

# CONTENTS

*"Still tracking the Kraks inbound towards the station, Sir, we have confirmed ID on one Kickback, one Kingpin, two Kylies plus five Kerfs in escort pattern - looks like a carrier strikegroup backed up by an SDN.... what the f....er, hold one please..... more jump exit signatures, Captain! Probable Sa'vasku waveforms...."*

*"Identification, Scan One?"*

*"Coming up, Sir..... scan patterns processing..... got them! Confirm Spikeys, two capital units and at least six smaller. OK, by mass readings we've got 90% probability on one Sandcrab and one Smudger, the other stuff may take a while to firm up but they're looking like a pair of Spankers and a number of escorts...."*

*"Thank you, Scan One - keep on them and give me any more data as you have it. Guns, I want a cold track on the Spikeys, but no going active until they make a move - we don't know whose side they'll be on this time, and I sure as hell don't want to push them...."*

*[Excerpt from bridge recorder transcript, RNS Lancaster, leading 43rd Operational Squadron in defence of Research Station Kantauris Delta 3, 2191.]*

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# INTRODUCTION

## INTRODUCTION

When we published Fleet Book Volume 1 in 1998, we promised there would be a second book to cover the alien races in the Full Thrust universe; well, after two years, here it is!

This book contains full rules, design systems and pre-designed ship stats for three different alien races - the Kra'Vak, the Sa'Vasku and the Phalons. Those of you who have a copy of MORE THRUST, the first supplement for Full Thrust that we produced, will recall that early versions of the rules and backgrounds for the Kra'Vak and the Sa'Vasku were originally published in that supplement. At the time, the "MT" version Kra'Vak were actually very over-powered for their points value, which led to unbalanced games, and the MT Sa'Vasku rules were only ever intended as some experimental suggestions for players to try out.

For Fleet Book 2, we have revised and rewritten both the Kra'Vak and the Sa'Vasku rules, and have added the Phalons (who never appeared in MT) as a third protagonist.

The Kra'Vak rules in this volume are not unlike the original MT version; players of the old rules will note some cosmetic changes, such as renaming the original KV "railguns" as "K-guns" (mainly so that we can possibly introduce a "railgun" system as another Human weapon in due course...), but the overall feel of the Kra'Vak ships and tactics will be very similar to the originals. This time, however, we think we've got the points system right so games will be more balanced!

For the Sa'Vasku, the rewrite has been much more extensive. They are still probably the most complex race to actually play in the game, but we have removed some of the more time-consuming aspects of the MT versions (particularly the original random power generation ability, which although it added a lot to the unpredictability of the race - both to its player and opponent - was very lengthy to use) and streamlined the SV rules while adding a lot more twists and options to their ships.

The Phalons are altogether new to the FT system, and appear for the first time in this volume. We wanted to add a race that looked totally alien, but acted in a way that humanity could relate to; the Phalons' weapons and systems are different from the humans' in many ways, but alike in others, and of the three alien races they are probably the most easily understood by mankind. Phalon ships are very powerful in play, a fact balanced by their high points values, and their willingness to fight (or indeed ally with) anyone if it is in their own interest should lead to many fascinating game permutations.

This volume is not necessarily the end of the alien races for Full Thrust; even while writing it, ideas have been bubbling to the surface for races, systems and ships that we could not include here, and there is almost endless scope for more material, human and alien.

Now you've got this book, you can start pestering us for Volume 3.....

Jon Tuffley, GZG, March 2000.

## CREDITS AND THANKS

Thanks to all the members, active and lurking, of the GZG email list, especially to those who have contributed ideas via the list which we have adapted for use in this volume. I can't name everyone personally, and in many cases I don't even know exactly who originated what (especially after the ideas have been chewed around by the list membership for a while!), but all the input has been invaluable in shaping not only this book but other stuff yet to come.... keep it up, chaps.

Special thanks must go to all the stalwart members of the on-line playtest group, with especially honourable mentions for sheer volume of response to Oerjan Ohlson (number-cruncher and design-checker extraordinaire!), Mark "Indy" Kochte, Alan Brain, Tom McCarthy, and of course Beth Fulton (for playtesting work above and beyond the call of duty, when I'm sure she had much more important things to do!).

Of course, this book wouldn't exist if it wasn't for all the keen Full Thrust players out there who keep buying the stuff we make, so my thanks also goes out to everyone who is reading this for your support past, present and (hopefully) future - you keep playing it, and I'll keep writing it!

## AN IMPORTANT NOTE ON MEASUREMENTS

Reading through this book, you will notice that we have given all measurements, ranges and distances in the rules in terms of "MU". This stands for Measurement Units, and we have decided to adopt this to replace the old method of giving all distances in inches. Basically, 1 mu can be any distance you want it to be according to the size of playing area you have, the size of models you are using, and simply personal preference. For general play, we assume that most people will use 1 mu = 1 inch (or approx. 25mm in metric), but it is just as valid to have a scale of 1 mu = 1 centimetre

if you are playing on a small tabletop (or if you want a game with very high speeds and lots of manoeuvring room on your normal size of table). If you have a huge area available to play on, then feel free to use any other conversion rate you like - 1 mu = 100mm, or 6 inches, or even more!

## NOTES FOR READERS WHO DO NOT HAVE FLEET BOOK 1

Fleet Book Volume 1 (Warships of the Major Powers, 2183), the companion book to this volume, contains a number of new, expanded and revised rules for Full Thrust - including a completely new ship design sequence that replaces the one in the Full Thrust 2nd Edition rulebook. The design sequences for the three alien fleets in this volume are all based on that new system, with appropriate modifications for the specifics of each alien race.

Although it will be a great help, it is not strictly necessary to have Fleet Book 1 in order to use and enjoy this volume; if you only have access to the basic FT 2nd edition book, then the following notes will help you to make use of the ships and rules given in this book:

**1) FIRE ARCS:** One of the most fundamental changes introduced in Fleet Book 1 was the move to 6 fire arcs of 60 degrees each, replacing the original four 90-degree arcs of FT 2nd edition. The arcs are now referred to as FORE (F), FORE PORT (FP), FORE STARBOARD (FS), AFT PORT (AP), AFT STARBOARD (AS) and AFT (A). A weapon bearing through the frontal 180 degrees of the ship would be denoted as a 3-arc (FP/F/FS) system. This change gives greater variety of possible arcs, and makes arc judgement much easier using the standard hexagonal bases that most starship models are supplied with. All ships in this volume use the 6-arc method, but if you wish to use the original ships from FT 2nd edition then we suggest you retain the old 4-arc system for those designs.

**2) VECTOR MOVEMENT:** Fleet Book 1 introduced a new (optional) system of realistic vector movement, which players could choose to use if they wished in place of the standard FT movement system (which is now termed CINEMATIC movement, as it is more in keeping with the highly unrealistic way that ships are seen to move in most SF movies!).

Each of the alien races in this book has rules given for both vector and cinematic movement, so if you do not have access to a copy of Fleet Book 1 then simply ignore all references to vector movement and use the standard cinematic system.

**3) SHIP MASS AND POINTS VALUES:** The new design system in Fleet Book 1 had the effect of raising the total MASS ratings of ship classes by a large factor (double or more, in most cases), but the actual POINTS VALUES remained approximately the same, so you can use the points costs as a rough guide to comparing ships between the different books - a typical Destroyer from Fleet Book 1 may have a MASS twice that of one from the original FT 2nd edition designs, but both will have a value of around 100 points or so. The same applies to the ship designs in this volume - they should be approximately equivalent in terms of points cost to those in FT 2nd edition.

**4) REROLLS:** This rule was introduced in Fleet Book 1, and is used in this volume as well: if certain weapon systems roll a 6 for damage effect, they can get to reroll to see if they inflict further damage as well as that scored by the initial 6 - in most cases, any damage scored by the reroll will be taken as "penetrative" damage, done inside screens and/or armour. Those weapons capable of reroll damage are explained in the relevant rules sections of this volume.

**5) AMENDED FIGHTER RULES:** Fleet Book 1 includes quite a large number of changes to the original 2nd edition fighter rules; the most important ones are the introduction of secondary fighter moves, and modifications to the endurance rules first published in More Thrust.

Fighter groups now have 6 Combat Endurance Factors, or CEFs, which they use up whenever they engage in combat (anti-ship or anti-fighter). Once they are out of CEFs, they may no longer make attacks and must return to their carrier.

Fighter movement is increased to 24 mu for standard fighters, and 36 mu for "fast" fighters. In addition, groups may make a "secondary move" of 12 mu after ship movement takes place, if they have any Combat Endurance Factors left - a secondary move uses up one CEF.

The Fighter Group Morale rules originally introduced in More Thrust are now recommended as standard rules, requiring a group to roll less than or equal to the number of remaining fighters in the group in order to make an attack pass on an enemy ship.

There are numerous other new ideas and rules in Fleet Book 1, but the summaries above are the most important if you are jumping straight from the FT 2nd Edition rulebook to this volume.

# GENERAL RULES

## BASIC SHIP DESIGN: RULES CHANGE

This affects ALL ship designs, human and alien; it is actually not really a change, so much as the lifting of an artificial restriction, and as such does not affect or invalidate any of the designs published in Fleet Book 1.

The change is simply to remove the fixed percentage limits on HULL INTEGRITY; instead of having to be bought in 10% increments, ship designs may now have as many or as few Hull boxes as the designer wishes, subject only to a lower limit of a minimum of 10% of the total ship mass. The actual number of hull boxes chosen does not have to exactly equal any given percentage of the ship's total mass.

Each Hull Integrity box still takes 1 MASS, and costs 2 points. The terms used to describe the hull types in FB1 (Fragile, Weak, Average etc.) may still be used to roughly describe the kind of structure a ship has, but they no longer refer to fixed percentage figures - they now indicate a range of possible hull strengths (chosen so that the FB1 designs fall about halfway into each range), so that a Fragile hull would be from the minimum 10% to about 14% of total mass, a Weak hull from approximately 15% to 24%, Average from 25% to 34%, Strong from 35% to 44% and a Super hull would be anything above 45%. These classifications are approximate, are for descriptive convenience only, and have no bearing on game play whatsoever.

### FIDDLING ABOUT TILL IT ALL FITS.....

Under the design system given in Fleet Book 1, with hull integrity strictly in 10% increments, if you couldn't squeeze all the systems you wanted into the MASS you had available then you were faced with recalculating the ship from scratch, and maybe even changing its overall mass to accommodate things. However, with the revised rule explained above, it is now a lot easier: if you decide that you REALLY need another fire control system, or another weapon battery or whatever, and do not have enough MASS left over to fit it in, then the new ability of being able to buy hull boxes in any quantity becomes very useful - you can go back to stage 2 of the design process and simply drop a couple of hull boxes to free up the extra mass you need, without affecting any of the rest of the ship design. Similarly, if you get to the end of the systems fitting-out stage and find you've got a few spare mass left over, you have the choice of putting in another system or else going back and adding an extra hull box or two. Of course, you have to remember to alter the layout of the damage track and change the points value spent on hull integrity, but unlike the old design system you don't have to start recalculating the whole design from scratch.

## GAME BALANCE

Throughout the design process of the rules for the three alien powers in this book, great emphasis has been placed on trying to get the points values as balanced as possible between the different fleets, so that 1000 points of (say) Kra'vak ships will theoretically be a fair match against 1000 points of Phalons, Sa'vasku or indeed any of the human fleets from Fleet Book 1.

Now, as they say, all things are relative (and all relatives are things....), and there will be cases in which the points system won't give a perfect balance, but it should be close enough for all normal game purposes. If you really want to spend hours and hours with spreadsheets and simulations, trying to find that little loophole that will give you that extra 0.5% edge over your opponents, then be our guest - it'll keep you out of the way of the people who just want to get on and play the game to have fun....

One thing that should be pointed out is that while the points values are as accurate as we could make them, the size classes of the ships are very approximate and can be misleading if taken in isolation. Some of the alien ships (the Phalons, in particular) are actually much more powerful on a ship-for-ship basis than the human designs, but to balance this their points cost is proportionally higher - this should be taken into account when setting up games and designing scenarios.

To take an example, in a small human (NSL) vs. Phalon battle, the players may choose forces up to approximately 750 points. The NSL player might have two Waldburg Destroyers, a Radetzky Escort Cruiser and a Richthofen Battlecruiser (all designs from Fleet Book 1), for a total of 746 points. The Phalon player might choose a Pthath Battleship, two Phuun Frigates and a Vloth Battle Scout for a total of 751 points. The NSL player might look (from the class descriptions) to have a far superior force, but the combat potential of the two fleets should actually be very similar.

## COMBINING DIFFERENT ALIEN TECHNOLOGIES

As soon as some players get their grubby little mitts on this book, they will start wanting to design ships based on a mixture of some or all the different races' weapons and systems.

Now, there is nothing inherently wrong in this, but please be aware that we have gone to great lengths to try and ensure that all the alien races presented here have a different feel from each other in game terms - they are not just "rubber suit aliens",

with the same ships and the same weapons using different names. If you start to mix-and-match the technologies in a search for the ubership (which, if we've done the balancing right, you SHOULDNT be able to find - not that that will stop you looking....) then all the fleets will start to look the same and a lot of the flavour of the game will be lost.

The simplest way round this is to just say "sorry, you can't do it" and back this up with some PSB about the radical differences between the various races' approach to their technologies making them totally incompatible. Rather than do this, however, we accept that it'll happen and thus need to lay down a few guidelines for those people who just can't resist it.

We have one VERY strong recommendation: NO MIXED-TECHNOLOGY SHIPS SHOULD BE USED IN ANY KIND OF COMPETITIVE OR TOURNAMENT GAME.

We would also suggest that mixed-tech designs should not be used when playing with people new to the game, or who are not part of your regular gaming group.

If you wish to discourage use of mixed tech without actually forbidding it, you may wish to consider a house-rule of applying a penalty increase to mass and/or points cost for any system or technology copied from another race.

If after all this your group of players wish (and agree) to try using mixed-tech in their designs, then by all means give it a go - you've paid us the money, and it's your game now!

*[As far as our published "canon" universe background is concerned, mixed-tech ships do not appear in any forces within the time period of the First Xeno War; though each of the protagonists (except the Sa'vasku, who consider themselves above all this innovation stuff...) will undoubtedly be devoting a good deal of time and resources to investigating the other races' technology from salvaged debris and captured or disabled ships, the problems of duplicating it with a completely different technological base are too great to be surmounted during the war years - we're not talking here about, for instance, the FSE stealing plans for something from the NSL and building a copy, we're talking about trying to integrate two or more totally alien forms of technology and materials. All the protagonists feel that it is much better to spend the shipbuilding resources they have on a dozen more warships of their own proven designs than to waste the same amount on one weird and experimental hybrid that may or may not work at all, and if it does may not be a lot better than what they've already got.]*

## VECTOR MOVEMENT: SUGGESTED RULES AMENDMENTS

The new system of Vector Movement that was introduced in the Fleet Book 1 as an alternative to the standard ("Cinematic") Full Thrust movement rules has now been in use with players for two years, and over that time we have received a large amount of feedback about it. While not being a strictly accurate mathematical model of how things really move in space, the system gives a reasonable "feel" of how things should be without the need for any complex calculations or excessive record-keeping, and general reaction to it from players has been very good.

One or two loopholes and oddities in the system have been discovered since it was published, and many possible solutions and fixes have been proposed by the very active members of the GZG email list among others. What we are presenting here is just a possible idea for refining the system a little, which we'd like to invite players to have a go with and, if they wish, let us know the results; these are not hard and fast rule amendments at this stage, merely suggestions - after the feedback comes in we'll make decisions about how the final "official" revisions (if any) will be worded for inclusion in the next edition of the Full Thrust rules.

### REVISED VECTOR MOVEMENT [OPTIONAL]

ALL thrust, whether for Main Drive burns, ship rotations or "thruster pushes", should come out of the total thrust factor of the main drive. Thruster pushes (side or retro thrusters) are now limited to a maximum of 1 thrust point per turn from any one set of thrusters - ie: a side push plus a retro push (1 thrust point each) is allowable, but two side pushes are not.

Multiple rotations in a single turn are permitted, but 1 thrust factor is used for each rotation (no matter how many or few course points the ship rotates through each time), so a thrust-4 ship could, for example, rotate to a new facing, do a thrust-2 burn with its main drive, then rotate again to bring its weapons to bear at the end of the turn. The same thrust-4 ship could also (say) do a 1 point push to starboard, a 1 point retro push, a rotate and still manage a thrust-1 burn with the main drive, in any order desired.

Note that this makes the mechanism for "standard" vector movement more like that given for the Kra'vak and Sa'vasku advanced drives in this volume, the difference being that the standard drives may still only apply their main drive thrust in the direction of facing, while the advanced grav drives may apply it in any direction regardless of current ship facing.

# GENERAL RULES

## ADVANCED AND SPECIALISED FIGHTER TYPES

The Fighters depicted in FT 2nd edition are assumed to be "multirole" fighters: good average, basic types – moderately fast, with reasonable anti-ship and anti-fighter capabilities; an all-round "multi-mission" type of craft; standard multirole fighters cost 18 points per group of 6 (3 points per fighter).

The rules that follow give some ideas for modifying your fighters into rather more specialised or improved types:

[Note: these rules originally appeared in the "MORE THRUST" supplement book, in slightly different form. Some of the rules have been amended and the points values changed to bring them in line with the Fleet Book 1 system.]

### FAST FIGHTERS

While normal fighters have a movement allowance of 24 mu per turn, "Fast" fighters have more powerful drives giving them a movement of 36 mu per turn; they still have a limit of 12 mu for secondary moves.

A group of 6 Fast fighters costs a total of 24 points (4 points each).

### HEAVY FIGHTERS

"Heavy" fighters have the same offensive and drive capabilities as normal fighters, but are better protected against attack by armoured hulls, heavier structural components etc. When Heavy fighters are attacked by beam-type (eg: Human, Phalon or Sa'Vasku) point-defence weapons or other fighters, rolls of "4" have no effect (ie: kills are only scored with rolls of 5 or 6). When fired on by Kra'Vak scatterguns, halve the number of kills scored.

A group of 6 Heavy fighters costs 30 points (5 points each).

### INTERCEPTORS

The Interceptor is a specialised type of fighter with no effective anti-ship capability, but optimised for anti-fighter performance. Interceptors may not fire on any vessels except other fighter groups (using the Dogfighting rules from FULL THRUST), but when they make such an attack they may add 1 to all die roll results – thus they kill one fighter on a roll of 3 or 4, and TWO on rolls of 5 or 6.

When themselves attacked (either by fighters or anti-fighter fire) they take casualties normally.

An interceptor group costs the same as a standard multirole group, as they are trading-off their anti-ship capability for their enhanced dogfighting.

### ATTACK FIGHTERS

Specialised "Attack" fighters are really the opposite of Interceptors – they have very little ability to engage other fighters, but carry increased weaponry loads for anti-ship missions. When in a dogfight situation with an enemy fighter group, Attack fighters only hit and kill opposing fighters with rolls of 6 (which destroy one fighter only per successful roll). When engaging other ships, however, the Attack fighters add 1 to all their die rolls ie: if firing on an un-screened target ship they would inflict 1 Damage Point with rolls of 3 or 4, and 2 DP with 5 or 6.

Because anti-ship capabilities are usually of more importance in the game than dogfighting, an Attack fighter group costs 24 points (4 per Fighter).

### LONG-RANGE FIGHTERS

This is an option to be used IF you are also using the "fighter endurance" rules. While normal fighters have six Combat Endurance Factors, a Long-Range group has NINE CEFs due to its additional fuel tankage, life-support etc.

A Long-Range fighter group costs 24 points (4 per Fighter).

### TORPEDO FIGHTERS

These are a further specialisation of the Attack fighter, carrying a heavy single-shot anti-ship weapon on each fighter. When the group attacks an enemy ship, roll once per fighter to see how many hits are scored – each fighter needs a roll of 4 or more to score a hit with its "torpedo"; those shots that hit inflict damage equal to the number rolled (ie: roll of 1-3 is a miss, but 4 scores 4 DP, 5 = 5 DP and 6 = 6 DP. No rerolls are made). Damage is applied half to armour (if any), half to hull.

The group may only attack ONCE in this manner, and for simplicity it is assumed that all the fighters in the group will attack the same target at the same time – it is not permitted to fire just some of the group and "save" the others for a later attack (unless of course you wish to agree this between yourselves, and work out the necessary record-keeping). Once the group has expended its torpedoes, it may then only fight in the same limited anti-fighter mode as for Attack fighters (ie: needing rolls of 6 for kills) and may not make any further attacks against enemy ships. The Torpedo Fighter group is thus very much a one-shot weapon, but a (potentially) extremely powerful one – for this reason a torpedo group costs 36 points (6 per Fighter).

When using specialised fighter groups, use the normal fighter symbol for the ship record diagram, but replace the "spot" in the symbol with the appropriate letter for the fighter type: for example, an "H" for Heavy Fighters, "T" for Torpedo Fighters, etc.

Note that all fighter groups, regardless of type, have the same MASS and hangar space requirement in the carrier or mothership, and operate under all the normal rules for launching, recovery and turn sequence.

## FIGHTER LAUNCHING - RULE AMENDMENT

In FT 2nd Edition, it was ruled that fighter launches were limited to 2 groups per turn for specialised carriers, and 1 group for other ships. Hindsight and a lot of play experience has suggested that this limitation should be removed, and that all fighter-carrying ships (whether specialised carriers or not) should be allowed to launch as many groups per turn as they have operational fighter bays. Fighter recovery (landing) is of necessity a slower process than launching, so any fighter carrying ship may only RECOVER fighter groups equal to HALF its number of operational fighter bays in any one turn.

Launching and recovery operations MAY both be performed by one ship in the same turn if desired.

Note: this rule amendment removes the need to define in rules terms exactly what constitutes a "carrier", as this now has no effect on play. Where reference is made to "carriers" in the rules, treat it as meaning any ship that is equipped to carry one or more fighter groups, whether or not that is its primary mission function.

## FIGHTER RE-ARMING - NEW RULE

[This rule is OPTIONAL, and may be used or amended to choice according to the background you wish to use and the timescale that you prefer a game turn to reflect.]

