow key 20 times to drop a single letter in the space cleared with yet another dazzling display of 4DOS power. (Most often overheard quote: "He types less than anyone I know.")

Jeff Grills, a.k.a. jefftep or "Quarters," likes his music loud in his second floor office. It's loud enough to hear in QA (on the third floor), but on some nights you could still hear his enraged screams at uncooperative code over the heavy beat. By putting off a haircut until after the game was completed (he still hasn't done this), Jefftep had plenty of time to take spins in his new car (leaving less time for inconsequentialities like shaving, and oh ... I dunno ... programming?).

Fired nine times officially (14 unofficially) after being with ORIGIN for only six months, Chuck Karpiak set new standards for absentee trouble-making toward the end of the testing cycle (his excuse was that he *had* to get married). Now better known as a glorified burger flipper, "Sixth Sense" delighted in confusing fast-food cashiers with tremendous orders (e.g., three foot-long subs).

Programming their best under the influence (Fosters' being the spirit of choice), the *Armada* PD Team still produced decent code in more sober moments — without necessarily getting us a version of said code in a timely manner (that is, when any of us were here). The concept of "programmer time" has continued to be one of the most baffling facets of the *Armada* PD Team. "One hour" would take on the elasticity of a wet noodle expanding until ultimately disintegrating. All seriousness aside, this team did much to produce a fine product.

Dan "Havoc" Orzulak

QA Project Leader

Dan's reputation as one of the best computer flight sim pilots in existence is only exceeded by his reputation for one of the most bizarre hair-styles known to man and by his own perception of his greatness. His skills in flight and his haircut are probably related to a little-known fact about his origins. When he was two, his parents visited South America, where they lost Dan in the jungle. Dan was discovered by a flock of crested cranes, who raised him as one of their own. When he was eighteen (that's 57 in crested crane years), Richard Garriott stumbled across him on safari and brought him back to test our flight sims. The rest, as they say, is history. Today Dan is the project leader for almost all our space flight sims because no one else can stand to fly the same ship in the same mission over and over and over and over ... So if you ever come by ORIGIN and you hear someone bragging about how good a pilot he is (interrupted every now and then by an uncontrollable squawk) you will know who it is — DanO, "the feathery legend in his own mind."

James "jafo" Flores

James 'jafo' Flores quickly made his mark on *Armada* by mastering its Campaign and Armada modes, taking full advantage of his overbearing laugh to serve his purposes well. James' favorite technique was to intimidate human adversaries, by heckling wickedly in a last-minute attempt to make his opponent flinch at the thought of what he had up his sleeve. As an archery teacher, you'd think James would be a spectacular marksman, but this was not the case. However, he *was* adept at blaming his death on the fact that either the game was "cheating" or that his joystick lost calibration in the heat of battle. Well-versed in strategy (most commonly seen ambushing himself, while testing both sides of a multi-player mode), James' techniques came out quite handy when writing up notes for this playguide — especially since he often found ways to backfire his own attempted ambushes on himself. This Batman wannabe spent many hours here (frequently asleep under his desk), refining this technique, leaving his girlfriend wondering "Who was that masked man?" and leaving the programmers envious of jafo-emulation mode.

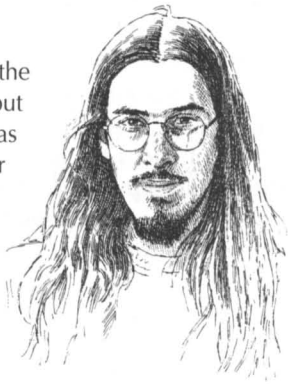
Jason "Rammer" Habel

Jason Habel has spent many hours mastering the art (so he says!) of ramming other people's ships in *Wing Commander Armada*. He says the art of ramming ships has been passed down from generation to generation in his family. He hopes to some day have children, so he can pass this technique on to them. It is for this reason that we nicknamed him "Rammer." Currently, Jason is going to school and refining his technique in order to become a better pilot. We keep telling him that the game would be much easier if he would just learn to fly. If you ever see him, ask him about his battle scars, and tell him to make the "face." We're sure he'd be happy to oblige.