When a fighter group is recovered by its carrier, roll 1 die: on a score of 1, the group may NOT be re-launched in this game (severe damage to returning fighters, crew fatigue etc.); on a 2-5 the group will be patched-up, refuelled and re-armed after 1 full turn, so it may re-launch in the second turn after recovery; on a score of 6, the group makes a crash turnaround and may re-launch on the turn immediately following that of recovery. If depleted groups are combined to make full strength ones, roll for each partial group and the worst case result applies to the entire new group.

## CORE SYSTEMS (OPTIONAL RULE)

[Important note: the rules quoted below were introduced in Fleet Book 1, and are reprinted here because they are of some importance to using two of the three races in this book.]

Looking at the ship data panels for the Kra'Vak and the Phalon designs, you will see a box in the right hand lower corner of each Systems Status Display (SSD) which contains three icons that represent the most vital systems buried deep within the hull of the ship: these are the "core" systems, and consist of the Command Bridge (which also includes computer systems, avionics etc.), the Power Core and the Life Support System.

You will note that the Sa'Vasku ships do not have the three core system icons on their SSDs; this is because the Sa'Vasku have their power source denoted by their separate Power Generator icons, and their constructs do not need life support systems or command areas in the same way that the other races' ships do. The Core Systems rules do not apply to Sa'Vasku ships (they have more than enough special rules of their own!).

If using the core systems rules, these three systems are grouped together on the ship diagram, with a box drawn round them. Whenever the ship reaches a threshold point, the systems within the core box are each rolled for as normal, but at +1 to the current threshold number - thus at the first threshold point, where systems are lost on rolls of 6 only, the core systems do NOT need to be rolled for (as they would only be lost on a "7"). On the second threshold, where normal systems go down on rolls of 5 or 6, the core systems are only hit on rolls of 6, and so on.

Notes:

- i) The core systems, and their basic "protective" box, do NOT need to have MASS allocated to them during ship design - they are assumed to be part of the essential structure of all ships.
- ii) If an opposing fleet is using Needle Beams, the core systems may NOT be targeted by these weapons; Needles may only fire at surface features on the ship, such as weapons, sensor grids, drive units etc.



# GENERAL RULES

## EFFECTS OF THRESHOLD DAMAGE ON CORE SYSTEMS

### COMMAND BRIDGE HIT

If the Command Bridge takes a hit, then a further D6 roll is made immediately - if the roll is 1 to 5, then the ship is "out of control" for that number of turns, until command can be restored through backup links and secondary command systems. If the roll is a 6, then the ship is PERMANENTLY out of control for the duration of the game. While a ship is "out of control", it will continue on its present course and velocity, and may not fire weapons, launch fighters or take any other offensive action. Passive defences (screens) are still operational, though active defences (PDS etc.) are not. Once control is regained (after the number of turns indicated by the die roll), all undamaged systems come back on line. Damage Control parties may be used at any turn to try and restore control earlier, using the normal damage control rules.

### POWER CORE HIT

If the Power Core takes a hit, it is damaged and may "go critical" and explode, destroying the ship. It continues to supply power for the ship, but the safety systems that control it are damaged or destroyed, and each subsequent turn the player must roll a die at the start of the turn - on a 5 or 6, the core explodes. Damage Control parties may be used as normal to try and stabilise the power core - such attempts are made before the roll for explosion for that turn, and success will bring the core back under control and negate any further effects (unless the core is then damaged again on a

subsequent threshold, when the process will repeat). Each turn, BEFORE rolling the die, the player may make a choice - he may abandon ship, or he may "dump" the core - this avoids the risk of explosion, but leaves the ship without power for anything but emergency life-support (from backup batteries) - the ship is intact, but unable to do anything further in this battle except continue to drift on its present vector. If the player chooses to abandon ship, the ship continues to drift while still rolling each turn to see if the core explodes - in this case, however, the needed number for an explosion drops by 1 each turn, as the core is running out of control with no-one to damp it down; thus it WILL explode eventually and the ship will be lost. A ship that dumps its core will be no further use for that battle, but may be salvaged afterwards and its power restored.

### LIFE SUPPORT HIT

If the Life Support Systems take a hit, then a further D6 roll is made immediately - the number rolled indicates that the life support will fail after that number of turns. Damage control parties may be allocated to try and repair the LSS as for any other system. If the LSS fails before being repaired, then the crew must immediately abandon ship or be lost. A ship without LSS become a drifting hulk, though it may of course be recovered and repaired after the game if it survives.

NOTE: The Core Systems rules given above are entirely optional; if you do not wish to use them, simply ignore the systems within the core box on the Kra'vak and Phalon ship diagrams for all game purposes.

## TURN SEQUENCE

This is a summary of the full game turn sequence that should be followed when using the various aliens and fleets listed in this volume and in Fleet book 1.

### 1) WRITE ORDERS FOR ALL SHIPS

Sa'Vasku players will also decide and note down their power allocation for the turn at this point, and Phalon players will need to note if any ships are deploying their Vapour Shrouds.

### 2) ROLL FOR INITIATIVE

Both/all players roll a D6 each - highest roll has initiative for this turn.

### 3) MOVE FIGHTER GROUPS

Both players alternate in moving one fighter group each until all fighter groups in play have been moved (if desired); player who LOST initiative roll moves first. Fighter groups being launched this turn must be moved before those already in flight.

Any fighter groups currently allocated to screening ships are NOT moved in this phase .

### 4) LAUNCH ORDNANCE (SALVO MISSILES\*, PLASMA BOLTS etc.)

Both players alternate in announcing and firing missile salvos from any missile-armed ships, plasma bolts from any Phalon ships, and any other launched ordnance that uses a placed marker; play alternates BY SHIP, not by single salvo. The player who LOST the initiative roll launches first. A marker is placed at the point of aim of each salvo, bolt etc.

### 5) MOVE SHIPS

Both players simultaneously move their ships, strictly in accordance with orders written in phase 1.

Fighter groups currently acting as fighter screens are moved at the same time as the ship they are screening, and must remain within the screening distance of the ship.

### 6) ALLOCATE ORDNANCE AND FIGHTER ATTACKS

All Missile Salvos and Fighter Groups that are within the specified attack ranges of suitable targets (and wish to attack, in the case of fighters) have their targets determined and announced (missile and fighter counters/models should be turned in place to face their intended target model, and the desired target announced to the opponent so it is clear exactly what they are attacking, but should NOT be physically moved\*). Phalon Plasma Bolt markers, which have an area effect and can damage all ships within their blast radius, do not need to announce targets. Fighter groups may, if desired, make a secondary move in this phase by expending a Combat Endurance factor.

\* This is a change from the previously-published versions of the rules, and is stated because this book introduces weapon systems capable of point defence fire which do not necessarily have all-arc coverage (ie: the Phalon pulser batteries) - it thus may be necessary to know which arc of the target a fighter or missile attack is originating from. Of course, fighter groups may make a secondary move to try and get out of the defensive arcs, but this will burn a CE factor as usual.

The markers/models MAY be moved up to contact with the target AFTER all PD fire has been resolved in phase 7.

### 7) POINT DEFENCE FIRE

Any ship under missile, plasma bolt and/or fighter attack allocates its defences against attacking elements, then rolls for effects. Fighter vs. fighter actions ("dogfights"), attempted fighter missile/bolt interceptions and screening actions by fighters are resolved BEFORE actual Point Defence fire is allocated to surviving targets. Note that ships equipped with Area-Defence Firecon systems may use their point-defence batteries to help defend other nearby ships in this phase, but each PDS may only be used ONCE in the turn - if it is used in support of another vessel, it is NOT available to defend the ship carrying it as well.

If the FIGHTER MORALE rules are being used, then fighter groups should make their rolls after any PD fire against them is resolved; the chance of failing the roll is thus increased by any members lost this turn as the fighters try to press home the attack through a barrage of PDS fire.

### 8) MISSILE, PLASMA BOLT AND FIGHTER ATTACKS

All missile salvos, plasma bolts and fighter groups that survive the defensive fire from phase 7 now have their attacks resolved; damage resulting from these attacks is applied immediately, including threshold damage resolution if applicable. Should it be necessary to determine exactly what order things happen in (eg: if a missile salvo is within the burst radius of a plasma bolt), then plasma bolts explode first, followed by missile resolution, and finally fighter attacks.

### 9) SHIPS FIRE

Starting with the player who WON the initiative roll in phase 2, each player alternates in firing any/all weapon systems on ONE ship at one or more targets subject to available fire control. Damage caused is applied immediately, and threshold damage checks are made where applicable as soon as all weapons fired by one ship at that one target have been used.

### 10) TURN END

Players confirm that all actions for the turn have been completed as necessary. Any untargetted missile or plasma bolt markers are removed from play. Next turn may now commence.

(\* For rules on Salvo Missiles and their effects, refer to Fleet Book 1; these weapons are not used by the races detailed in this volume.)

# GENERAL RULES

## SHIP DATA PANELS

The following pages contain Ship Data Panels for the warships of the three alien races detailed in this volume. Most of the information contained in each panel should be self-explanatory, but a few notes may help.

### SYSTEMS STATUS DISPLAY

This box, which is also referred to as the "Ship Diagram", is a graphic display of all the systems fitted to the ship. The icons used are explained in the relevant rules sections for each race. This panel should be photocopied to make up your own ship record charts for your games.

### THE TMF/NPV BOX

There is a small box in each ship's Data Panel that gives "TMF" and "NPV" for the ship. These stand for (respectively): TOTAL MASS FACTOR and NOMINAL POINTS VALUE. The TMF is the MASS of the ship design, and the NPV is the Points Cost of the ship (excluding fighters and/or small craft costs in the case of ships with hangar facilities).

### THE BACKGROUND INFORMATION BOX

This is a panel of notes and information on the ship class, including the year (human calendar) in which the class was first identified by human forces. Most of this is of background interest only, but may be useful in generating scenarios.

### THE TECHNICAL SPECIFICATIONS BOX

This panel contains a written description of the systems fit of the ship class, listing all the items found on the Ship Diagram. Note that the "weapons" section only lists the number and class of each weapon, and not the arcs through which it may fire - that is indicated by the icons on the Ship Diagram. The Displacement figure is the total tonnage of the ship, which under the "official" background we take as 100 tonnes per MASS factor.

### THE SHIP ILLUSTRATION

The line drawing of each ship is an illustration of the relevant miniature in the Full Thrust model starship range; the drawings are, of course, not to scale with each other! Note that we do occasionally redesign or modify items in the miniature ranges, and in a few cases the illustration may not be an exact representation of the model currently in production.

### UNDIA CODENAMES

The United Nations Defence Intelligence Agency (UNDIA) is primarily responsible for collating and coordinating all the input from the military intel units of the different human forces involved in the War, through its Xeno Intelligence Division (XID). UNDIA issues standardised military codenames for all types of alien ship encountered by human forces, and most navies use these codenames to refer to those ship types. In the cases of the Kra'vak and the Phalons, direct communications and intercepted signal traffic mean that human forces also know each race's "native" names for their ship types, but the codenames are still used widely in both official and unofficial terms.

The UNDIA codenaming scheme works by assigning a simple and easily-recognised word or common name to each ship type; most are in English (being the standard language of official UN business) though some common non-English names and words are used on occasions. A simple convention of designating all Kra'vak ships with "K" names, all Sa'Vasku with "S" and all Phalons with "P" helps instant recognition when different forces are reported in the heat of battle.

Each of the ships detailed in this book has its UNDIA codename given in the data panel for that ship, along with the human class type that the ship most resembles (in terms of both mass and intended operational role).

## SHIP RECORD CHARTS

Three different SHIP RECORD CHARTS are provided in this book, one for each of the three races; each has Ship Diagram blanks to suit the relevant race's design system. Feel free to copy this chart and cut-and-paste the diagrams around to suit your own forces. To prepare a ship record chart for any of the fleets listed in this volume we recommend photocopying the Ship Diagrams (System Status Displays) from the Data Panels of the ships you want to use, and arranging them suitably on a sheet of paper along with the "order panel" from the bottom of the record chart blank, then re-copying the result. Sorry we couldn't provide ready-made sheets for each different fleet, but for one thing they would almost never match any one person's miniature force and for another they would take up half the book!

You will note that the Sa'vasku ship record chart is somewhat more complicated than the Kra'vak and Phalon ones, and has space for only six ships rather than the ten of the other races; this is because the Sa'Vasku require more planning and record-keeping than the others, in the form of allocating and recording their power distribution each turn, and their order-writing sections are organised to allow this. The Sa'Vasku chart also has a large empty "notes" box on it, which may be used to jot down anything that needs to be recorded about the ships during play that will not easily fit into the order boxes.

### A NOTE ON SCANNING AND COMPUTER REPRODUCTION OF SHIP DATA PANELS, SSDs AND SHIP RECORD CHARTS

These days, a great many of you will have access to scanners and computer equipment that will enable you to reproduce parts of the ship data panels for the purpose of making up your own record charts for the game. This is perfectly acceptable provided it is for your own personal use, and not for any kind of commercial gain or payment. We also have a number of enquiries from time to time about the posting of SSDs etc. on web-sites; our policy on this is that you may web-publish your OWN designs freely for non-profit purposes, including using the standard SSD format and icons, but we would ask you NOT to post any of the actual ship designs given in this volume or any of our other publications to any website; if people want to use them, they can buy a copy of the book!

We would also ask that, for both legal reasons and out of courtesy, any website devoted to or containing material connected to Full Thrust or any of the supplements contains a clear statement of our copyrights plus details of how to contact us for further information (these can be found at the back of this book).

## COUNTERS

While on the subject of copy-and-cut-out bits, we have also provided a few counter masters for plasma bolts, vapour shrouds, leech pods, fighter /drone groups (for all three races) and fighter CEF markers, and some "rolled ship" markers that we should have included in Fleet Book 1 but didn't!

Feel free to copy as many of these counters as you like (for personal use only please) - we recommend copying them onto coloured card if possible.

															CEF REMAINING <b>6</b>	CEF REMAINING <b>6</b>
															CEF REMAINING <b>5</b>	CEF REMAINING <b>5</b>
															CEF REMAINING <b>4</b>	CEF REMAINING <b>4</b>
															CEF REMAINING <b>3</b>	CEF REMAINING <b>3</b>
															CEF REMAINING <b>2</b>	CEF REMAINING <b>2</b>
															CEF REMAINING <b>1</b>	CEF REMAINING <b>1</b>

# XENO FILE 1: THE KRA'VAK

The Kra'Vak (literal translation: "People of the Sorrow Killer ") are anthropoid oxygen-breathing carbon based lifeforms; the extreme coincidence of three such fundamentally similar races developing sentience, civilisation and technology in such a relatively small area of the Galaxy at approximately the same time lends much credence to the Sa'Vasku theories of some sort of genetic meddling by one or more of the older races, and indeed given the way the Old Ones are, the whole thing may be some kind of huge practical joke to them.....

The Kra'Vak are bipeds with bilateral symmetry, with dry skin that is scaly in some areas and leathery in others; skin colours vary between individuals and Clans, and can be anything from greenish-greys through shades of brown to almost black - some rare individuals exhibit a purplish colouration. They are hairless, but have a number of ropy tendrils that hang from a bony crown that circles their skull. Their jaws are slightly insectoid in appearance, with multiple mandibles that move in various directions, and their deep-set eyes have a much greater frequency range than human vision, allowing them to see quite a way into both the infra-red and ultra-violet bands.

Kra'Vak speech is hard and guttural, and many of its sounds are almost impossible for human vocal organs to simulate. In theory it is just about possible for each race to mimic enough of the other's sounds to make some kind of pidgin communication work, but there has been so little verbal contact reported that there has not been much chance to put this into practice - the very few Kra'Vak captives taken by human forces seem to die quickly in confinement, even when treated well, and no human prisoner has yet returned from Kra'Vak captivity to tell any tales.

Kra'Vak physiology exhibits certain mammalian traits, though there are reptilian similarities in there as well and other aspects that bear no relation to any known form of Terran biology.

Each Kra'Vak progresses through a number of gender stages as it matures. At birth and for the first major stage of its life, the Kra'Vak is gender-neutral - this stage lasts until physical maturity is reached (they grow rapidly, and reach this point at approximately 7-8 Terran years old), when the Kra'Vak becomes "male" and fertile, and enters an adolescent stage during which its warrior and mating instincts are at their height.

At approximately 18-20 T-years of age, the Kra'Vak alters again and becomes "female", at which point it will seek an adolescent "male" to mate and produce young. This fertile female phase lasts around another ten to twelve T-years, during which time the Kra'Vak may bear as many as a dozen young under the right circumstances (gestation is short, around four months).

At the age of about 30 T-years, the Kra'vak will undergo its final life-change, returning to an infertile gender-neutral state, in which it will spend the remainder of its lifespan (which can be long, often as many as 150 T-years even without high-tech medical support).

In this stage of it's life the Kra'Vak will become a worker within the society, assisting with the raising of the War Family's young, farming, or (since the rise from barbarism to technical civilisation) working in manufacturing or business. A few of these "senior" Kra'Vak may rise through the heirarchy to positions of leadership within the War Family and ultimately the Clan or the entire Dominion.

## **RO'KAH (Clouded War Mind)**

One physiological trait in particular has shaped Kra'Vak development and history - when a normal Kra'Vak becomes angered, fearful or otherwise strongly emotionally stimulated, chemicals released into its brain cause a reaction known as Ro'Kah (literal translation: "Clouded War Mind"), which causes the Kra'Vak to become steadily more enraged as the source of the stimulation increases. In its extreme stages, the Kra'Vak will enter a kind of "berserker rage" in which it will attack almost anything (including, in some cases, its own fellows) but loses its capacity for rational and coherent thought and planning. This gives Kra'vak warriors a kind of "reverse morale" effect, where the worse the situation gets in terms of enemy threat, casualties etc., the more frenzied the warriors will become in their attacks. In Kra'Vak prehistory, this was a survival trait - running away was of little use against the fast predators of Zha'Vak, and the only defence was to launch a furious frontal attack with all their strength.

While in the grip of Ro'Kah, a Kra'vak warrior will fight like a demon, using any and all weapons to hand (natural and manufactured), but loses all concept of tactics. In personal combat, an enraged Kra'Vak will simply launch itself at its opponent, with a weapon if it has one and with mandibles and claws if it doesn't, uttering a terrible war scream. At this point, it will either win or die. This frenzied burst of energy cannot be maintained for long, and if the warrior wins the fight it will soon subside into a much more passive state as the causes of the Ro'Kah are removed and the effects of the fury drain away.

The early forms of Ro'Kah are evident in young Kra'Vak almost from birth, though the effects are strongest during the male adolescent phase. Once it enters the female phase the Kra'Vak will lose some of the wildest extremes of Ro'Kah, though it is still present - even in the final adult life phase Ro'Kah still occurs under extreme stress, though it takes considerably more stimulation to bring on the effects.

As the Kra'Vak civilisation rose from barbarism and they began to develop technology, mechanised warfare and eventually spaceflight, the racial legacy of Ro'Kah remained with them. Its effects are most strongly seen in Kra'Vak ground troops (almost exclusively made up of adolescent male-phase warriors), where their close proximity to the enemy triggers the neurochemical release that precipitates Ro'Kah very easily. Warriors that are more remote from the "sharp end" of the fighting, such as AFV crews and to a greater extent Starship personnel, feel some of the effects but at a slower rate and with less ferocity; they may also have the benefit of the controlling influence of a Sia'Na (see below). The area in which Ro'Kah has most bearing on space combat is with Kra'Vak fighter pilots - the exhilaration and stimulation of individual combat is strong when flying a fighter, and incoming fire and losses to a group will often push the remaining pilots into the frenzied state, causing them to make violent and sometimes-suicidal runs at their targets. Any fighter crews that survive such an attack pass will then generally rely on their computer systems to take their fighters back to the carrier while they themselves recover and calm as the effects of Ro'Kah gradually subside.

In a group, Kra'Vak will suffer the effects of Ro'Kah just as intensely as on their own; in some ways each feeds off the emotional stimulation of the others, and the tension rises even faster even among groups of older Kra'Vak. This is true both of small groups (say, a squad-size unit of ground troops) and larger gatherings, and can even extend to entire War Families. At the macro level, these effects are reflected in the interaction between Kra'vak Clan groupings and in their reactions towards other races - it is a race-wide form of Ro'Kah which has brought about the war against the perceived threat of the Hu'Man.

## **THE SIA'NA (Walkers of the Path)**

The Sia'Na (literal translation: "Walkers of the Path", but the concept best translates as "Moderator") are a small caste of Kra'vak in which the physiological processes that cause Ro'Kah are absent or dormant. In Kra'vak pre-technic civilisation, where Ro'Kah was an accepted and necessary part of inter-Kra'Vak relations and conflict, offspring found to be Sia'Na were considered defective and either exiled from the War Family or simply killed. As the Kra'vak culture matured and their society became more sophisticated, however, it was realised that the Sia'Na held a unique place in the scheme of things - they could serve as a moderating influence on warriors consumed by the fury of Ro'Kah, making proper tactical and strategic decisions without minds clouded by the fury.

The presence, words and thoughts of a Sia'Na have a calming and controlling influence on Ro'Kah-enraged warriors, which seems to be accomplished through a mixture of cultural conditioning, "religious" belief and some kind of empathic link - the Kra'Vak's own scientists and psychologists don't fully understand it themselves, any more than human science really understands the occasional manifestation of apparent psionic abilities and other paranormal phenomena in humans.

To be born Sia'Na is to live a precarious life in Kra'Vak society; they are both revered and despised at the same time by the warriors, and it is not unknown for a warrior in the grip of Ro'Kah to turn on and kill a Sia'Na who tries to calm and control him. For this reason, the Sia'Na are masters of subtle diplomacy and persuasion; these skills grow with age and experience, as does the Sia'Na's ability to affect larger numbers of Kra'Vak over a wider area - some of the Sia'Na Elders can extend their influence to a huge crowd, or even by remote communications, while the younger and less adept of the caste must be in close physical proximity to the warriors they are attempting to "advise".

Kra'Vak warships will normally have one Sia'Na in their crew to act as advisor and moderator to the ship's commander; in very large ships (dreadnoughts and heavy carriers), and in any ship acting as a fleet flagship, there may be a small group of three or more Sia'Na assigned to the Flag command staff.

In essence, the presence of Sia'Na in a ship crew or force command is a reversal of the role of the "Political Officers" found in ESU forces; while the Political Officer will watch for signs of cowardice and dissent among the troops or crew and force them to keep fighting, the Sia'Na exists to STOP the Kra'Vak warriors from throwing away their lives, ships and equipment in their frenzied battle-rage - effectively, to stop them from losing the war for the sake of winning the battle.

## **THE KRA'VAK DOMINION**

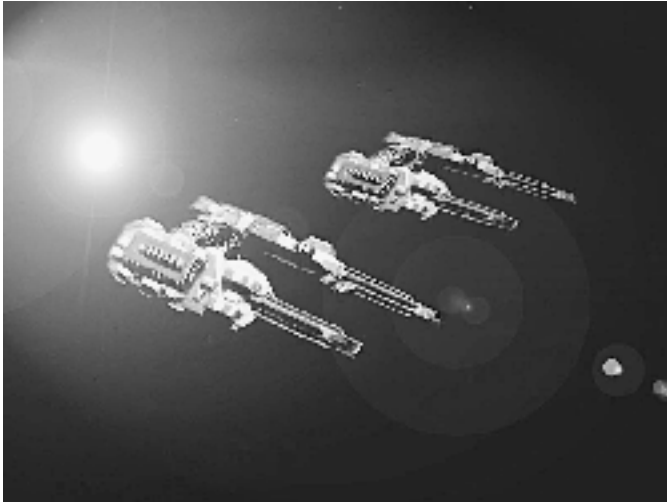
The Dominion of the Kra'Vak is composed of a large number of Clans, each Clan being divided into many separate War Families. A Clan is a "nation" of Kra'Vak numbering from the hundreds of thousands to many millions, while a War Family is an extended tribal bloodline group of maybe several hundred members.

The Kra'Vak homeworld is known as Zha'Vak (Literal translation: "World of the Sorrow Killer "). The other worlds of the Dominion include heavily settled colony worlds similar to the human Inner Colonies, populated by multiple Clans, and many smaller colonial

# XENO FILE 1: THE KRA'VAK

outposts which are usually settled by members of single Clans. It is not unusual for settlers on a colony world to found their own "new" Clan as a breakaway from their origins on the homeworld, while others maintain close ties to Zha'Vak.

The Star Force of the Dominion (the Kra'Vaka'Kia'Kon - literally, Spear of War Host of the People of the Sorrow Killer), which comprises the space naval assets of the Kra'Vak armed forces, is theoretically a homogenous single entity made up from the fleets of the various Clans under a unified command structure. In practice, the individual fleets and units are still primarily loyal to their own Clans and internal dissent (and even outright combat) is not unknown; mixing units from different clans is generally a bad idea and is avoided wherever possible except in the largest operations.



A pair of Di'Tok Destroyers (model code FT 405).  
Painted and photographed by Agis Neugebauer.

## KRA'VAK WARSHIPS

The Kra'Vak are especially adept at gravitic manipulation technology, having developed it to a much higher degree than Humanity has. All their major weapon systems are grav-based, and rely heavily on kinetic projectile weapons rather than energy or particle beam technologies.

The drive systems of Kra'Vak ships seem to be very effective for their size, and make full use of the Kra'Vak mastery of Grav technology to permit rates of manoeuvre far in excess of those possible to human ships. Their FTL (jump) drives appear to function in much the same way as human systems, using very similar principles.

The warships of the Kra'Vak Dominion are equipped with gravitic-accelerator kinetic projectile guns, known as K-guns, which fire solid penetrators at incredibly high velocities. These kinetic penetrators cause massive damage when they impact their target; screens are of no use against them, and even heavy armour is of little effect - while armour will stop the smallest K-gun rounds from doing too much internal damage, the larger classes of K-gun will simply slice through the armour and rip into the ship's internals.

The accuracy of the K-guns is limited by their fire-control computer predictions of exactly where the target ship will be when the projectiles arrive, hence their accuracy degrades with range and the consequent increase in time lag on receiving target positioning data. The different classes of K-gun battery on Kra'Vak ships vary mainly in the mass of the projectiles fired, thus the damage caused by a successful hit increases with battery size. All K-gun classes are assumed to have similar firing velocities and targetting systems, however, so range and hit probabilities remain constant regardless of battery class. The long accelerator "barrels" of the K-guns mean that the majority of them are only able to bear through one single fire arc, and Kra'Vak ships are generally designed with all their major weapon mounts in the frontal arc - the main exception to this being the smallest K-gun, the K-1, which is compact enough to be mounted in a traversable mount and is thus capable of all-arc fire.

Normal Kra'Vak design practice is to mount a small number of the largest class of forward-mounted K-guns that the ship can carry, backed up by a one or more K-1 systems as secondary weapons. This makes tactical manoeuvring and ship facing of primary importance to the Kra'Vak, and to this end all their ships are equipped with

advanced grav-drives that give them much greater manoeuvrability than Human ships of the same basic thrust level.

Kra'Vak warships do not carry energy screens or large amounts of hull armour. Instead, their ship hulls are built with a much higher degree of internal structural integrity than most Human designs, to withstand and absorb internal damage caused by penetrating weapon hits (which has an additional bonus of being better able to take the massive stresses imposed by the enhanced manoeuvring capabilities of their advanced grav drives).

The standard Kra'Vak point defence weapon is a one-shot system known as the "scattergun", which fires a large cloud of relatively small kinetic projectiles at very high velocities over a wide area. It is a very effective system against fighters, missiles and other similar threats, and can also do a small amount of damage to a close-range ship target. Reloading a scattergun with a new charge of projectiles is a lengthy operation that can only be done when the ship is not in combat, so each scattergun is only able to fire once in a battle - for this reason, larger Kra'Vak ships carry a fairly large number of individual scattergun launchers, which has the additional advantage that they can salvo-fire a number of them (or even all of them) in one go if under heavy attack. Scatterguns are all-arc weapons, able to fire at any target around the ship.

Human military forces generally refer to Kra'Vak ships by their UNDIA-assigned codenames (KEG, KERF etc.), though the actual Kra'vak names for most of the classes are known from translations of intercepted signal traffic. Human crews and troops tend to use their own slang terms for the Kra'Vak in general, the most common being "Kravs" or "Kraks", though there are many less printable variants in use.

## GAME NOTES FOR KRA'VAK PLAYERS

A Kra'Vak fleet has the potential to be very powerful and effective, but requires careful handling in battle. The bulk of any Kra'Vak warship's offensive power - in the shape of its main K-guns - is concentrated in the Fore arc, and thus tactical manoeuvring is of the utmost importance to ensure that the desired targets are kept within the rather narrow fire arc.

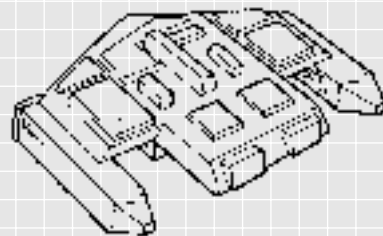
Whether you are playing in cinematic or vector movement, the ability to anticipate the enemy's movements holds the key to victory. The Kra'Vak lack any "placed-marker" ordnance (such as the Humans' salvo missiles or the Phalons' plasma bolts), but their direct fire weaponry is hugely effective IF it can be kept on target.

Use the limited supplies of scatterguns wisely - opposing forces will often try to swamp the defences of their enemies with massed attacks, but the Kra'Vak's ability to salvo-fire all their scatterguns at once if they wish can be a devastating counter to this sort of tactic, albeit at the cost of leaving some ships defenceless against any follow-up waves.

**ID CONFIRM - VA'SAN**

**K'V FIGHTER (HEAVY)**

**UNDIA CODENAME: KART**



**CREW 2**



**LS 27.4 - 16.89**



**THR 553.7 - 22.8**



# XENO FILE 1: THE KRA'VAK

## KRA'VAK SHIP DESIGN AND SYSTEMS

### HULL INTEGRITY

Kra'Vak hulls are generally very strong internally with (normally) no added armour - as most of their own weapons are kinetic penetrators, they build their hulls to absorb as much damage as possible before reaching each threshold point. Kra'Vak hull boxes require 1 MASS each, cost 2 points each and are arranged in a standard four-row damage track using the normal rules.

Kra'Vak ships MAY carry armour in some cases, though it is unusual for them (and none of the designs in this book use it). If required, Kra'Vak armour has the same MASS (1 per box) and cost (2 points per box) as human armour, and functions in exactly the same way.

### MAIN DRIVE SYSTEMS

To differentiate the Kra'Vak advanced drives from the normal drives, a slightly different icon is used on the Ship Systems Displays, and when the thrust rating of a Kra'Vak drive is written down it is suffixed by an "A" to indicate that the advanced drive rules should be used (eg: a Kra'Vak drive with a thrust rating of 6 is denoted "6A").

Kra'Vak Advanced Grav Drives are costed at the rate of THREE points per MASS of drive system, instead of the 2 points per MASS charged for "normal" drives.

### KRA'VAK THRUST AND MANOEUVRE

[Note that these rules for Advanced Drives also apply to Sa'vasku ships, but NOT to the Phalons.]

#### Cinematic Movement:

When using the Cinematic ("standard" FT) movement system, Kra'Vak vessels move and manoeuvre in exactly the same way as other ships, using the normal rules, with one exception: they are permitted to use MORE than half their available thrust for COURSE CHANGES, and may in fact use up to ALL their thrust rating for this. Thus a Kra'Vak ship with a thrust of 6 could actually make a full 180-degree about-face in a single move (though its path would in fact be an L-shape manoeuvre rather than a turn in place, as it is still bound by the normal rules about splitting course changes between the start and midpoint of the movement). The effect of this is to make Kra'Vak ships much more manoeuvrable than their human counterparts, which is a compensation for the more restricted fire arcs of their major weaponry.

It should be noted that this ability does NOT mean that Kra'Vak ships gain any extra thrust factors to carry out this increased manoeuvring; if the ship uses all of its thrust to change course, it will still have none left over to accelerate or decelerate with.

#### Vector Movement:

If you prefer to use the new Vector Movement System introduced in Fleet Book 1, the Advanced Grav Drives of the Kra'Vak ships operate in the following way:

Because their drive's grav-field may be directed as required, Kra'Vak ships may apply thrust in ANY direction (in game terms, in any of the 12 standard course directions), regardless of the facing of the ship at the time. As with standard vector movement, they may rotate to any facing for the cost of one thrust factor, but they do not use "pushes" (as their main drive capability makes this irrelevant). Any thrust used for rotation comes out of the main drive's thrust factor, so is not available as propulsive thrust in the same turn - thus a thrust-4 Kra'vak ship currently on heading 12 but facing course 9 could apply, say, 3 thrust in any chosen direction (it could apply it in direction 12, accelerating itself along its current heading without changing its facing) and then the remaining 1 thrust to rotate to any new facing desired in order to bring its main K-guns to bear on a target.

### FTL DRIVES

Kra'Vak FTL (Jump) drives operate in exactly the same way as human ones, using the standard rules; MASS requirement is 10% of total ship mass, and cost is 2 points per MASS used.

### KINETIC GUNS (K-GUNS)

The Kra'Vak main antiship weapons are Grav-powered kinetic projectile weapons known as K-guns.

K-guns are direct fire weapons which may fire once per turn at any target within their fire arc(s).

All K-guns, regardless of class, have the same range bands and require the same score to hit.

For each K-gun firing, roll a single die: the score needed to hit starts at 2+ at range of 0 - 6 mu, then rises by one for each additional 6 mu range band - so the hit score needed is:

Range 0 - 6 mu:	2+ to hit
Range 6 - 12 mu:	3+ to hit
Range 12 - 18 mu:	4+ to hit
Range 18 - 24 mu:	5+ to hit
Range 24 - 30 mu:	6 to hit

When a hit is scored, roll a second die: if the number rolled is GREATER THAN the CLASS of the K-gun, then the damage done is equal to the class number of the gun; if the roll is EQUAL TO OR LESS THAN the class of the K-gun, then the damage is DOUBLE the gun class.

There is one exception to this rule - a natural roll of 6 always does just damage equal to the gun class, even for K-guns of class 6 and larger.

*EXAMPLE: A class-3 K-gun will inflict 6 points of damage on a roll of 1 - 3, and 3 points on a 4 - 6; a class-5 K-gun will inflict 10 points of damage on a roll of 1 - 5, and 5 points on a 6. Applying the exception rule, a class-6 K-gun will do 12 points on a 1 - 5, but only 6 points on a 6.*

K-gun damage is very effective a piercing armour - if it hits a target with armour (including Sa'vasku carapaces) then the hit does ONE point of its damage to the armour, and all the remainder straight through to the hull - so a hit doing 4 DP would knock out one armour box and three hull boxes. Note that this damage distribution is PER SINGLE HIT, not a cumulative effect of a salvo from several K-guns.

The multi-layered Phalon shell armour is an exception to this - when K-guns of sufficient power hit Phalon shells, they take out one box from EACH shell level before delivering any remainder to the hull itself (see the Phalon rules section for more explanation and examples).

It should be noted that unlike beam weapon fire, where all the dice rolled against a given target may be rolled together, in the case of K-gun fire it is important to roll the dice for each CLASS of K-gun separately (or with differently coloured dice if available), so that you know which classes scored hits and thus how to roll for the damage.

**SPECIAL NOTE:** Class-1 K-guns are able to fire in a limited point-defence mode, in the same way that human class-1 beams are. K-1 systems that fire in this role may not also perform antiship fire in the same turn. Roll 1 die for each K-1 firing, and one hit is scored on a roll of 5 or 6 (one "hit" kills one fighter or missile; K-1 shots have no effect against Phalon plasma bolts).

As with other Kra'Vak weapons fire, there are no rerolls - this actually makes them a little less effective than class-1 beams in the PD role, as the beams get a reroll on a score of 6.

The MASS requirements for the various K-gun classes are as follows:

K-1 (all-arc fire)	2 MASS
K-2 (one arc)	3 MASS
K-2 (two arc)	4 MASS
K-3 (one arc)	5 MASS
K-4 (one arc)	8 MASS
K-5 (one arc)	11 MASS
K-6 (one arc)	14 MASS

Class-1 K-guns automatically get all-round (6 arc) fire; class-2 K-guns may have one or two fire arcs. All other K-guns are limited to single-arc fire only.

Larger classes of K-gun are possible, and the mass required rises by 3 per additional class.

All K-guns cost 4 points per MASS used.

### MULTIPLE KINETIC PENETRATOR (MKP) PACKS

The MKP is a one-shot antiship weapon similar in some ways to the human Submunitions Pack, used on some small Kra'vak ships to give a powerful shipkilling punch. It fires through 1 arc only (usually the Fore arc), and has a range of 12 mu. When fired, one die is rolled - on a 1-3 no hits are scored, on a 4 or 5 it scores 1 hit, and on a 6 it scores two hits (no rerolls).

For each hit scored, the MKP does 4 damage points, of which the first one is taken on armour (if any) and the remainder on hull - as for a class-4 K-gun hit. Phalon layered shells have the same effect as against K-gun hits.

The MKP icon is crossed out when it has been fired.

*EXAMPLE: If an MKP shot rolls 4 or 5, it will inflict 4 DP, as 1 to armour and 3 to hull; if it rolls a 6, it will inflict two SEPARATE hits, so will do a total of 2 DP to armour and 6 to hull.*

The MASS of an MKP is 1, and the cost is 4 points.

# XENO FILE 1: THE KRA'VAK

## SCATTERGUNS:

Kra'Vak ships use their one-shot scatterguns as point-defence weapons. Any number of available scatterguns may be fired at one time, at any valid targets.

After use, the scattergun icons that have been fired should be crossed through to show that they cannot be used again in that game.

Kra'Vak ships do not use (or require) ADFC (Area-Defence Fire Control) systems.

As per the standard rules for PDS fire, the Kra'Vak do NOT need a functioning fire control system in order to fire their scatterguns, even as antiship weapons.

Each scattergun may only fire once per game. It may fire at any single target (fighter group, missile salvo, plasma bolt etc.) in the point-defence phase of the turn. A scattergun may fire at any target within a range of 6 mu (they are all-arc weapons), or may fire at any target that is attacking another ship provided that the ship itself is within 6 mu of the scattergun-firing ship. In other words, it may fire as a point-defence or an area-defence system to the player's choice, according to the standard engagement rules for such systems.

**SPECIAL NOTE:** if used in the area-defence role, firing at fighters or missiles engaging a friendly ship, if the effect roll scores a ONE then some of the scattergun projectiles hit the ship that is being defended, and inflict 1 damage point on it.

A scattergun may also be used as a point-blank range antiship weapon, at any target within 6 mu. In this mode it is fired in the main ship weaponry fire phase, and it does not require the use of an operational fire control.

The effect of a scattergun charge depends on the type of target fired at; 1 die is rolled in all cases:

Against standard fighters or salvo missiles, the shot kills 1D6 elements from the group/salvo (ie: 1-6 fighters/missiles). If targetting HEAVY fighters, halve the number of kills (round up).

Against plasma bolts, a roll of 4 or 5 reduces the bolt strength by 1, and a 6 reduces it by 2 (no rerolls).

Against ship targets, a roll of 4 or 5 inflicts 1 damage point, and a roll of 6 inflicts 2 damage points (treated as two separate hits, so both are taken on armour if applicable). No rerolls.

Each scattergun takes up 1 MASS, and costs 5 points.

## FIRE CONTROL SYSTEMS

Kra'Vak ships carry fire-control systems that function exactly as their human equivalents; use all standard rules for them. A Kra'Vak FC system requires 1 MASS and costs 4 points.

As their scatterguns have an in-built "area-defence" capability (ie: they are not only useful against targets attacking their own ship), the Kra'Vak have no need for ADFC systems.

## CREW FACTORS AND DAMAGE CONTROL

Kra'Vak ships use the same rules for crew factors and damage-control parties as human ships; there is one crew factor for each 20 MASS of ship (or part thereof), so for example a MASS 30 Kra'Vak ship has a crew factor of 2, and a MASS 41 ship a factor of 3.

There is no cost or mass requirement for crew factors.

The crew factors are indicated by small stars placed in some of the hull boxes on the SSD - the placement of the crew factors being determined by dividing the mass used for hull integrity by the total crew factor (and rounding UP in all cases): for example, a ship with a crew factor of 4 and a hull integrity of 30 would have a crew factor star placed in every EIGHTH box on the damage track ( $30/4 = 7.5$ , rounded up to 8), and the last star in the last box - so the crew factors would be in the eighth, sixteenth, twenty-fourth and thirtieth (final) boxes.

When a hull box containing a crew star is lost to damage, that crew factor is lost due to accumulated crew casualties.

Crew factors represent the number of damage control parties (DCPs) available to the ship - one DCP for every remaining crew factor on the ship. DCPs may attempt to repair systems lost to threshold damage, with up to three DCPs being allocated to each attempted system repair - the basic roll of success in the repair attempt is 6 if one DCP is working on it, -1 for each additional DCP allocated to the task (so the allowed maximum of 3 DCPs will make a successful repair on a roll of 4+). Any one system may only be the subject of one attempted repair roll in any given turn.

## HANGAR BAYS

Kra'Vak ships may carry hangar bays for fighter groups (or other embarked small craft) in exactly the same way as human ships, using all the standard rules.

Each Fighter Bay uses 9 MASS and costs 18 points, to carry up to 6 MASS of fighters, ie: one group; bays for other small craft use 1.5 x the MASS of craft carried, and cost 3 points per MASS used.

## FIGHTERS

Kra'Vak fighters, like human ones, operate in groups of 6 craft. They have 6 Combat Endurance Factors, which may be used up to make attacks and/or to make secondary moves.

The standard Kra'Vak fighter is the Ra'San (literally "Little Sliver of Mother", UN codename KIP) and the heavy variant is the Va'San ("Great Sliver of Mother", UN codename KART). The Ra'San is treated as a regular multirole fighter, and the Va'San gets the defensive bonus for being a "heavy" fighter. The costs per group of 6 are 18 points per Ra'San group (3 per fighter) and 30 points per Va'San group (5 per fighter).

Both types have a basic move of 24 mu, and can make a secondary move of up to 12 mu at the expense of one CEF.

Standard and heavy Kra'Vak fighters both attack with 1 die per fighter in the group, but they use kinetic rather than energy weapons and their damage profile is slightly different from the beam-armed human fighters; on a roll of 1-3 they do no damage, on a 4 or 5 they do 1 DP, on a 6 they do 2 DP but this treated like a K-gun hit: 1 DP to armour and 1 DP to the hull.

There are no rerolls made when firing at ships, and screens have no effect against the fighters' kinetic weapons. Note that when in combat against other fighters, the Kra'Vak fighters DO get a reroll on scores of 6 - in this case it represents a number of separate kills rather than an amount of damage inflicted.

Kra'Vak fighter groups are not subject to the standard Fighter Morale rules; the effects of Ro'Kah ("Clouded War Mind" - see notes on Kra'Vak psychology) affect Kra'Vak fighter pilots much more than ship crews, because they do not have a Sia'Na on hand to moderate their war rages - there are far too few Sia'Na to allocate one to every two-or three-person fighter crew, or even to each fighter group. Whenever a Kra'vak fighter group wishes to press home an attack, a roll should be made on the same basis as a standard Fighter Morale check - in this case, however, the roll is not to see if the Kra'Vak will break off, but instead to see if they will fall into the Ro'Kah frenzy. If the die score is greater than the remaining number of fighters in the group, then the remaining pilots become Ro'Kah enraged. In this state, the attack continues, but each fighter gets to roll TWICE for its attack instead of the normal once. If there is an ACE pilot in the group, it also gets a doubled attack, so actually gets FOUR rolls!

After this one attack pass in Ro'Kah, the effects will start to wear off and the group MUST return to its carrier without performing any further attacks; if using the re-arming rules, then the group may be relaunched for a new mission as normal after the necessary period.

Ro'Kah also affects dogfighting and intercepting Kra'Vak fighters - make a roll for each group at the start of the dogfight resolution, and if the check rolls more than the number of fighters then they get the doubled attacks for as long as the dogfight lasts - when it is over (when the enemy is destroyed or breaks off successfully - the Kra'Vak will not break off while in Ro'Kah) then they will attempt to return to their carrier. If "bounced" during their return they are treated as a group that have exhausted their CEF.