Starr "Bravestarr" Long

A wily roadie vegetarian (who eats Sausage McMuffins?), Starr has tested several projects dating back to *Ultima VII*. If he's not running around screaming, "If it's not Scottish, it's crap!" he can currently be found testing *BioForge*. By the way, if you see him, don't ask if he lost a bet — he shaves his head because he wants to.

Jeremy "Monkeyboy" Mappus



This tie-dyed long-haired hippie freak rabbit really wanted the world to know his true callsign to be "Weezin'theMeyer," but that was deemed unfit to print for reasons unknown. Jerm, as he is more affectionately known, has been with ORIGIN for about a year and a half. In that time he has been involved with the testing of *Strike Commander, Tac Ops* and *Righteous Fire*, and was QA Project Leader for *Privateer CD*. During that time Jerm has also distinguished himself for his random outbursts and creative name calling, especially during his late night dazes (leading most on the team to conclude that being a tie-dyed rabbit does not improve one's lifestyle as much as he might like to think). Currently leading the testing effort on *Noctropolis*, Jerm also spends his time creating computer animation and hookin' (leading most on the team to consider him morally superior, despite being a long-haired hippie freak).

Jennifer "JenJen" Mason

Concerned about her mother finding something "in there," JenJen spent a lot of time making sure the quotes contained nothing of a disparaging nature, although she provided much more fruitful material than the entire rest of the team combined. Though not exactly the only girl on the infamous night-shift 'J' team (Jason was briefly doing nights as well), JenJen spent much of the time providing a different perspective on the testing of *Armada*. In fact she extensively tested all chat modes in the game as well as providing healthy doses of physical abuse for the entire team (when not bouncing off the cube walls). JenJen has been with ORIGIN Product Support for approximately two years, and *Armada* is her first test project. Having lost the chicken to Project Leader "Sonic HH"'s more radical hair style, JenJen has moved on to testing *Noctropolis*. Happy Easter.

Marc "Skeeter" Petrick

Known among his fellow wingmen as "Skeeter" and "The Warrior of the Fishhook," Marc earned his reputation by defeating his opponents through mindgames, especially with country music taunts. His strategy — stun the enemy by transmitting a brief Hank Williams, Jr. musical clip, then ram him head-on before he had time to recover. Low, but effective. This strategy made him a feared opponent. Marc's only weakness — being ZAP-ed off the network by the vengeful lead programmer.

Todd "Viper" Wachhaus

Aside from defeating the hockey puck and rubber band opponent, "Viper" defended his title best when on the road. When not committing all of his time to crushing the Kilrathi Empire, Todd could usually be found (or heard) driving Austin streets — while bassing the tunes of the Dangerous Toys. At the homefront, Todd could typically be found in 'hood company with the likes of Beevis and Butthead (one of whom for which Todd bears a suspicious resemblance ...).

Jim "Furball" Gould, David "DAVID" Ladyman, Mike "Tron" Vragel

Additional Testers

For over a decade, the mention of this trio caused paper game designers to quiver and publishers to dive for cover. They have been responsible for bending the rules, manipulating the data, and distorting reality for a wide variety of roleplaying and board games from such companies as Steve Jackson Games, FASA and TSR — hence their affectionate nickname, The Wrecking Crew.

With a warcry on their lips ("It's *your* turn to buy the pizza!"), the trio turned their attention to the computer world. After a brief orientation session ("Which is the 'any' button?" "My cat was chewing on the CD — does that make any difference?" "Where are the dice?"), our heroes set forth to wreak havoc. Sixteen pizzas, twelve bags of Oreos and two cases of Coca-Cola later, they emerged triumphant ("I can't get my mouse to work in spaceflight!" "Are you *sure* there're no dice?" "How do you turn this thing off?"). The Wrecking Crew is now in search of other galaxies to conquer.

And breakfast.

OFFICIAL ORIGIN HINT BOOK

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