## KRA'VAK SHIP DESIGN PROCEDURE

- 1) SELECT OVERALL SHIP MASS.
- 2) SELECT HULL INTEGRITY VALUE and create Damage Track.
- 3) INSTALL MAIN DRIVE.
- 4) INSTALL FTL DRIVE (if required).
- 5) TOTAL MASS USED SO FAR.
- 6) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEMS.
- 7) TOTAL POINTS VALUES to calculate NPV of ship.

### 1) SELECT OVERALL SHIP MASS.

This may be any size desired, though most combat starships fall within 10 - 300 MASS.

*EXAMPLE: We choose to build a Kra'Vak battlecruiser-size ship with a total MASS factor of 100. This gives us a basic hull that will take up to 100 MASS of hull strength, drives and other systems.*

### 2) SELECT HULL INTEGRITY LEVEL and create Damage Track.

Any amount of the available MASS may be used for HULL INTEGRITY, which represents the overall structural strength of the ship's hull and its ability to absorb damage. The only restriction is that the MINIMUM amount of hull integrity is 10% of the ship's total MASS.

# XENO FILE 1: THE KRA'VAK

The actual MASS of the Hull Integrity chosen is equal to the number of DAMAGE BOXES the ship has, which are then organised into four rows (in accordance with the Damage Track rules).

Crew factors should be worked out and indicated on the damage track at this point (mainly for Damage Control purposes), in exactly the same way as for human ship designs.

Kra'Vak ships do not generally use much (if any) hull armour, but if you wish to use a little - there is no prohibition from doing so - then it should be added here using the same rules and costs as human armour from Fleet Book 1 (1 MASS per box of armour, cost is 2 points per MASS used).

*EXAMPLE: Because most of their weapons are kinetic penetrators, Kra'Vak ships generally use heavy internal hull structures to minimise the effects of penetrating hits; we choose to allocate 40 MASS to Hull Integrity, so the ship has 40 Damage Boxes (which will be arranged on the Damage Track as four rows of 10). The points cost for the hull integrity will be 2 x MASS used, ie: 80 points.*

### 3) INSTALL MAIN DRIVE .

All ships require a Main Drive; the MD takes up 5% of the ship's overall MASS for every Thrust Factor of drive power. Because they are classed as Advanced Drives, Kra'Vak main drives cost 3 points per MASS used.

*EXAMPLE: We decide to give our ship a Thrust Factor of 4, so this takes 4 x 5 = 20% of the overall MASS; the ship's Main Drive takes up 20 MASS.*

The cost will be 20 x 3 = 60 points.

### 4) INSTALL FTL DRIVE (if required).

If an FTL drive is to be part of the design, it is fitted at this stage and uses up 10% of the overall ship MASS. Cost is 2 points per MASS used.

*EXAMPLE: Our ship needs an FTL drive; it will take up 100 x 10% = 10 MASS. The cost will be 10 x 2 = 20 points.*

### 5) TOTAL MASS USED SO FAR

Add up the total MASS used by the Hull Integrity, Main Drive and FTL Drive systems, and subtract this from the overall ship MASS to find the amount left for fitting-out with offensive, defensive and other systems.

*EXAMPLE: Our design has used 40 MASS for Hull Integrity, 20 for Main Drive and 10 for FTL Drive. This totals 70 MASS from the overall 100, so we are left with 30 MASS for fitting-out.*

*So far, our ship has cost 100 + 80 + 60 + 20 = 260 points.*

### 6) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEMS

Choose the desired mix of weapon installations and other systems to suit the ship's intended mission profile, ensuring that the total MASS required for all the systems does not exceed the available MASS left from step 6.

*EXAMPLE: Most KV warships have their main offensive power in a small number of large K-guns bearing in the Fore arc, plus a few small turreted (all-arc) class 1 K-guns as secondary weapons; defences consist of a number of one-shot Scattergun charges. We decide to fit the largest main guns that we can on our battlecruiser, so opt for a pair of K-5 systems backed up by just a single K-1 and four Scatterguns. We decide that 2 fire control systems will probably be enough at this stage, and add these to the design. This is a hard-hitting strike ship made to kill large enemy targets, but will need support from other KV ships to be truly effective.*

K5 x 2 (F) @ 11 MASS = 22 MASS  
 K1 x 1 (all arc) @ 2 MASS = 2 MASS  
 2 x Fire Controls @ 1 MASS = 2 MASS  
 Scatterguns x 4 @ 1 MASS = 4 MASS

Total MASS used for systems = 30

### 7) TOTAL POINTS VALUES

*EXAMPLE: The points costing of our example ship is:*

BASIC HULL (MASS 100)	MASS x 1	100 points
HULL INTEGRITY (MASS 40)	MASS x 2	80 points
MAIN DRIVE (KV type) (MASS 20)	MASS x 3	60 points
FTL DRIVE (MASS 10)	MASS x 2	20 points
K5 x 2 (F) (MASS 22)	MASS x 4	88 points
K1 x 1 (all arc) (MASS 2)	MASS x 4	8 points
4 x Scatterguns (MASS 4)	MASS x 5	20 points
2 x Fire Controls (MASS 2)	MASS x 4	8 points

**Total cost (NPV - Nominal Points Value): 384 points**

## KRA'VAK WEAPONS AND DEFENCES SUMMARY



### KINETIC GUNS (K-GUNS)

Range 0 - 6 mu: 2+ to hit  
 Range 6 - 12 mu: 3+ to hit  
 Range 12 - 18 mu: 4+ to hit  
 Range 18 - 24 mu: 5+ to hit  
 Range 24 - 30 mu: 6 to hit

If hit scored, roll again; roll GREATER than K-gun class = DP equal to class, roll LESS THAN OR EQUAL to class = DP equal to class x 2. Natural roll of 6 is always class x 1 DP, even for K-6 and larger.

First DP of hit taken on armour, remainder penetrates.


Class-1 K-guns ONLY can fire in limited point-defence mode: 1 fighter/missile kill is scored on a roll of 5 or 6; no rerolls.

ICONS (examples): K-1 (all-arc)  K-4 (one arc) 

### MULTIPLE KINETIC PENETRATOR (MKP) PACKS

One-shot system, range 12 mu. 1 die rolled: 1-3 = no hits, 4 or 5 = 1 hit, 6 = 2 hits (no rerolls).

Each hit does 4 damage points, one to armour (if any) and remainder on hull.

ICON: 

### SCATTERGUNS

One shot system, all-arc fire. May fire in point-defence, area-defence or anti-ship mode.


1 die is rolled in all cases:

Against standard fighters or salvo missiles, the shot kills 1D6 elements from the group/salvo (ie: 1-6 fighters/missiles). Against HEAVY fighters, halve the number of kills (round up). No rerolls.

Against plasma bolts, 4 or 5 reduces the bolt strength by 1, 6 reduces it by 2. No rerolls.

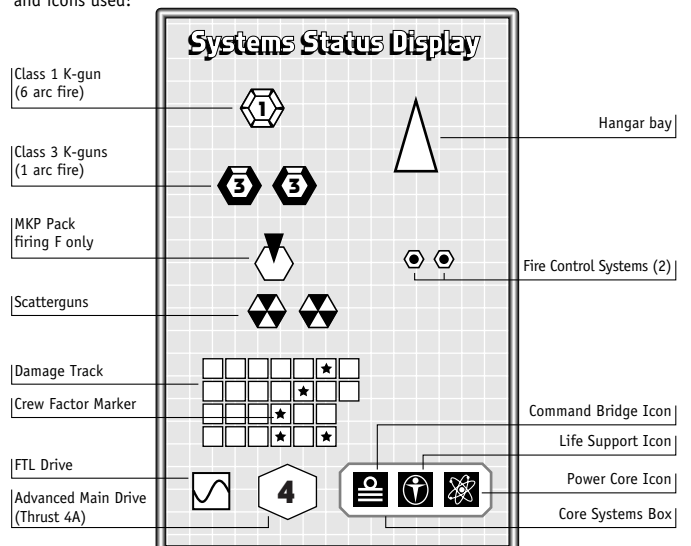
Against ship targets, 4 or 5 = 1 DP, 6 = 2 DP (two separate hits, so both are taken on armour if applicable). No rerolls.

In area defence mode, roll of 1 = 1 DP against ship under attack.

ICON: 

## KRA'VAK SYSTEMS STATUS DISPLAY (SSD)

The diagram below is an example of how to read the Kra'Vak SSDs on the ship data panels. Please note that this is NOT an actual ship design, just a key to the symbols and icons used!



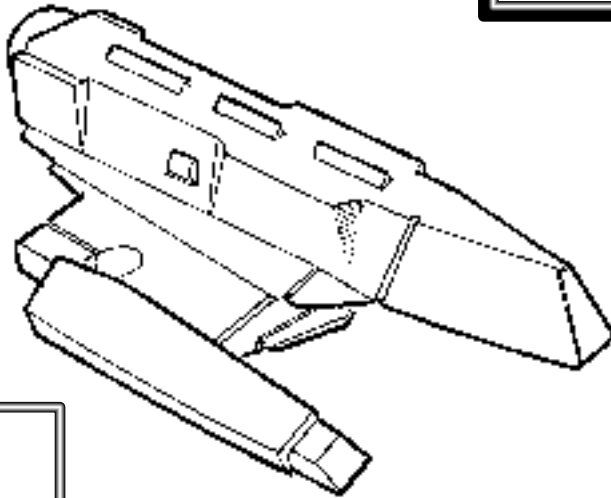
# KRA'VAK DOMINION STAR FORCES



**LU'DAK CLASS  
SNEAK DEADLY KILLER**  
(UN codename *KIN*)  
**HUMAN CLASS**  
**EQUIVALENT:** Scoutship

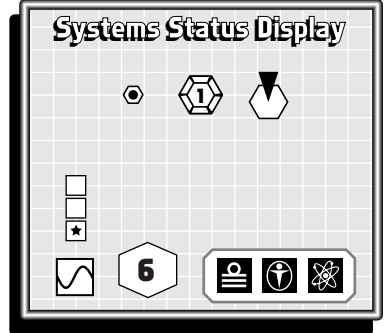
## Lu'Dak class SNEAK DEADLY KILLER

**TMF: 11**  
**NPV: 44**



### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Scoutship  
**Displacement:** 1100 tonnes  
(MASS factor 11)  
**Hull Integrity:** 3  
**Crew:** 11 [Crew Factor: 1]  
**Armament:** 1 x Class-1 K-gun, 1 x  
MKP packs (one-shot)  
**Defences:** None  
**Sensor Suite:** Standard sensors, 1 Fire  
control system  
**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

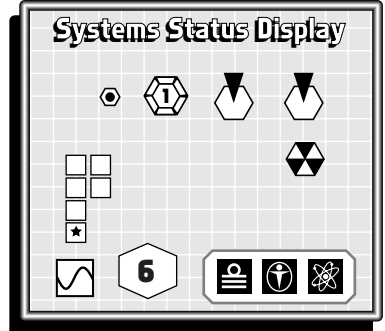
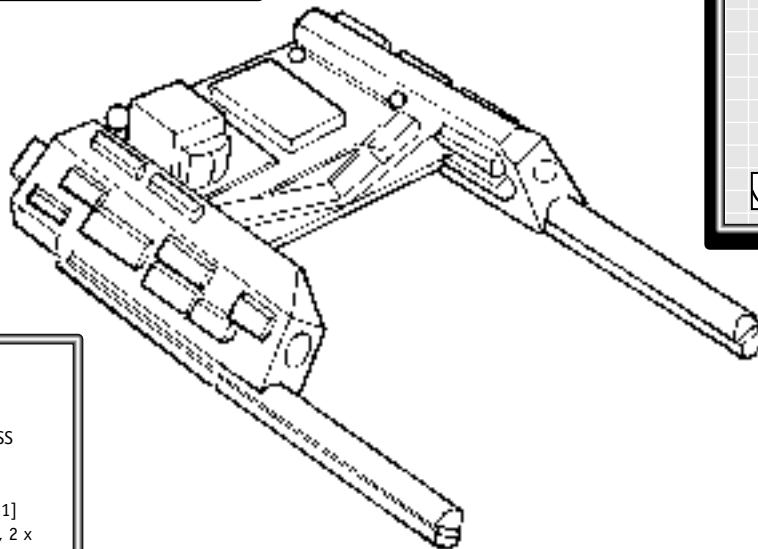


### First encountered: 2185.

The Lu'Dak is a small ship (though heavier than most human scouts) that packs an extremely large punch for its mass. Intended as a fast strike ship for killing small enemy vessels or soft targets (eg: merchantmen), it carries a single-shot MKP pack that allows it to cause severe damage to ships much larger than itself, plus a K-1 battery that permits it to snipe at long range if required.

## Ka'Tak class RAIDER DARK KILLER

**TMF: 20**  
**NPV: 79**



### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Striker/Corvette  
**Displacement:** 2000 tonnes (MASS  
factor 20)  
**Hull Integrity:** 6  
**Crew:** 20 [Crew Factor: 1]  
**Armament:** 1 x Class-1 K-gun, 2 x  
MKP packs (one-shot)  
**Defences:** 1 x one-shot  
"scattergun" kinetic  
killer  
**Sensor Suite:** Standard sensors, 1 Fire  
control system  
**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

**KA'TAK CLASS  
RAIDER DARK KILLER**  
(UN codename *KEG*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
Striker/Corvette

### First encountered: 2185.

Like the Lu'dak scout, the Ka'Tak is a very powerful one-pass shipkiller with the ability to gut even a medium-size ship with its two MKP packs; it is quite large and expensive for a Corvette, however, with a mass and cost equivalent to many human frigate classes. Ka'Taks are commonly used as commerce raiders and to provide an independent fast strike force for fleet operations.

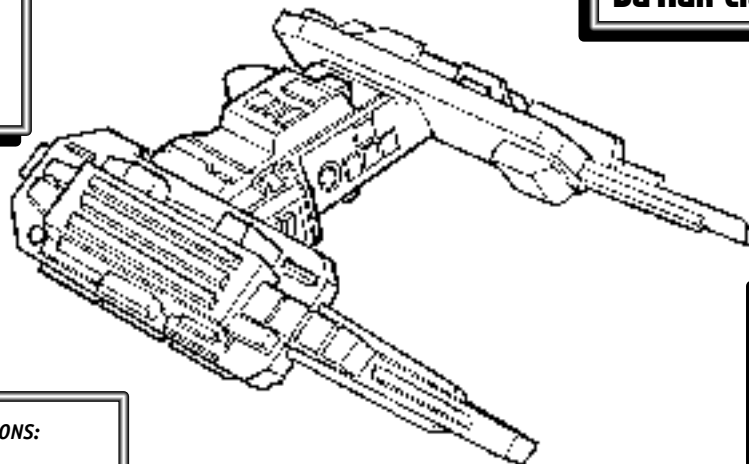




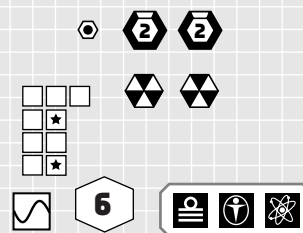
**DA'KAK CLASS  
SWIFT WAR KILLER**  
(UN codename **KITE**)  
**HUMAN CLASS  
EQUIVALENT:**  
Heavy Frigate

## Da'Kak class SWIFT WAR KILLER

**TMF: 30**  
**NPV: 119**



### Systems Status Display



#### TECHNICAL SPECIFICATIONS:

**Human Class**

**Equivalent:** Heavy Frigate

**Displacement:** 3000 tonnes  
(MASS factor 30)

**Hull Integrity:** 9

**Crew:** 30 [Crew Factor: 2]

**Armament:** 2 x Class-2 K-guns

**Defences:** 2 x one-shot  
"scattergun"  
kinetic killers

**Sensor Suite:** Standard sensors, 1 Fire control system

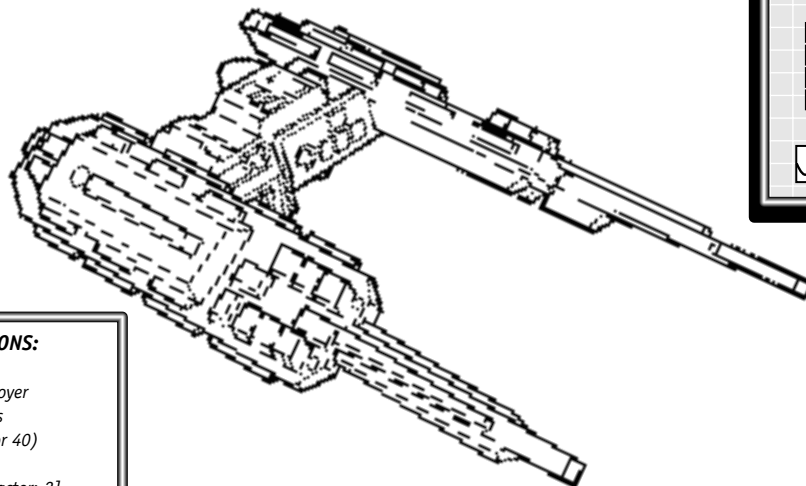
**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

#### First encountered: 2184.

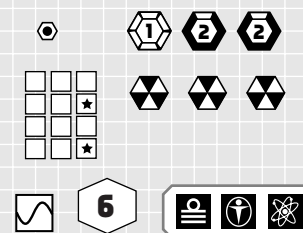
The Da'Kak is the most commonly encountered Kra'Vak light escort, and is normally classed as a frigate although (in common with most of their smaller ships) its actual mass is very high for this classification, and is more like that of a human destroyer. It is a capable and effective ship, if slightly hampered by the lack of an all-arc K-gun system to back up the significant main armament of two forward-firing K-2 guns.

## Di'Tok class LITTLE DEATH DARK SHIP

**TMF: 40**  
**NPV: 159**



### Systems Status Display



#### TECHNICAL SPECIFICATIONS:

**Human Class**

**Equivalent:** Heavy Destroyer

**Displacement:** 4000 tonnes  
(MASS factor 40)

**Hull Integrity:** 12

**Crew:** 40 [Crew Factor: 2]

**Armament:** 2 x Class-2 K-guns,  
1 x Class-1 K-gun

**Defences:** 3 x one-shot  
"scattergun"  
kinetic killers

**Sensor Suite:** Standard sensors,  
1 Fire control system

**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

**DI'TOK CLASS  
LITTLE DEATH DARK SHIP**  
(UN codename **KERF**)  
**HUMAN CLASS  
EQUIVALENT:**  
Heavy Destroyer

#### First encountered: 2183.

The Di'Tok was the first Kra'Vak ship class to be encountered by human forces, when one killed the PAU battlecruiser Kinshasa off New Lusaka in 2183. Since that opening shot, Di'Toks have been present at almost every battle between human and Kra'Vak fleets. Mounting the same main guns as a Da'Kak frigate, the Di'Tok supplements these with an all-arc K-1 and a better loadout of defensive scatterguns.

# KRA'VAK DOMINION STAR FORCES

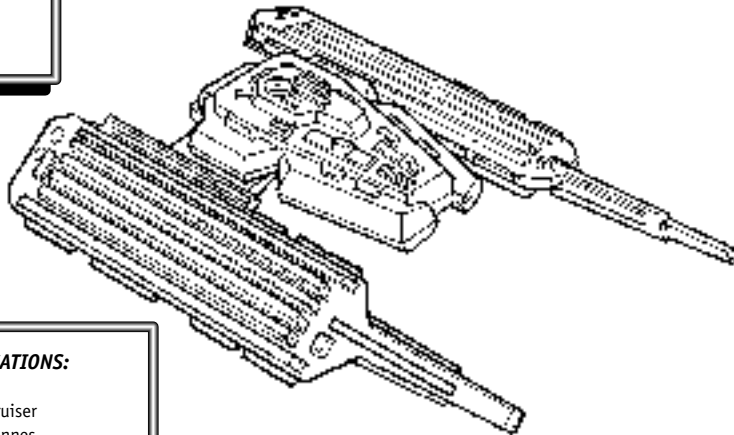


**VO'BOK CLASS**  
**HUNTER SILENT SHIP**  
 (UN codename *KESTREL*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Light Cruiser

**TMF: 60**  
**NPV: 238**

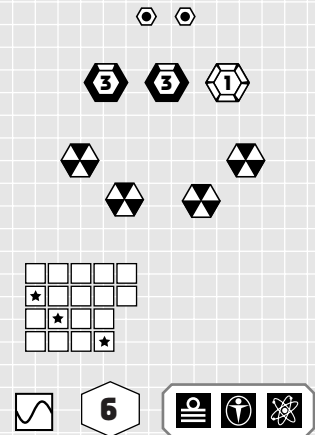
**TECHNICAL SPECIFICATIONS:**

**Human Class**  
**Equivalent:** Light Cruiser  
**Displacement:** 6000 tonnes  
 (MASS factor 60)  
**Hull Integrity:** 18  
**Crew:** 60 [Crew Factor: 3]  
**Armament:** 2 x Class-3 K-guns,  
 1 x Class-1 K-gun  
**Defences:** 4 x one-shot  
 "scattergun"  
 kinetic killers  
**Sensor Suite:** Standard sensors,  
 2 Fire control systems  
**Drive Systems:** Main Drive Rating 6A,  
 FTL (jump) drive



## Vo'Bok class HUNTER SILENT SHIP

### Systems Status Display

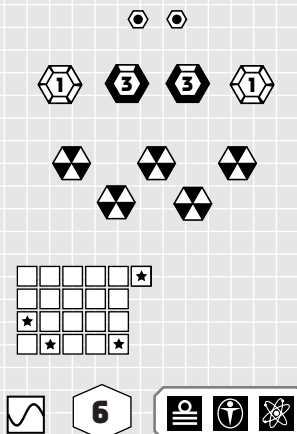


**First encountered: 2184.**

The Vo'Bok is the smallest commonly-encountered Kra'vak cruiser, and is found supporting most task force groups; they are also used as flagships for small raiding parties of Da'Kak FFs and Di'Tok DHs, and several have been reported on solo operations deep within human space. Main armament of the Vo'Bok is good, though it has only a single K-1 system for all-arc backup.

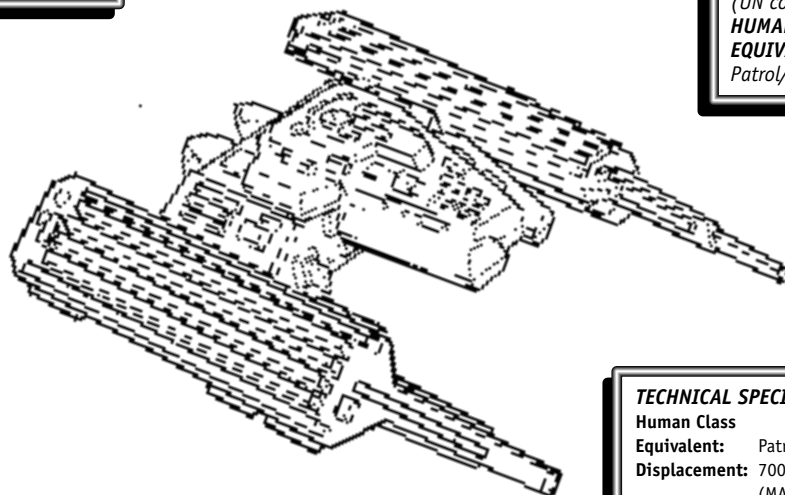
## Si'Tek class ROVER DARK SHIP

### Systems Status Display



**TMF: 70**  
**NPV: 278**

**SI'TEK CLASS**  
**ROVER DARK SHIP**  
 (UN codename *KERMIT*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Patrol/Escort Cruiser



**TECHNICAL SPECIFICATIONS:**

**Human Class**  
**Equivalent:** Patrol or Escort Cruiser  
**Displacement:** 7000 tonnes  
 (MASS factor 70)  
**Hull Integrity:** 21  
**Crew:** 70 [Crew Factor: 4]  
**Armament:** 2 x Class-3 K-guns,  
 2 x Class-1 K-guns  
**Defences:** 5 x one-shot  
 "scattergun"  
 kinetic killers  
**Sensor Suite:** Standard sensors,  
 2 Fire control systems  
**Drive Systems:** Main Drive Rating 6A,  
 FTL (jump) drive

**First encountered: 2185.**

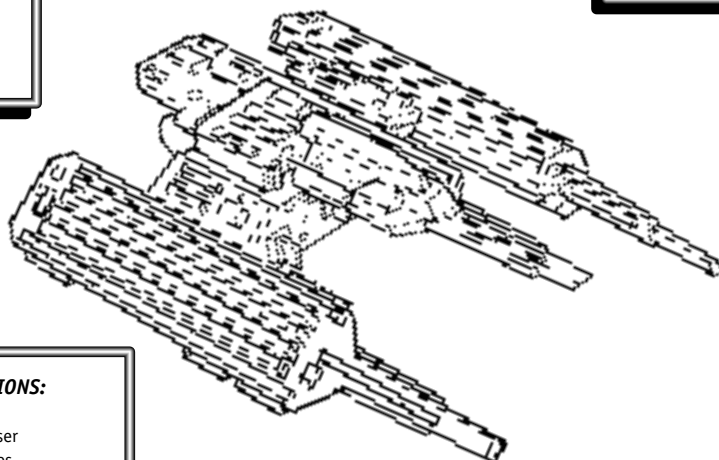
The Si'Tek is a typical medium sized escort cruiser, normally found supporting the Kra'vak battleline in major operations. It has a powerful antiship armament, plus enough scattergun charges to be useful in the area-defence role to protect other ships from fighter and missile attack.

# KRA'VAK DOMINION STAR FORCES



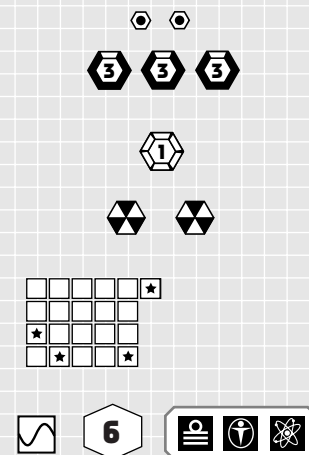
**KO'TEK CLASS  
ATTACK DARK SHIP**  
(UN codename *KYLIE*)  
**HUMAN CLASS  
EQUIVALENT:**  
Strike Cruiser

**TMF: 70**  
**NPV: 275**



## Ko'Tek class **ATTACK DARK SHIP**

### Systems Status Display



### TECHNICAL SPECIFICATIONS:

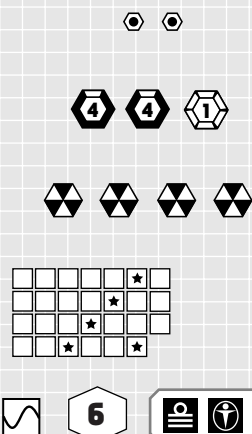
**Human Class**  
**Equivalent:** Strike Cruiser  
**Displacement:** 7000 tonnes  
(MASS factor 70)  
**Hull Integrity:** 21  
**Crew:** 70 [Crew Factor: 4]  
**Armament:** 3 x Class-3 K-guns,  
1 x Class-1 K-gun  
**Defences:** 2 x one-shot  
"scattergun"  
kinetic killers  
**Sensor Suite:** Standard sensors,  
2 Fire control systems  
**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

### First encountered: 2187.

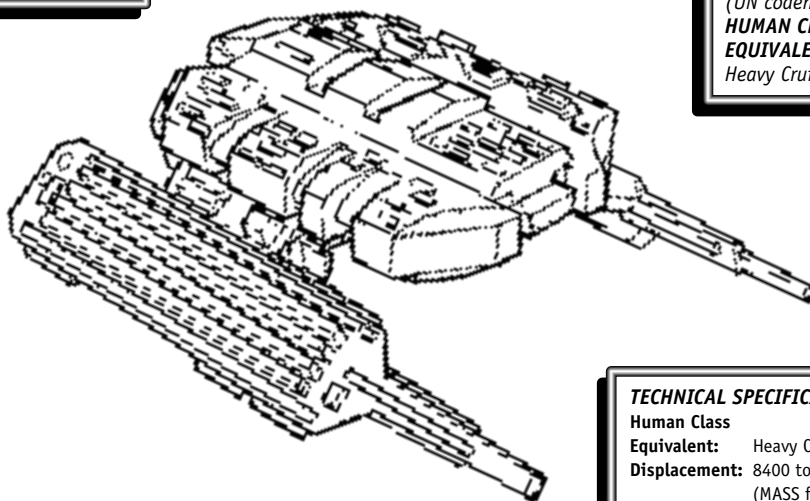
The Ko'Tek is an odd departure from "normal" Kra'vak ship designs doctrine, in that it mounts an odd number of large primary K-guns; one of the latest types of Kra'vak warship to be identified, the Ko'Tek appears to be a modified version of a Si'Tek hull with the addition of a third K-3 system, the other defensive systems being downrated to make room for it. Whether this is a full production class or a field-expedient conversion is unclear at this time, but since its appearance a number of Ko'Teks have been seen in action.

## Va'Dok class **GREAT DEADLY SHIP**

### Systems Status Display



**TMF: 84**  
**NPV: 329**



**VA'DOK CLASS  
GREAT DEADLY SHIP**  
(UN codename *KONTOS*)  
**HUMAN CLASS  
EQUIVALENT:**  
Heavy Cruiser

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Heavy Cruiser  
**Displacement:** 8400 tonnes  
(MASS factor 84)  
**Hull Integrity:** 27  
**Crew:** 84 [Crew Factor: 5]  
**Armament:** 2 x Class-4 K-guns,  
1 x Class-1 K-gun  
**Defences:** 4 x one-shot  
"scattergun"  
kinetic killers  
**Sensor Suite:** Standard sensors,  
2 Fire control systems  
**Drive Systems:** Main Drive Rating 6A,  
FTL (jump) drive

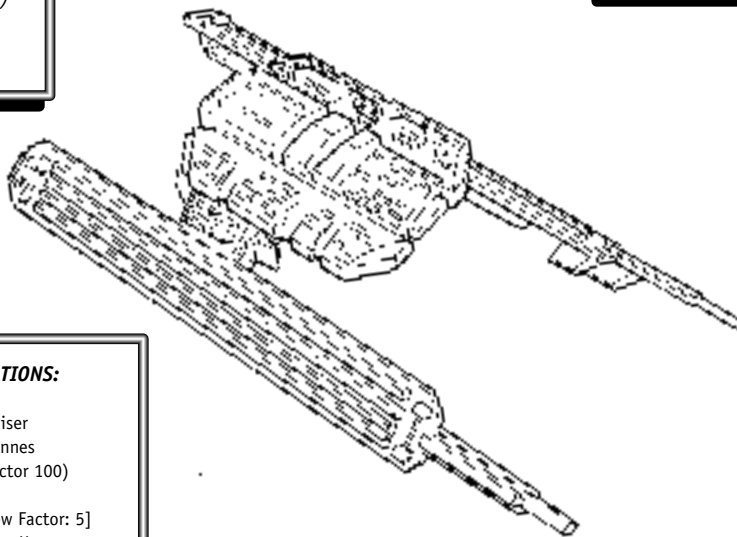
### First encountered: 2184.

The Va'Dok is a typical Kra'vak heavy cruiser design, with good thrust (affording excellent manoeuvrability with its advanced grav drives), a strongly-built hull and a deadly fore-arc armament of twin K-4 guns. With only limited secondary weaponry (as single K-1 battery) and a relatively small number of scattergun charges for defence, the Va'Dok is very much a strike ship designed to kill its prey as quickly as possible.



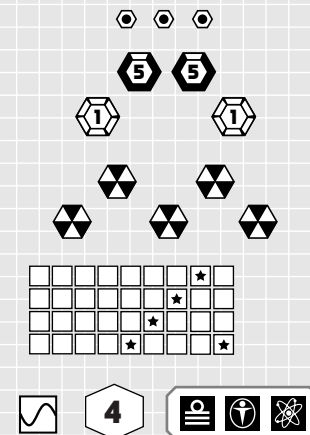
**Ti'DAK CLASS  
FIGHT DEADLY FLYER**  
(UN codename **KENNY**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
Battlecruiser

**TMF: 100**  
**NPV: 393**



## Ti'Dak class FIGHT DEADLY FLYER

### Systems Status Display



### TECHNICAL SPECIFICATIONS:

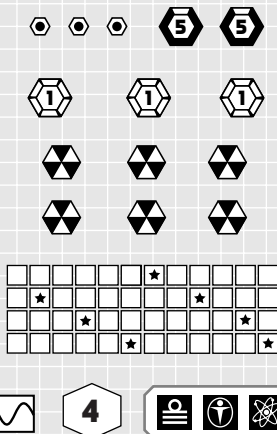
**Human Class**  
**Equivalent:** Battlecruiser  
**Displacement:** 10000 tonnes  
(MASS factor 100)  
**Hull Integrity:** 36  
**Crew:** 100 [Crew Factor: 5]  
**Armament:** 2 x Class-5 K-guns,  
2 x Class-1 K-guns  
**Defences:** 5 x one-shot  
"scattergun"  
kinetic killers  
**Sensor Suite:** Standard sensors,  
3 Fire control systems  
**Drive Systems:** Main Drive Rating 4A,  
FTL (jump) drive

### First encountered: 2185.

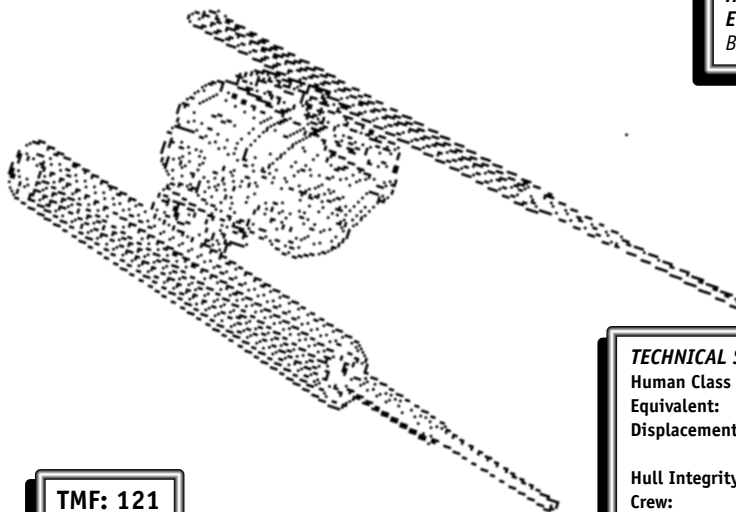
The smallest Kra'vak design to mount the immensely powerful K-5 guns, the Ti'Dak is built around a slightly smaller version of the Ko'Vol battleship design, and is commonly found as a heavy unit in cruiser task forces, often serving as a flagship for such formations.

## Ko'Vol class ATTACK SORROW MONSTER

### Systems Status Display



**TMF: 121**  
**NPV: 467**



**KO'VOL CLASS ATTACK  
SORROW MONSTER**  
(UN codename **KATSUMI**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
Battleship

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Battleship  
**Displacement:** 12100 tonnes  
(MASS factor 121)  
**Hull Integrity:** 48  
**Crew:** 121 [Crew Factor: 7]  
**Armament:** 2 x Class-5 K-guns,  
3 x Class-1 K-guns  
**Defences:** 6 x one-shot  
"scattergun"  
kinetic killers  
**Sensor Suite:** Standard sensors,  
3 Fire control systems  
**Drive Systems:** Main Drive Rating 4A,  
FTL (jump) drive

### First encountered: 2184.

The Ko'Vol has a similar weapons fit to its smaller cousin, the Ti'Dak BC, but slightly better defensive and secondary systems and a much larger and stronger hull structure. The Ko'Vol is used as a major battleline unit, and is also commonly encountered as a long-range independent patrol craft or heavy raider.



# KRA'VAK DOMINION STAR FORCES



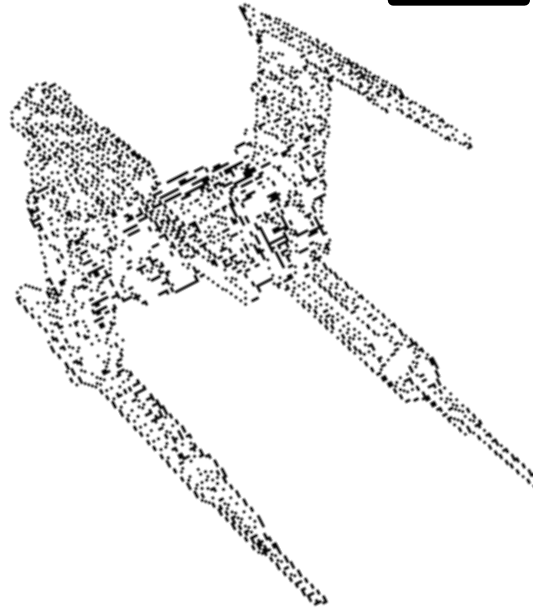
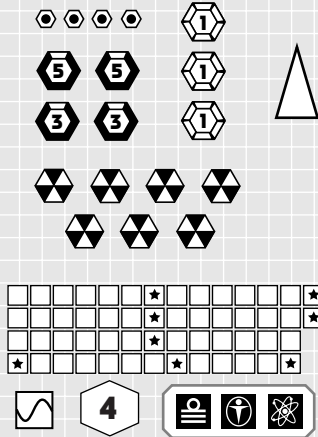
## Lo'Vok class GREAT DEATH SORROW SHIP

TMF: 160  
NPV: 626

### TECHNICAL SPECIFICATIONS:

**Human Class Equivalent:** Battledreadnought  
**Displacement:** 16000 tonnes (MASS factor 160)  
**Hull Integrity:** 54  
**Crew:** 160 + fighter crews. [Crew Factor: 8]  
**Armament:** 2 x Class-5 K-guns, 2 x Class-3 K-guns, 3 x Class-1 K-guns  
**Defences:** 7 x one-shot "scattergun" kinetic killers  
**Sensor Suite:** Standard sensors, 4 Fire control systems  
**Drive Systems:** Main Drive Rating 4A, FTL (jump) drive  
**Hangar Bays:** 1 bay holding 6 fighters (fighter cost not included)

### Systems Status Display



### First encountered: 2184.

The Lo'Vok is the standard Kra'vak light dreadnought or heavy battleship class, with an extremely powerful main weapons suite comprising twin K-5 guns and a pair of lighter (but still deadly) K-3 types. Like most human battledreadnoughts, the Lo'Vok has a limited fighter handling capability, with a single hangar bay to carry one group of supporting fighters.

**LO'VOK CLASS GREAT DEATH SORROW SHIP**  
 (UN codename **KATANA**)  
**HUMAN CLASS EQUIVALENT:**  
 Battledreadnought

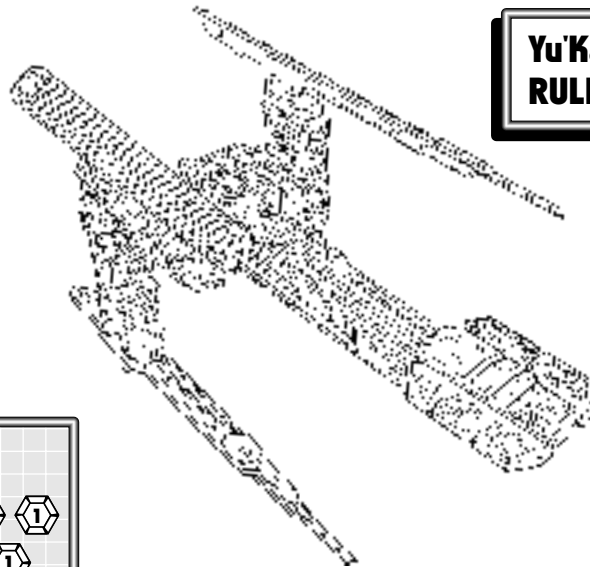
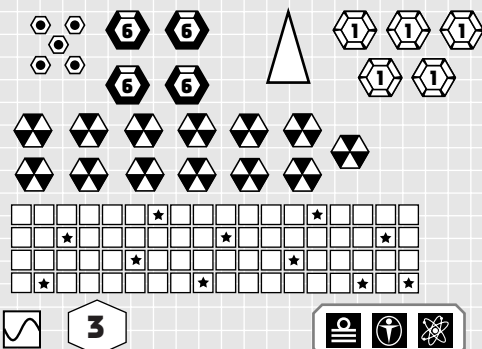
### First encountered: 2185.

As the human translation of its Kra'vak name suggests, the Yu'Kas is often used as a command flagship in major war fleets, and it is a massive ship with devastating firepower. The awesome power of the four huge class-6 kinetic guns, backed up by a large array of lighter K-gun batteries, make the Yu'Kas able to cripple many a large warship with a single well-aimed salvo. As with all Kra'vak ships, its advanced grav drive allows it amazing manoeuvrability for a vessel of its size, and it also has the capacity to carry a single embarked fighter group.

## Yu'Kas class RULER WAR MOUNTAIN

**YU'KAS CLASS RULER WAR MOUNTAIN**  
 (UN codename **KICKBACK**)  
**HUMAN CLASS EQUIVALENT:**  
 Superdreadnought

### Systems Status Display



TMF: 220  
NPV: 883

### TECHNICAL SPECIFICATIONS:

**Human Class Equivalent:** Superdreadnought  
**Displacement:** 22000 tonnes (MASS factor 220)  
**Hull Integrity:** 72  
**Crew:** 220 + fighter crews. [Crew Factor: 11]  
**Armament:** 4 x Class-6 K-guns, 5 x Class-1 K-guns

**Defences:** 13 x one-shot "scattergun" kinetic killers  
**Sensor Suite:** Standard sensors, 5 Fire control systems  
**Drive Systems:** Main Drive Rating 3A, FTL (jump) drive  
**Hangar Bays:** 1 bay holding 6 fighters (fighter cost not included)

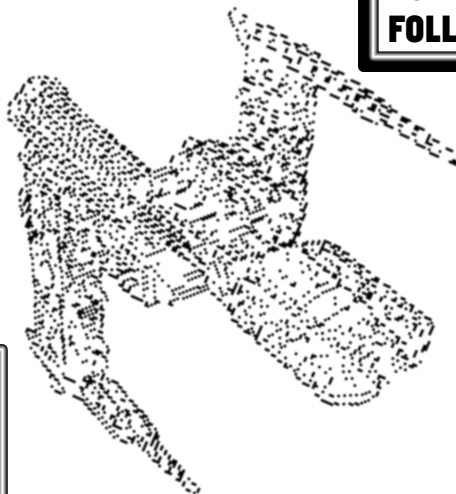
# KRA'VAK DOMINION STAR FORCES



## First encountered: 2185.

The Do'San is the Kra'vak equivalent of a Light Carrier, able to hold four groups of fighters (usually a mix of Ra'San standard type and Va'San heavies). It is used in smaller battle groups that do not warrant the inclusion of the huge Ko'San class. Although primarily a fighter carrier, the Do'San mounts enough antiship armament to give a good account of itself in the battleline, plus the usual Kra'vak hull strength to absorb considerable punishment.

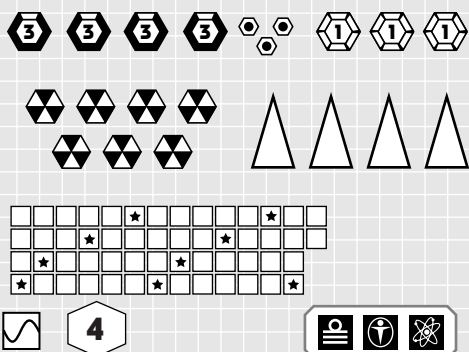
## Do'San class FOLLOWER SLIVER MOTHER



**DO'SAN CLASS FOLLOWER SLIVER MOTHER**  
(UN codename **KIMONO**)  
**HUMAN CLASS EQUIVALENT:**  
Tactical (Light) Carrier

**TMF: 180**  
**NPV: 671**

### Systems Status Display

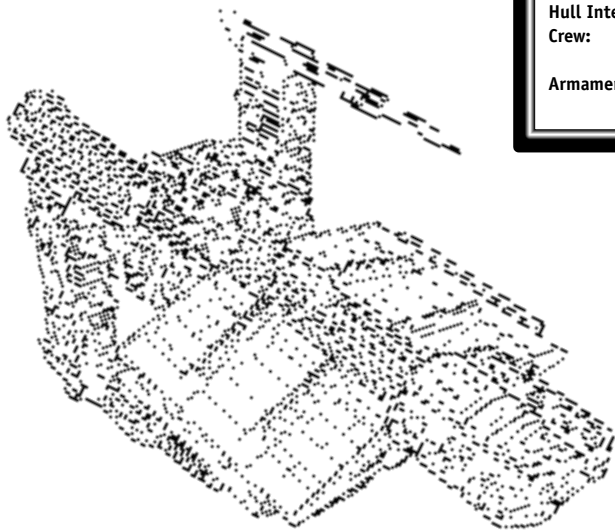


#### TECHNICAL SPECIFICATIONS:

**Human Class:** Tactical Carrier  
**Equivalent:** Tactical Carrier  
**Displacement:** 18000 tonnes (MASS factor 180)  
**Hull Integrity:** 54  
**Crew:** 180 + fighter crews. [Crew Factor: 9]  
**Armament:** 4 x Class-3 K-guns, 3 x Class-1 K-gun

**Defences:** 7 x one-shot "scattergun" kinetic killers  
**Sensor Suite:** Standard sensors, 3 Fire control systems  
**Drive Systems:** Main Drive Rating 4A, FTL (jump) drive  
**Hangar Bays:** 4 bays each holding 6 fighters (fighter cost not included)

## Ko'San class ATTACK SLIVER MOTHER



#### TECHNICAL SPECIFICATIONS:

**Human Class:** Heavy Carrier  
**Equivalent:** Heavy Carrier  
**Displacement:** 24000 tonnes (MASS factor 240)  
**Hull Integrity:** 72  
**Crew:** 240 + fighter crews. [Crew Factor: 12]  
**Armament:** 4 x Class-3 K-guns, 4 x Class-1 K-guns

**Defences:** 11 x one-shot "scattergun" kinetic killers  
**Sensor Suite:** Standard sensors, 3 Fire control systems  
**Drive Systems:** Main Drive Rating 4A, FTL (jump) drive  
**Hangar Bays:** 6 bays each holding 6 fighters (fighter cost not included)

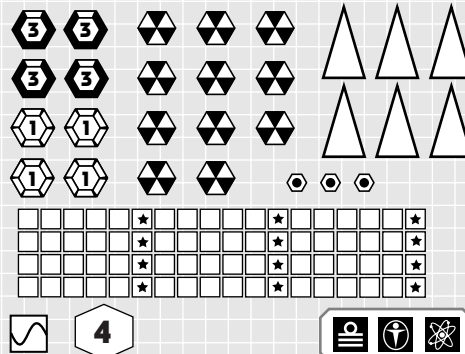
**TMF: 240**  
**NPV: 917**

**KO'SAN CLASS ATTACK SLIVER MOTHER**  
(UN codename **KINGPIN**)  
**HUMAN CLASS EQUIVALENT:** Heavy Carrier

## First encountered: 2185.

The huge Ko'San is the biggest Kra'vak warship yet encountered; it is primarily a fighter carrier, with 6 groups of mixed Ra'San and Va'San fighters embarked, but is also well armed and protected and can hold its own in combat against most enemies. In particular its scattergun point defence armament is extensive and makes it very dangerous for enemy fighters to attack. The Ko'San also has a drive power that gives it a manoeuvrability well in excess of any human carrier class.

### Systems Status Display

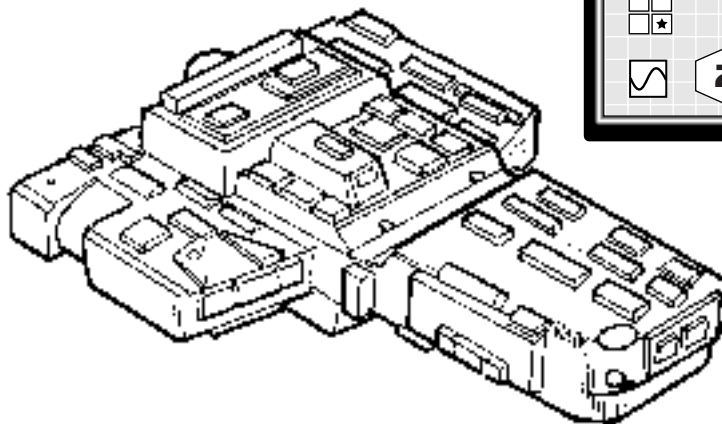




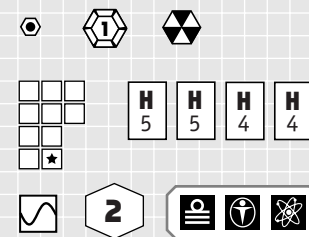
## Sha'Ken class WAR SUPPLIES MOVER

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Light Freighter/  
 Fleet Tender  
**Displacement:** 4000 tonnes  
 (MASS factor 40)  
**Hull Integrity:** 10  
**Crew:** 40 [Crew Factor: 1  
 (Merchant)]  
**Armament:** 1 x Class-1 K-gun  
**Defences:** 1 x one-shot  
 "scattergun"  
 kinetic killer  
**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 2A,  
 FTL (jump) drive  
**Cargo Holds:** 18 mass [1800 tonnes]



### Systems Status Display



**TMF: 40**  
**NPV: 97**

**SHA'KEN CLASS WAR SUPPLIES MOVER**  
 (UN codename **KODO**)  
**HUMAN CLASS EQUIVALENT:**  
 Light Freighter/  
 Fleet Tender

### First encountered: 2186.

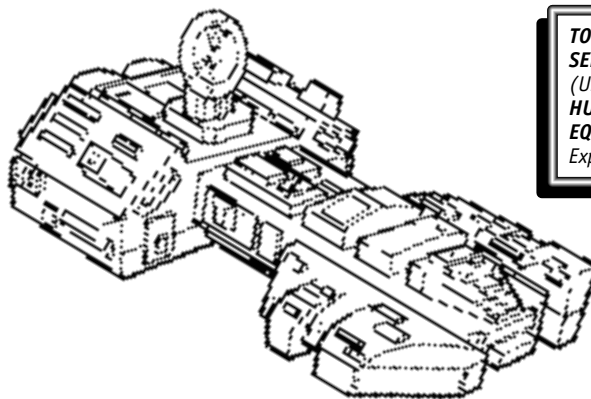
The Sha'Ken is a small supply ship often found accompanying Kra'vak war fleets, carrying stocks of disposable munitions (K-gun ammunition, scattergun reloads and the like) and other consumables. Sha'Ken class ships have also been known to be used as small assault carriers to transport ground troops and equipment for attacks on minor human outposts where only limited resistance is expected.

### First encountered: 2186.

The To'Rok is a reconnaissance ship used by the Kra'vak to scout out enemy-held systems prior to attack; it also carries considerable laboratory facilities and a pair of small interface landers, and is used to insert covert teams onto enemy occupied worlds to obtain captives for study and analysis. The ship is well enough armed to protect itself if necessary, but it is not intended to be a warship.

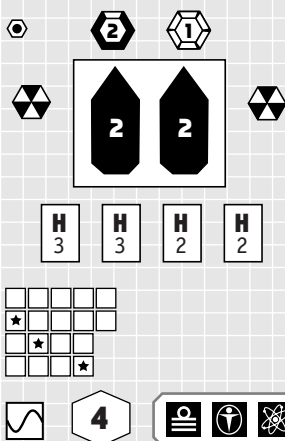
## To'Rok class SEEKER STEALTHY SHIP

**TO'ROK CLASS SEEKER STEALTHY SHIP**  
 (UN codename **KANGA**)  
**HUMAN CLASS EQUIVALENT:**  
 Explorer/Recon ship



**TMF: 60**  
**NPV: 196**

### Systems Status Display



### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Explorer/Recon Ship  
**Displacement:** 6000 tonnes  
 (MASS factor 60)  
**Hull Integrity:** 18  
**Crew:** 60 [Crew Factor: 3]  
**Armament:** 1 x Class-2 K-gun,  
 1 x Class-1 K-gun  
**Defences:** 2 x one-shot  
 "scattergun" kinetic killers

**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 4A,  
 FTL (jump) drive  
**Lab or**  
**Hold Space:** 10 mass [1000 tonnes]  
**Shuttle Bay:** 6 mass, holding 2 x mass 2  
 interface shuttles  
 (4 points each, cost not  
 included in NPV)





# XENO FILE 2: THE SA'VASKU

[Note: in terms of the game background, Humanity knows almost nothing of the Sa'Vasku beyond what has been observed of their combat capabilities. Much of the detail provided below is background material to permit the development of interesting scenarios; it does NOT represent information known to the players' "characters" on board the ships in battle.....]

The Sa'Vasku have been around for a long time, and have seen many younger starfaring civilisations rise, falter and die over the millennia. The Sa'Vasku themselves are huge, almost immobile creatures that live a semi-aquatic existence surrounded and tended by their myriad biotech constructs; they are not immortal, but are incredibly long-lived by human standards, with lifespans into thousands of years. There are only a small number of actual Sa'Vasku on each of the worlds that form their domain, and they seldom leave those worlds, carrying out almost all contact between their own worlds and with other races by proxy through their constructs.

Their technology is very advanced in some ways, though restricted in others by the form that it has taken - they long ago reached a technological plateau and have remained there ever since. Their control over biological engineering and biotechnology is very great, and their constructs are supremely versatile, but they are certainly not invincible against the "hard" weapons technology of the younger races.

The almost simultaneous (in galactic terms) rise of three aggressive and expansionist young races - Humanity, the Phalons and the Kra'vak - within the same smallish volume of space has been unprecedented in recent history (that is, in the last few hundred millennia!), and the Sa'Vasku find this highly disturbing - some of them believe it to be the result of genetic manipulation by races even older than themselves, known simply as the Old Ones, for reasons that even the Sa'Vasku do not understand.

Above all, the Sa'Vasku wish to maintain a balance - they are quite happy for things to carry on as they have for many tens of thousands of years, and they fear change and instability. They have realised that a total victory by any one of the younger races over the others would leave the Sa'Vasku themselves at a disadvantage and open to attack. While they generally dislike open interference in the affairs of other races (and consider the younger races somewhat beneath their attention), in this case they have found themselves getting involved - in effect, they wish to ensure that no-one actually wins the war, and ideally they would like to see all the protagonists wear themselves down through attrition until none of them are a further threat to the stability of the area.

The Sa'Vasku will thus involve themselves (via their constructs) on any and all sides at different times, especially if one race appears to be gaining the upper hand on a strategic level, which makes their agenda less than comprehensible to the other races - if a Sa'Vasku force is encountered it is impossible to know whether it will act as friend or foe until it makes its intentions known (often by opening fire...) and reasoned communication is impossible unless the Sa'Vasku themselves initiate it.

There have been a number of "meetings" between the Sa'Vasku constructs and humans since first contact was made in 2188, always at the instigation of the Sa'Vasku. They totally ignore all hailing and communication attempts from human ships, and humanity has learnt that they must wait for the Sa'Vasku to come to them. At times, human communication attempts have been met with attacks of great ferocity, and it may well be that they interpret some of the transmissions as hostile sensor sweeps; as with everything concerning the Sa'Vasku, this remains pure conjecture to the humans.

## SA'VASKU SPACE COMBAT CONSTRUCTS

Sa'Vasku starships are known as Sra'Kith'Aa (Far-Reacher War Entities), a term which has been used by their contact constructs during their limited communication with representatives of humanity. Throughout the period of the Xeno War, Humanity knows effectively nothing about the Sa'Vasku, or their motivations, beyond that little which the aliens themselves have deigned to tell them.

No signals, verbal or otherwise, between Sa'Vasku craft or other constructs have ever been detected by human ships except when the Sa'Vasku desired contact with humanity, and it is theorised that they use either a form of telepathic communication or something equally undetectable to current human sensor technology.

The "names" of the Sa'Vasku ship classes are given in the ship data as the closest human-pronounceable rendition of the actual sound patterns made by the contact constructs (the specialised volitional constructs that the Sa'Vasku use to interface with humanity on the rare occasions that they deem this necessary) when describing the ships, and the nearest possible human translation of these sounds - the use of terms like "elder" and "younger" in these ship names appears to imply that Sa'Vasku ships actually grow and mature into larger classes as they get older, but this may be just a linguistic confusion (though it is the source of many "When I grow up I want to be a Superdreadnought..." jokes among the Human military!).

It is not known if Sa'Vasku ship-entities have individual names as well, and there is the possibility that some confusion may exist between these and the "class" names. Most human navies have adopted the UNDISA-assigned codenames as standard designations for the Sa'Vasku ship types encountered so far.

Unofficially, most human crews refer to Sa'Vasku ships in general as "Spikeys" or "Spineys", an obvious reference to their appearance.

Each Sa'Vasku "ship" is a single large bioconstruct, an artificial living entity in its own right. Where separate "crew" have been encountered from Sa'Vasku vessels, these have themselves been constructs engineered for specific functions, such as the terrifying biotech warriors used as boarding parties and ground assault forces. A Sa'Vasku ship-entity will carry many smaller constructs of almost limitless variety, each specialised for a particular task, and these constructs are generally divided into two types - Volitionals, which have their own individual intelligence and limited free will, and Non-Volitionals which are mindless, bio-robotic worker constructs.

The bulk of the main hull structure of a Sa'Vasku ship is composed of living matter termed "biomass", which serves both as structural integrity and to provide raw material for the construction (or growth) of their fighter-equivalent Drones and for other forms of expendable ordnance; raw biomass may also be used in attempts to repair and replace damaged systems lost in combat. Most Sa'Vasku ships other than the very smallest ones also carry an "armour" layer, termed a carapace, which is composed of dead biomass that may not be converted for other purposes.

The mobility, offensive and defensive capabilities of Sa'Vasku ships are uniquely flexible - they can reconfigure themselves at will to direct their available power to drives, screens, weapons etc. in any proportion, which makes them very unpredictable to fight against - a ship that exhibits phenomenal thrust levels at one moment may suddenly divert all power to its weapon nodes and unleash a hugely powerful energy blast at potentially enormous ranges. The Sa'Vasku are not invincible, however, and a ship that is using most of its power for thrust or weapons fire is in turn very vulnerable to attack, as it will not have enough power left over to put up its defences or to repair damage it sustains.

## GAMING NOTES FOR SA'VASKU PLAYERS

Commanding a Sa'Vasku fleet in combat is a challenge, and requires a bit more thought and step-by-step planning than most of the other fleets in Full Thrust. If you can master this, however, the special capabilities of the Sa'Vasku ships make them formidable and dangerous opponents.

If a Sa'Vasku player correctly anticipates his enemy's actions and uses his ships' unique abilities to counter them in the most efficient way, then he will be hard to beat; if he fails to do this, he will probably get soundly thrashed!

In their "average" form, Sa'Vasku ships are no more powerful (and in some ways worse) than equivalent classes from other races and powers. Their great strength, however, lies in their ability to choose how to distribute their available energy to optimise different areas of their performance on a turn by turn basis. If a Sa'Vasku player expects to take a lot of fire from his opponent in a particular turn, then he can divert the majority of his ships' energy to mobility and/or defences to either avoid or fend off the attacks - in the next turn he may be in an ideal position to attack, and may then switch all his energy output to offensive measures and fry the opposition. A single medium-sized Sa'Vasku ship can have the maneuverability of a scout, the defences of a fleet carrier or the attack strength of a dreadnought - but NOT all at the same time.... if it gets caught in the wrong place, with the wrong energy distribution, it WILL die quickly....

## SA'VASKU SHIP DESIGN AND SYSTEMS

### MAIN DRIVE NODES

Unlike the other races, who all have specific thrust ratings given to their ships' drive systems at the design stage, the thrust output of Sa'Vasku drives depends on the amount of power points being fed to them each turn.

The amount of power required to produce a given thrust factor is dependant on the overall MASS of the ship, and is determined thus:

Power points required = 2% x thrust required x ship MASS .

So, for thrust-6 with a MASS 80 ship, the power requirement is 2% of (6 x 80) = 9.6 (rounded up to 10) power points.

Now, don't worry about the bit of maths here - the power requirements will be calculated at the design stage and entered up on the ship's Status Display in the form of the "thrust table" (the ship designs in this volume have these already done, of course), so you can see at a glance exactly how much power must be put into the ship's Move pool to get the thrust level you want for that turn.

When Sa'Vasku drives become damaged as a result of a threshold check (or a needle hit), they require double the normal amount of power input for a given thrust rating (4% x thrust x MASS); again, these amounts are worked out in advance and entered up on the thrust table for easy reference in play.

# XENO FILE 2: THE SA'VASKU

The THRUST TABLE on each Sa'Vasku SSD consists of a column headed "T", which is the amount of thrust produced, and a "P" column which gives the number of power points required to produce that thrust factor. There are two entries in the "P" column, the first for the drive node in its fully operational state and the second (after the slash) for a damaged drive node. A whole (integer) number of power points must be spent on thrust, so if the factor required is greater than one entry in the T column but less than the next, then the power point cost is as for the next higher entry.

## SA'VASKU THRUST AND MANOEUVRE

Sa'Vasku drives count as Advanced Drives, and use the same rules for movement in either Cinematic or Vector mode as for the Kra'Vak drives. Refer to the Kra'Vak movement rules section of this volume, and apply the same rules and restrictions.

The icon used for a Sa'Vasku drive node is the same as that used for the Kra'Vak advanced drives, as a little reminder that the same movement rules are used in both cases; as there is no set thrust rating for Sa'Vasku drives, however, there is a star rather than a thrust number printed in the drive icon.

## FTL DRIVE NODE

A Sa'Vasku FTL Node is the equivalent of any other race's FTL Drive system. It requires points equal to its own MASS, from the Movement (M) pool, to activate.

When activated, the FTL jump occurs according to the standard rules.

FTL Node MASS is equal to 10% of ship mass. Cost is 2 points per MASS of node.

## BIOMASS BOXES

The damage track of a Sa'vasku ship is composed of biomass boxes in the same way as other ships have hull integrity boxes. Where damage is concerned, a biomass box works exactly like a hull box - one is crossed off for every damage point inflicted on the ship's structure, working along each row from left to right. A threshold check is made for the ship's systems when the end of a row of the damage track is reached.

Biomass differs from other races' ship hulls in that it can be deliberately consumed by the ship itself, to produce drone (fighter) groups or ammunition for pod launchers nodes, and also to repair damaged ship systems. All biomass consumed this way is crossed off the damage track in the opposite direction to that of inflicted damage - ie: from the right-hand end of the bottom row.

Consumed biomass does NOT cause threshold checks to be taken, even if an entire row or more is consumed. Only inflicted damage can cause threshold checks to be made.

If the consumed biomass boxes meet the damaged ones (ie: all biomass boxes have been crossed out for one reason or the other), then the ship is dead.

Each biomass box requires 1 MASS, and costs 2 points.

## CARAPACE

A Sa'Vasku ship may have a number of Carapace boxes in a single row above the top row of its biomass boxes; Carapace boxes are indicated by circle icons, in the same way as human ship armour, and the carapace is treated like armour in all respects. The carapace boxes represent a hardened layer of "dead" biomass, and may not be consumed by the ship.

Carapace boxes take 1 MASS each, and cost 2 points per box.

## POWER GENERATORS

A Sa'vasku ship has a number of Power Generators (usually four) placed at the end of the rows of its biomass boxes. The total amount of power points available to the ship for each game turn is the sum of the numbers in all the still-functioning Power Generators.

As accumulated damage reaches the end of a row of biomass boxes, the Power Generator at the end of that line is AUTOMATICALLY lost; it does not have to be rolled for during the threshold check. Full rows of biomass consumed by the ship does NOT cause the loss of a power generator.

MASS required for generators is 1 per power point value. Cost is 2 points per MASS.

## ALLOCATING POWER

Each turn during the orders phase, the ship's available power (the sum of the functioning power generators) must be divided between 4 "power pools"; MOVEMENT, ATTACK, DEFENCE, and REPAIR, noted on the record chart as M, A, D and R. The division of the available power points between the four pools is entirely at the player's discretion, and there is no requirement to place any power points into any one pool - power may be allocated to all four pools, or concentrated in just one or two, to choice.

Power allocated to the MOVEMENT (M) pool is available for powering the Main Drive Node to apply thrust, or to power up the FTL Drive Node to make an FTL jump off-table.

**The amount of power that must be available in the M pool for a given thrust factor is listed in the Thrust table on the ship's SSD.**

Power allocated to the ATTACK (A) pool is available for powering the ship's Stinger Node(s) to fire beam shots, and to fire any Pod Launcher Nodes if the ship is so equipped.

The amounts of power required for each weapon system are given in the relevant rules for those systems. Power from the A pool is also used to fire the ship's point-defence systems in the form of its Spicules.

Power allocated to the DEFENCE (D) pool is available for energising the ship's Screen Node(s) if it has any; the amount required to power each screen node is equal to the mass of the node, which in turn is equal to 5% of the overall ship mass.

The allocation of sufficient power to the D pool to operate the screen node(s) implies that the screen is in operation for the whole of that turn. If a ship does not have a functional screen node, then it does not gain any benefit from power allocated to the D pool.

Power allocated to the REPAIR (R) pool is available for system repair attempts, and is also used by Broodships (or other ships with drone wombs) to "grow" their drone (fighter) groups.

**IMPORTANT NOTE: Any power points that are not used by the end of the turn, whichever pool they have been allocated to, are lost. There is no power storage from turn to turn. "USE IT OR LOSE IT...."**

## STINGER NODES

The Stinger Node is the Sa'Vasku equivalent of a standard FT beam weapon, except that its output is variable according to how much power is allocated to each shot.

One power point channelled through a stinger node produces a 1-die beam shot at up to 12 mu range. At up to 24 mu range, 2 power points are required for a 1-die shot, at up to 36 mu it doubles again to 4 power points per die, and continues doubling as range increases - thus a Sa'Vasku beam may have any range you like as long as there is enough power to pump into the Stinger node, but it is a system of rapidly diminishing returns - you can get a shot to reach a huge 72 mu range if you REALLY want to, but you will need 32 power points just to roll a single hit die!

Power points (PP) required for 1-die shot at:

0-12 mu range 1 PP  
12-24 mu range 2 PP  
24-36 mu range 4 PP  
36-48 mu range 8 PP  
48-60 mu range 16 PP  
60-72 mu range 32 PP

and so on....

A single stinger node may handle any required amount of power for each shot, but each node may only fire at one target in any given turn. All stinger nodes may fire through 3 arcs, and the node may be placed to cover any three contiguous arcs at the designer's choice.

Sa'Vasku beam die rolls are read exactly as for standard beam weapons, ie: against an unscreened target, 1-3 = no effect, 4-5 = 1 DP, 6 = 2 DP + reroll.

Human and Sa'Vasku screens, and Phalon vapour shrouds all affect stinger shots in the standard way.

Rerolls are made for natural rolls of 6, and stingers do not penetrate armour (ie: hits are taken by armour/carapace boxes if any remain, before applying any hits to hull) unless reroll damage is inflicted.

*EXAMPLE 1: A Sa'Vasku ship has 6 PP available for a single stinger shot; if it was to engage a target within 12 mu, it would get to roll 6 dice; at up to 24 mu, 3 dice, and to 36 mu 1 die only (and 2 PP would be wasted).*

*EXAMPLE 2: A Sa'Vasku ship has 10 PP available for a single stinger shot; if it was to engage a target within 12 mu, it would get to roll 10 dice; at up to 24 mu, 5 dice, and to 36 mu 2 dice.*

## POD LAUNCHER NODES

A Pod Launcher Node is a projectile launcher which can fire a number of different munitions, which are created by consuming biomass and then fired using power points from the Attack (A) pool. The type of munition to be fired may be decided by the player at the time of launch - it does not have to be specified earlier. Three different munition ("pod") types are detailed below - the Lance, Leech and Interceptor Pods, but the Sa'Vasku are versatile enough to use many others - we may add a few more types later, or players are free to come up with some as house rules provided everyone in the playing group is happy with them.

# XENO FILE 2: THE SA'VASKU

Pod Launcher Nodes are single-arc weapons, and most of the pod munitions may only engage targets that fall within the launcher's arc (the exception being the short-range Interceptor Pod, as detailed below).

The phase of the turn sequence in which a pod launcher fires depends on the munition it is firing - Lance and Leech Pods are fired during the main ship fire phase, while Interceptor Pods are fired in the point-defence phase. Regardless of this, a Pod Launcher may only fire once per turn.

## LANCE PODS

The Lance Pod is the Sa'Vasku's primary carapace (armour) penetrating weapon.

Lance Pods require 3 power points to fire, and consume 1 biomass. They may be fired at any target that falls within the fire arc of the pod launcher.

To score a hit with a Lance Pod, roll 1 die: at 0-6 mu, a hit is scored on 3+, at 6-12 mu 4+, at 12-18 mu 5+, and at 18-24 mu a 6 is required.

When a lance pod hits its target, roll a second D6; the number rolled is the number of damage points inflicted by the hit; as with Kra'vak K-guns, only the FIRST point scored is taken off armour/carapace (if any), the entire remainder penetrates through to kill hull boxes. There are no rerolls for Lance Pod damage.

## LEECH PODS

Leech Pods are very nasty weapon systems designed to inflict continuing damage on their target.

Leech Pods require 3 power points to fire, and consume 1 biomass. They may be fired at any target that falls within the fire arc of the pod launcher.

The range and to-hit mechanism is the same as given above for the Lance Pods.

When a leech pod hits its target, it does 2 points of immediate damage; however, it will the CONTINUE to do damage turn by turn, unless it is killed off by the target ship. For every subsequent turn that the leech torp is active, it does an additional 2 points of damage to the target ship - so on the turn of impact it causes 2 points, on the next turn a further 2 points and so on....

Leech Pod damage is non-penetrating - it will spread across the ship's surface, destroying armour or carapace first before attacking the hull.

To kill off a leech pod, a crewed ship (Human, KV or Phalon) treats it as a damage control task - the rolls, number of teams assigned etc. are exactly as for repairing a lost system - success indicates the leech has been eradicated, failure means it continues to do damage next turn. The attempts to kill it occur in the damage control phase, so if they fail then the leech will do it's next turn of damage at the beginning of the following fire phase before there is another chance to kill it.

Other Sa'Vasku ships attacked by a leech pod need to expend at least one power point allocated to the Repair (R) pool to try and kill it - the required roll is 6, -1 for each additional power point applied to the attempt up to a maximum of 3 points total (which will kill the leech on a roll of 4+).

## INTERCEPTOR PODS

An Interceptor Pod is a Pod Launcher munition which "bursts" after firing and releases a cluster of miniature drones, like the Sa'Vasku's fighter drones but much smaller and with only a one-turn lifespan; they are used as an area-defence weapon to hunt down and kill enemy fighters, missiles and similar targets.

Firing an Interceptor Pod from a Pod Launcher Node requires 3 power points from the Attack (A) pool, and also consumes 1 biomass.

The range of an Interceptor Pod is up to 12 mu, and any fighter group, missile salvo or plasma bolt within 12 mu of the firing ship may be targetted - it does NOT have to fall within the fire arc of the Pod Launcher, because the Interceptor mini-drones can steer themselves after launching; nor does the target have to itself be attacking the firing ship, which makes the Interceptor Pod suitable for the area-defence role.

The effect of an Interceptor Pod is the same as that of a Kra'vak Scattergun - against fighters and missiles it kills 1 D6 members of the target group/salvo, and against plasma bolts a roll of 4 or 5 reduces the bolt strength by 1, while a 6 reduces it by 2.

Any fighter group, missile salvo or plasma bolt within 12mu may be targetted, not just those attacking the firing ship.

## DRONE WOMBS

Sa'Vasku drones (fighters) may only be grown and launched by ships which have Drone Wombs - each womb can grow (or launch) one 6-drone group at a time. Sa'Vasku ships produce drones by converting hull biomass into the necessary components - it takes 1 biomass to "grow" 1 drone, and they may only be produced in full groups of 6 - if a ship has less than 6 available biomass then it cannot grow a drone group.

Drones that survive their mission and return to their ship are "reabsorbed" - they are broken

down into their constituents and the biomass that created them is available for reuse, either as more drones or for other purposes.

A Drone Womb takes 1 turn to grow a drone group, and a second turn to launch it.

Recovery is the reverse - one turn to recover the remaining drones of the group (which will almost certainly be understrength) and a second turn to reabsorb the biomass. While the womb is occupied by any drones (whether being grown, reabsorbed, or held ready for launch) it may not do anything else.

Creating drones uses power as well as biomass - one power point must be expended for every drone grown, so a full group uses 6 power points; these power points must be allocated to the Repair (R) pool at the start of the turn, and the growing of the drones must be noted in the ship's orders for the turn.

Launching, recovering and reabsorbing of drones does NOT require power point expenditure.

Each Drone Womb take up 3 MASS and costs 9 points, not including the necessary biomass to convert into drones.

*EXAMPLE: a Sa'Vasku Broodship has four drone wombs. In turn one, the ship grows a drone group in each of wombs 1 and 2, which consumes 12 of its hull biomass and also costs it 12 power points. In turn 2, the ship launches both its newly-created groups, and grows two more in wombs 3 and 4, at the cost of another 12 power points and 12 biomass. These groups will be able to launch in turn 3.*

*Later in the game, 3 surviving drones from one of the groups straggle back to the Broodship - they are recovered, and the following turn may be broken down to recover 3 biomass for reuse (this does not cost any power points).*

## DRONE FIGHTERS

The standard Sa'Vasku Drone (Ku'Tho'Ra, UN codename SPRIG) is a small, limited-range space combat construct "piloted" by a single volitional brain (which is an integral part of the drone). The drones are assembled, or grown, from biomass constituents within the Drone Wombs of specially-equipped Sa'Vasku ships, which correspond to the fighter carriers of other races. The Sa'Vasku do not use specialised drone types, the standard drone being the combat equivalent of a typical human multirole fighter.

When and if recovered by their broodship (or any other Sa'Vasku ship with an functional drone womb), drones are not re-armed like human fighters - their biomass is reabsorbed by the carrier and may be reused to "grow" new drone groups, or used for other functions.

Once launched from the drone womb, Sa'Vasku drones follow the same rules as human and other fighters, including endurance (standard 6 Combat Endurance Factors), movement and combat. They are NOT subject to Fighter Morale checks, and will always attack if the owning player desires it. All Sa'Vasku drones are the equivalent of standard multirole fighters, ie: a movement allowance of 24mu, and an attack of 1 die per drone. They may make secondary moves of 12mu at the cost of one CEF.

Sa'Vasku drone groups always consist of 6 drones when at full strength.

## SCREEN NODES

A Screen Node requires power points allocated to the Defence (D) pool equal to the MASS of the node in order to operate. When powered, each screen node is the equivalent of a single level of standard screen generator. A ship that carries two screen nodes may choose to power one, both or neither in a given turn, depending on how much power it allocates to the D pool. As with human screens, more than two screen nodes may be carried as redundant backups, but no more than two will have an effect at any one time.

MASS required per Screen Node is 5% of ship MASS, with a MINIMUM size of 3 MASS. Cost is 3 points per MASS of node.

*Example:*

*A Sa'Vasku ship of MASS 120 carries two Screen Nodes; each node occupies 5% of the ship, or 6 MASS, and thus requires 6 power points to operate. If the player allocates 6 power points to the D pool, one of the screen nodes is considered active and the ship benefits from the effects of a level-1 screen for that turn. If 12 points are allocated to the D pool, then both screen nodes are powered and the ship is treated as having level-2 screens in operation.*

## SPICULES

Spicules are the Sa'Vasku equivalent of Point Defence Systems; each Spicule may fire once per turn at any one target that is attacking the ship, and requires one power point from the ATTACK (A) pool to fire (though they are technically "defensive" weapons, they are active weapons rather than passive systems and hence draw power from the A pool rather than the D). A spicule has all-arc fire, and when fired rolls one die with exactly the same effects as a standard PDS.

Note that the Sa'Vasku do not use an equivalent of an ADFC, and hence Spicules are not capable of area-defence fire - that role is filled by the "interceptor pods" that may be fired from Pod Launchers.

Each Spicule is 1 MASS, and costs 3 points.

# XENO FILE 2: THE SA'VASKU

## CORTEX NODES

A Cortex Node is the Sa'Vasku version of a Fire Control system, and it works in exactly the same way as a standard fire control. Cortex Nodes do NOT require power allocated to them.

Each Cortex Node occupies 1 MASS, and costs 4 points.

## DAMAGE CONTROL

Ship systems lost at threshold checks may have repairs to them attempted by expending power points from the Repair (R) pool equal to the MASS of the system being repaired, AND making a die roll for success; 4+ on a D6 is required to successfully repair the system.

If the roll succeeds, then 1 biomass is consumed to fabricate the components for the repair.

If the roll fails, then the biomass is not consumed but the power used IS wasted.

Only one roll is permitted per damaged system each turn. Lost Power Generator systems MAY be replaced in this manner, but only if enough power points are available from the surviving PGs for the task.

## SA'VASKU SHIP DESIGN PROCEDURE

- 1) SELECT OVERALL SHIP MASS.
- 2) SELECT HULL INTEGRITY VALUE (BIOMASS) and create Damage Track.
- 3) ADD CARAPACE.
- 4) ADD POWER GENERATORS.
- 5) INSTALL MAIN DRIVE NODE.
- 6) INSTALL FTL DRIVE NODE (if required).
- 7) TOTAL MASS USED SO FAR.
- 8) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEM NODES.
- 9) TOTAL POINTS VALUES to calculate NPV of ship.
- 10) CREATE THRUST TABLE.

### 1) SELECT OVERALL SHIP MASS

This may be any size desired, though most combat starships fall within 10 - 300 MASS.

*EXAMPLE: We choose to build a Sa'Vasku construct with a total MASS factor of 100, which will make it roughly equivalent to a human battlecruiser or small battleship in size. This gives us a basic hull that will take up to 100 MASS.*

### 2) SELECT BIOMASS (HULL INTEGRITY) LEVEL

Any amount of the available MASS may be used for BIOMASS, which is the living inner structure of the ship; like the Hull Integrity of other ships, the BIOMASS total represents the overall structural strength of the ship and its ability to absorb damage, but also has other special functions unique to the Sa'Vasku. The only restriction is that the MINIMUM amount of biomass is 10% of the ship's total MASS.

The actual MASS of the biomass chosen is equal to the number of DAMAGE BOXES the ship has, which are then organised into four rows (in accordance with the standard Damage Track rules).

*EXAMPLE: Sa'Vasku ships generally start with a fairly high biomass value, as some of it will be "consumed" during the battle to launch some weapons and repair damaged systems; we choose to allocate 30 MASS to biomass, so the ship has 30 Damage Boxes (which will be arranged on the Damage Track in four rows, split 8/8/7/7). The points cost for the biomass will be 2 x MASS used, ie: 60 points.*

### 3) ADD CARAPACE

Sa'Vasku CARAPACE is the equivalent of human armour, and consists of "dead" biomass on the outside of the hull to give added protection.

*EXAMPLE: We decide that our ship will allocate 10 MASS to its carapace, giving us 10 boxes in one row above the hull damage track. At 2 points per box (the same as armour for Human and Kra'vak designs), the cost is 20 points.*

### 4) ADD POWER GENERATORS

The Power Generators (PGs) are the most vital systems on a Sa'vasku ship, as they

supply the energy for everything else. Any amount of MASS may be allocated to PGs, with each MASS generating one power point each turn.

*EXAMPLE: We decide to allocate 22 MASS to PGs, giving our ship a power generation capacity of 22 points per turn while it remains undamaged. The PGs are always divided into 4 separate systems placed at the end of the rows of the damage track - in this case our ship will have 2 PGs each of factor 6, and 2 of factor 5; the stronger PGs are always on the lower damage track rows (so that the weaker ones are lost first when damage is inflicted), so the four PGs will be arranged as 5/5/6/6. The cost of the PGs will be MASS x 2, = 44 points.*

### 5) ADD MAIN DRIVE NODE

All ships require a Main Drive Node, which requires 10% of the ship's overall MASS; the amount of thrust the node will produce depends on the amount of power channelled through it in any one turn.

*EXAMPLE: Our 100 MASS ship thus needs to use 10 MASS for its main Drive Node. The Main Drive Node costs 10 x 2 = 20 points.*

### 6) INSTALL FTL DRIVE

If an FTL drive is to be part of the design, it is fitted at this stage and uses up 10% of the overall ship MASS.

*EXAMPLE: Our ship needs an FTL drive; it will take up 10 MASS. The FTL Node costs 10 x 2 = 20 points.*

### 7) TOTAL MASS USED SO FAR

Add up the total MASS used by the Biomass, Carapace, Power Generators, Main Drive and FTL Drive systems, and subtract this from the overall ship MASS to find the amount left for fitting-out with offensive, defensive and other systems.

*EXAMPLE: Our design has used 30 MASS for biomass, 10 for carapace, 22 for Power Generators, 10 for Main Drive, and 10 for FTL Drive. This totals 82 MASS from the overall 100, so we are left with 18 MASS for further systems.*

### 8) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEM NODES

Choose the desired mix of weapon and other system nodes to suit the ship's intended mission profile, ensuring that the total MASS required for all the systems does not exceed the available MASS left from step 7.

*EXAMPLE: For this ship, we choose three offensive Stinger (beam) nodes, each of which has three fire arcs - they will be arranged to cover the AP/FP/F, FP/F/FS and F/FS/AS arcs, giving optimum overlapping coverage of fire. One Pod Launcher Node is chosen to increase the variety and power of weaponry, aimed through the Fore arc. 2 Spicules will provide point-defence fire, and 2 Cortex nodes fulfil the functions of fire-control systems. Finally, for defence we decide on a Screen Node that will provide the equivalent of a level-one screen when powered up.*

3 x Stinger Nodes @ 2 MASS	= 6 MASS
1 x Pod Launcher Node (1-arc) @ 3 MASS	= 3 MASS
2 x Spicules (PDS) @ 1 MASS	= 2 MASS
2 x Cortex Nodes (Fire Controls) @ 1 MASS	= 2 MASS
1 x Screen Node @ 5% of overall ship MASS	= 5 MASS

**Total used for systems = 18 MASS**

### 9) TOTAL POINTS VALUES

*EXAMPLE: The points costing of our example ship is:*

BASIC HULL:	MASS x 1	100 points
BIOMASS (MASS 30) 8/8/7/7	MASS x 2	60 points
CARAPACE (MASS 10)	MASS x 2	20 points
POWER GENERATORS (MASS 22)	MASS x 2	44 points
MAIN DRIVE NODE (MASS 10)	MASS x 2	20 points
FTL DRIVE (MASS 10)	MASS x 2	20 points
3 x Stinger Nodes (MASS 6)	MASS x 3	18 points
1 x Pod Launcher Node (MASS 3)	MASS x 3	9 points
2 x Spicules (MASS 2)	MASS x 3	6 points
2 x Cortex Nodes (MASS 2)	MASS x 4	8 points
1 x Screen Node (MASS 5)	MASS x 3	15 points

**Total cost (NPV - Nominal Points Value) 342 points**

### 10) CREATE THRUST TABLE

Because of the way that Sa'vasku drives function, it will be a huge help to the gameplay if you calculate beforehand how many Power Points are required to produce a certain thrust factor for a given size of ship; that way, when writing orders you can easily see the amount of power that has to be allocated to the M (movement) pool in order to achieve the desired thrust level for that turn.



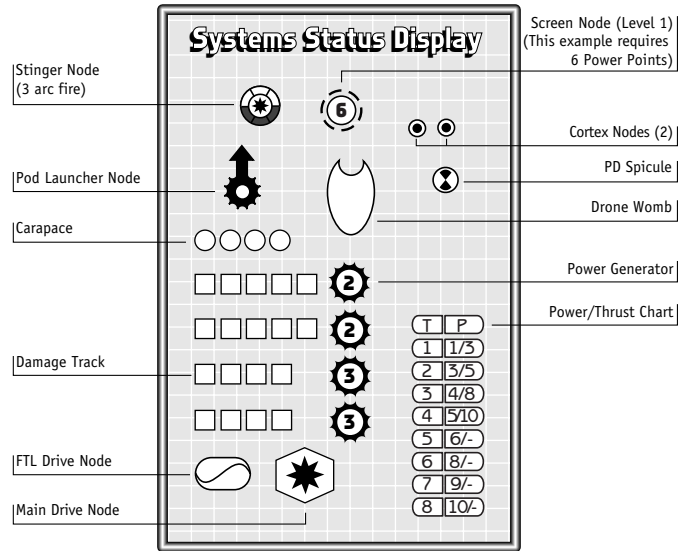
# XENO FILE 2: THE SA'VASKU

EXAMPLE: Our MASS 100 ship requires power points equal to 2% of its MASS for every thrust factor generated; thrust-1 thus requires 2 power points (PP) if the drives are fully functional (4 if the drive is damaged), and so on. The thrust table will look like this:

T	P
1	2/4
2	4/8
3	6/12
4	8/16
5	10/20
6	12/24
7	14/-
8	16/-
9	18/-
10	20/-
11	22/-

## SA'VASKU SYSTEMS STATUS DISPLAY (SSD)

The diagram below is an example of how to read the Sa'Vasku SSDs on the ship data panels. Please note that this is NOT an actual ship design, just a key to the symbols and icons used!



## SA'VASKU WEAPONS AND DEFENCES SUMMARY

### STINGER NODES

Each stinger node may fire once per turn. Any amount of power may be put through one node.

Power points (PP) required for 1-die shot at:

- 0-12 mu range 1 PP
- 12-24 mu range 2 PP
- 24-36 mu range 4 PP
- 36-48 mu range 8 PP
- 48-60 mu range 16 PP
- 60-72 mu range 32 PP

Stinger beam die rolls are read exactly as for standard beam weapons, i.e. against an unscreened target, 1-3 = no effect, 4-5 = 1 DP, 6 = 2 DP + reroll.

Human and Sa'Vasku screens, and Phalon vapour shrouds all affect beam shots in the standard way.

ICON:

Stinger Node (3 arc, FP/F/FS)

### POD LAUNCHER NODES

Pod Launcher Nodes are single-arc; most of the pod munitions may only engage targets within the launcher's arc (the exception being the Interceptor Pod, which is short-range but steerable).

Each Pod munition fired consumes 1 biomass and takes 3 power points from "A" pool.

Typical pod types:

### LANCE PODS

Roll 1 die for hit: 3+ needed at 0-6 mu, 4+ at 6-12 mu, 5+ at 12-18 mu and 6 at 18-24 mu.

Hits score 1 D6 damage, first point off armour and remainder penetrating.

### LEECH PODS

To-hit roll same as Lance Pods. On a hit, does 2 DP in first turn, but stays on target and does 2 further damage points (non-penetrating) each turn until

removed. Leech Pods must be removed by damage control rolls in same way as system repairs.

### INTERCEPTOR PODS

Range is 12 mu; any fighter group, missile salvo or plasma bolt within 12 mu of the firing ship may be targetted - it does NOT have to fall within the fire arc of the Pod Launcher.

Against fighters and missiles an Interceptor Pod kills 1 D6 members of the target group/salvo; against plasma bolts, 4-5 reduces bolt strength by 1, 6 by 2. No rerolls.

ICON:

Pod Launcher Node (Fore arc)

### SCREEN NODE

Each screen node requires power points from "D" pool to operate; effect is as for 1 level of standard screens per operating screen node. Power requirement indicated by number in icon.

ICON (example):

Mass 5 Screen Node

### SPICULES

Point-defence system that require 1 power point from "A" pool for one shot. May fire once per turn, all-arc. Shot is resolved exactly as for standard PDS fire.

ICON:

### CORTEX NODES

Act as Fire Control systems, using standard rules. No power points required.

ICON:

# SA'VASKU SPACE COMBAT CONSTRUCTS

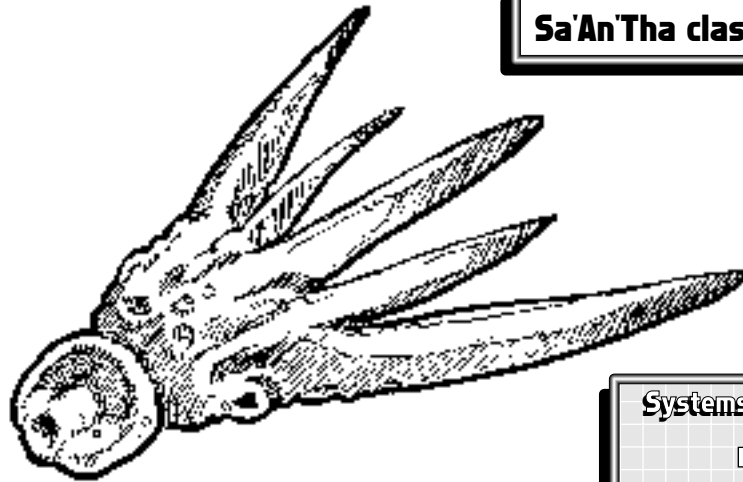


**SA'AN'THA CLASS  
SCOUT SHIP**  
(UN codename *SHAM*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
Scoutship

**TMF: 10**  
**NPV: 34**

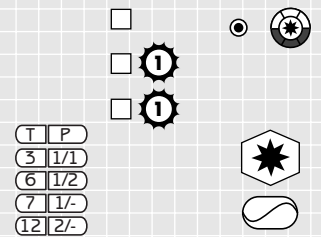
**TECHNICAL SPECIFICATIONS:**

**Human Class:** Scoutship  
**Equivalent:** Scoutship  
**Displacement:** 1000 tonnes  
(MASS factor 10)  
**Hull Biomass:** 3  
**Carapace:**  
**Integrity:** None  
**Power Gen:** 2  
**Armament:** 1 x Stinger node  
**Defences:** None  
**Sensor Suite:** Standard sensors,  
1 x Cortex node  
**Drive Systems:** Main Drive node,  
FTL (jump) node



**Sa'An'Tha class SCOUT SHIP**

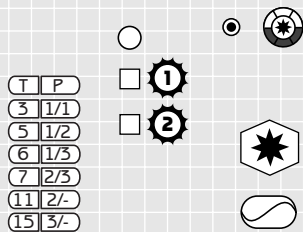
**Systems Status Display**



**First encountered: 2188.**

The Sa'An'Tha is a small Sa'Vasku scoutship with a reasonable power output for its mass, and a good amount of hull biomass to absorb damage; it does not, however, have any protective carapace and so is quite a "soft target".

**Systems Status Display**



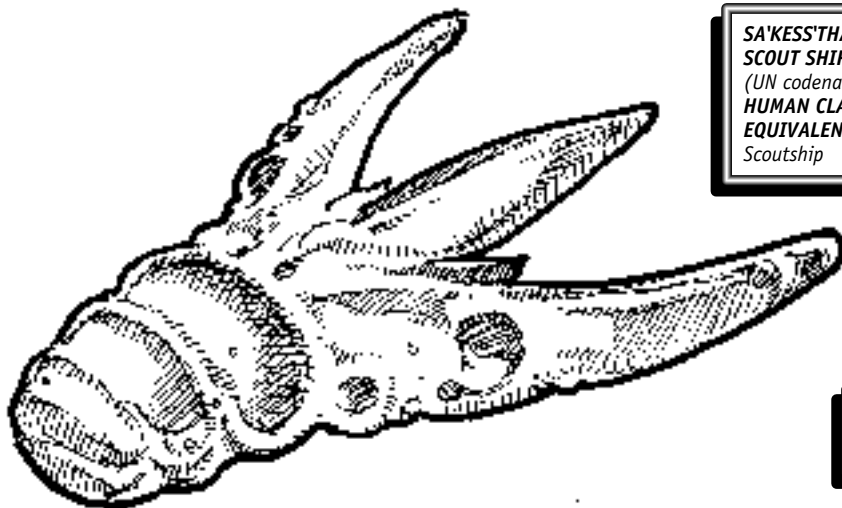
**Sa'Kess'Tha class SCOUT SHIP**

**SA'KESS'THA CLASS  
SCOUT SHIP**  
(UN codename *STEM*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
Scoutship

**TMF: 11**  
**NPV: 37**

**TECHNICAL SPECIFICATIONS:**

**Human Class:** Scoutship  
**Equivalent:** Scoutship  
**Displacement:** 1100 tonnes  
(MASS factor 11)  
**Hull Biomass:** 2  
**Carapace:**  
**Integrity:** 1  
**Power Gen:** 3  
**Armament:** 1 x Stinger node  
**Defences:** None  
**Sensor Suite:** Standard sensors,  
1 x Cortex node  
**Drive Systems:** Main Drive node,  
FTL (jump) node



**First encountered: 2189.**

The Sa'Kess'Tha has a lower amount of hull biomass than the slightly smaller Sa'An'Tha, but it does possess some protective carapace and enough power generation capacity to deal out an effective amount of beam fire at close ranges, or to accelerate very rapidly when it needs to.



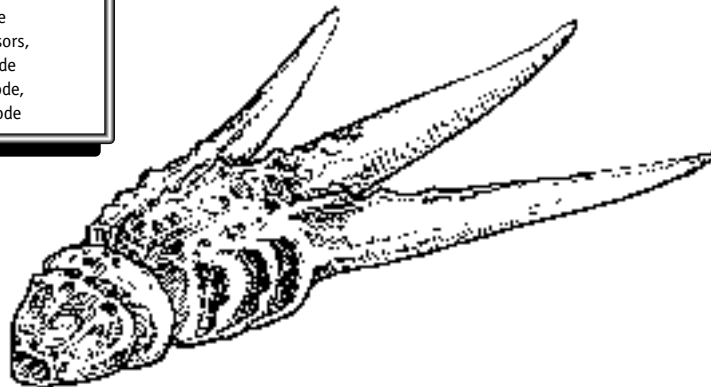
# SA'VASKU SPACE COMBAT CONSTRUCTS



## TECHNICAL SPECIFICATIONS:

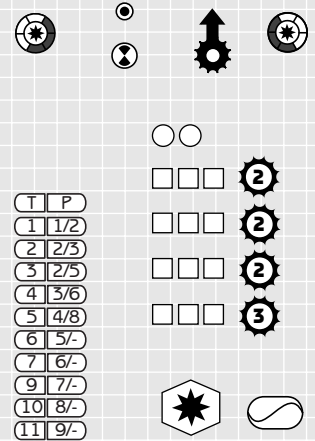
**Human Class**  
**Equivalent:** Heavy Destroyer  
**Displacement:** 4000 tonnes  
 (MASS factor 40)  
**Hull Biomass:** 12  
**Carapace**  
**Integrity:** 2  
**Power Gen:** 9  
**Armament:** 2 x Stinger nodes,  
 1 x Pod Launcher node  
**Defences:** 1 x PD Spicule  
**Sensor Suite:** Standard sensors,  
 1 x Cortex node  
**Drive Systems:** Main Drive node,  
 FTL (jump) node

**TMF: 40**  
**NPV: 130**



## Fo'Vur'Ath class ELDER ATTACK SHIP

### Systems Status Display



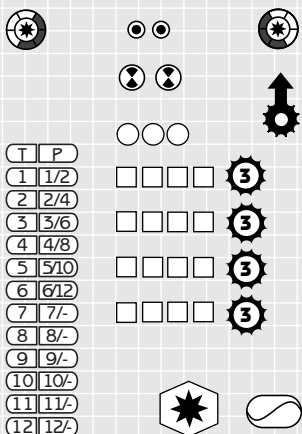
**FO'VUR'ATH CLASS ELDER ATTACK SHIP**  
 (UN codename *STING*)  
**HUMAN CLASS EQUIVALENT:**  
 Heavy Destroyer

### First encountered: 2188.

The Fo'Vur'Ath class is the largest common attack ship, and the smallest regularly-seen Sa'Vasku construct to carry a pod launcher node which gives it the ability to fire torpedo-type weapons. The Fo'Vur'Ath has a relatively weak protective carapace, but a good level of hull biomass (which it needs to provide raw material to feed the pod launcher).

## Var'Arr'Sha class YOUNGER STRIKE SHIP

### Systems Status Display



## TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Light Cruiser  
**Displacement:** 5200 tonnes  
 (MASS factor 52)  
**Hull Biomass:** 16  
**Carapace**  
**Integrity:** 3  
**Power Gen:** 12  
**Armament:** 2 x Stinger nodes,  
 1 x Pod Launcher node  
**Defences:** 2 x PD Spicules  
**Sensor Suite:** Standard sensors,  
 2 x Cortex nodes  
**Drive Systems:** Main Drive node,  
 FTL (jump) node

**TMF: 52**  
**NPV: 169**



### First encountered: 2188.

The Var'Arr'Sha class strike ship is equivalent to a light cruiser in human terms, and fulfils much the same roles of both independant raider and battleline escort. Well equipped with both offensive and defensive nodes and with a good power generation ability, the Var'Arr'Sha is a versatile ship and one of the most commonly-encountered Sa'Vasku constructs.

**VAR'ARR'SHA CLASS YOUNGER STRIKE SHIP**  
 (UN codename *STALKER*)  
**HUMAN CLASS EQUIVALENT:**  
 Light Cruiser



# SA'VASKU SPACE COMBAT CONSTRUCTS

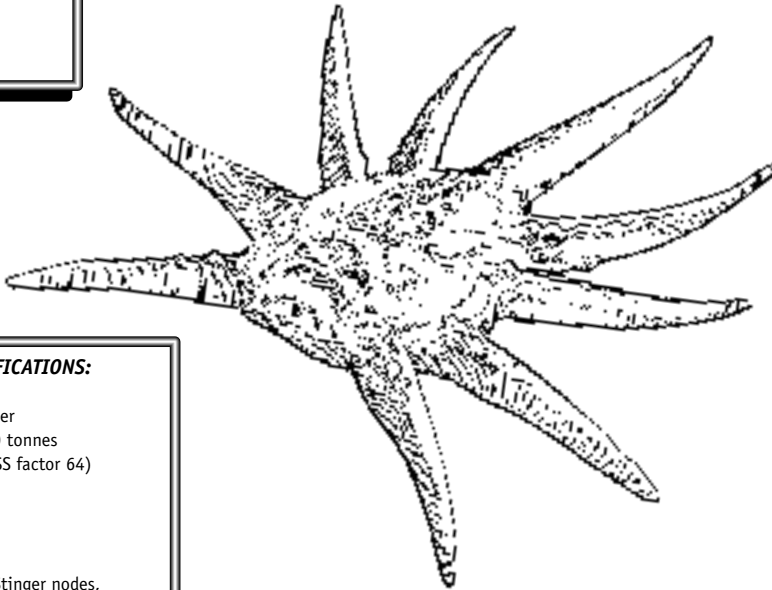


**VAR'KIIR'SHA**  
**CLASS STRIKE SHIP**  
 (UN codename *SLINKY*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Cruiser

**TMF: 64**  
**NPV: 208**

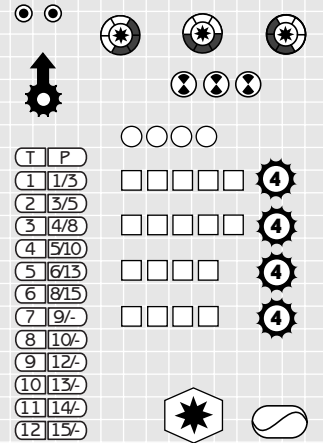
**TECHNICAL SPECIFICATIONS:**

**Human Class**  
**Equivalent:** Cruiser  
**Displacement:** 6400 tonnes  
 (MASS factor 64)  
**Hull Biomass:** 18  
**Carapace**  
**Integrity:** 4  
**Power Gen:** 16  
**Armament:** 3 x Stinger nodes,  
 1 x Pod Launcher node  
**Defences:** 3 x PD Spicules  
**Sensor Suite:** Standard sensors,  
 2 x Cortex nodes  
**Drive Systems:** Main Drive node,  
 FTL (jump) node



## Var'Kiir'Sha class STRIKE SHIP

### Systems Status Display

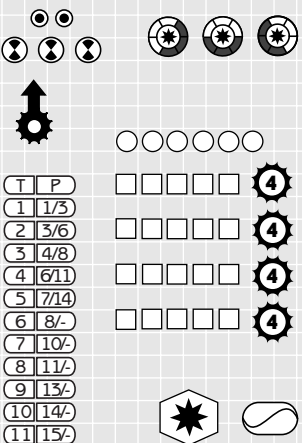


**First encountered: 2189.**

The Var'Kiir'Sha class strike ship is a larger version of the Var'Arr'Sha, with a tougher carapace, a little more usable biomass and a significantly greater power generation capacity. It is most commonly found as a major unit in small raiding squadrons.

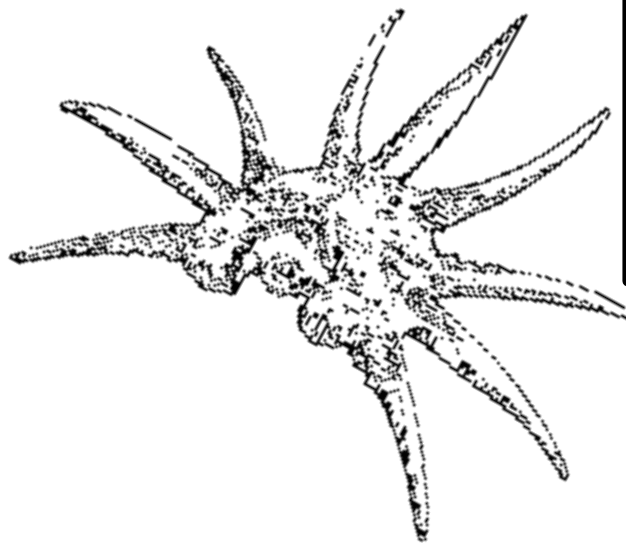
## Var'Thee'Sha class STRIKE SHIP

### Systems Status Display



**TECHNICAL SPECIFICATIONS:**

**Human Class**  
**Equivalent:** Cruiser  
**Displacement:** 7000 tonnes  
 (MASS factor 70)  
**Hull Biomass:** 20  
**Carapace**  
**Integrity:** 6  
**Power Gen:** 16  
**Armament:** 3 x Stinger nodes,  
 1 x Pod Launcher node  
**Defences:** 3 x PD Spicules  
**Sensor Suite:** Standard sensors,  
 2 x Cortex nodes  
**Drive Systems:** Main Drive node,  
 FTL (jump) node



**TMF: 70**  
**NPV: 226**

**First encountered: 2189.**

With a slightly higher overall mass than the similar Var'Kiir'Sha, the Var'Thee'Sha class devotes most of this extra to biomass and carapace strength, making it a more survivable ship but with similar offensive capabilities. The Var'Thee'Sha is often encountered as a solo raider or patrol ship.

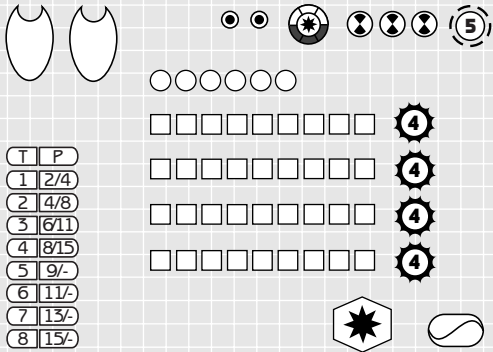
**VAR'THEE'SHA CLASS**  
**STRIKE SHIP**  
 (UN codename *SPANKER*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Cruiser

# SA'VASKU SPACE COMBAT CONSTRUCTS



## Thy'Sa'Teth class YOUNGER BROODSHIP

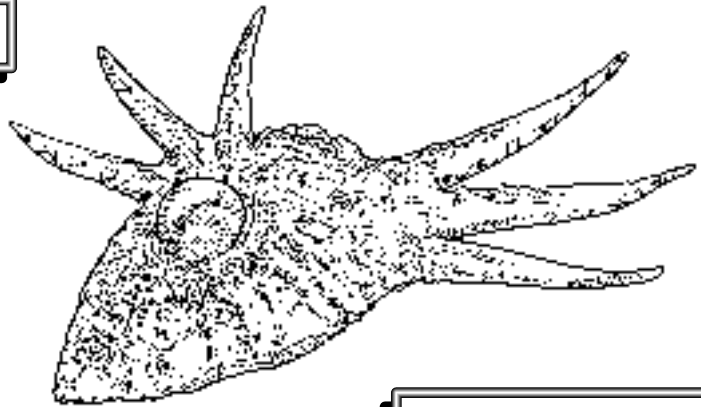
### Systems Status Display



TMF: 94  
NPV: 302

First encountered: 2189.

The Thy'Sa'Teth is the smallest class of Broodship (drone mothership) yet encountered. Used to provide drone support for small task forces, the Thy'Sa'Teth devotes most of its capacity to the raw biomass and power generation needed to produce and launch its drone groups, and is usually found escorted by a number of smaller ships to protect it from attack.



**THY'SA'TETH CLASS  
YOUNGER BROODSHIP**  
(UN codename **STUBBY**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
*Escort Carrier*

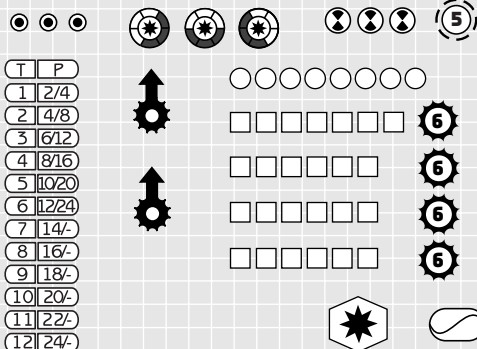
### TECHNICAL SPECIFICATIONS:

**Human Class:** Escort Carrier  
**Equivalent:** Escort Carrier  
**Displacement:** 9400 tonnes  
(MASS factor 94)  
**Hull Biomass:** 36  
**Carapace:** 6  
**Integrity:** 6  
**Power Gen:** 16  
**Armament:** 1 x Stinger node  
**Defences:** 1 x Screen node,  
3 x PD Spicules  
**Sensor Suite:** Standard sensors,  
2 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node  
**Drone**  
**Capability:** 2 x Drone Wombs

## Shyy'Tha'Var class ELDER STRIKE SHIP

TMF: 100  
NPV: 326

### Systems Status Display



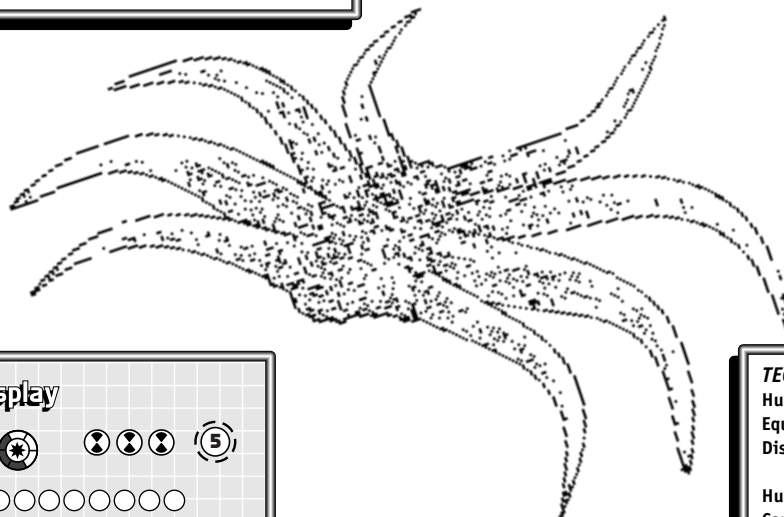
First encountered: 2188.

The Shyy'Tha'Var is a much larger version of the Var'Thee'Sha and similar strike ships, and has a large power generation capacity that makes it a very powerful ship. Its tough carapace and a screen generator node allow it to absorb a lot of punishment, and a good biomass level permits steady and deadly fire from its pair of pod launcher nodes.

**SHYY'THA'VAR CLASS  
ELDER STRIKE SHIP**  
(UN codename **SPIDER**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
*Battlecruiser*

### TECHNICAL SPECIFICATIONS:

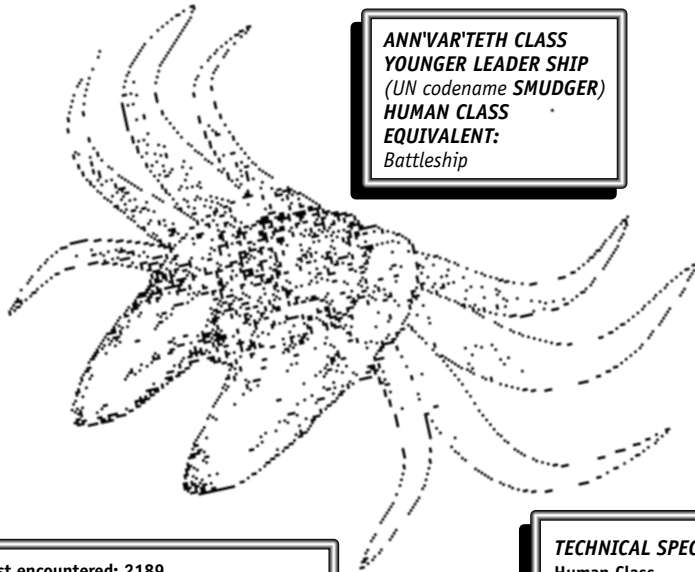
**Human Class:** Battlecruiser  
**Equivalent:** Battlecruiser  
**Displacement:** 10000 tonnes  
(MASS factor 100)  
**Hull Biomass:** 25  
**Carapace:** 8  
**Integrity:** 8  
**Power Gen:** 24  
**Armament:** 3 x Stinger nodes,  
2 x Pod Launcher nodes  
**Defences:** 1 x Screen node,  
3 x PD Spicules  
**Sensor Suite:** Standard sensors,  
3 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node



# SA'VASKU SPACE COMBAT CONSTRUCTS

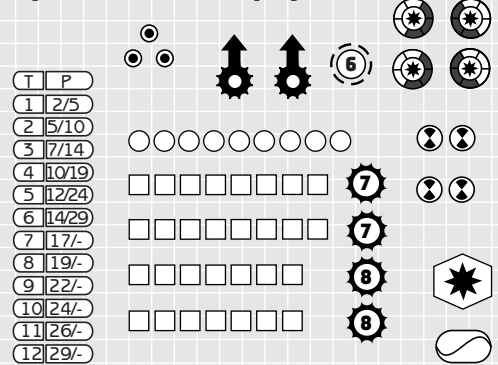


## Ann'Var'Teth class YOUNGER LEADER SHIP



**ANN'VAR'TETH CLASS  
YOUNGER LEADER SHIP**  
(UN codename **SMUDGER**)  
**HUMAN CLASS  
EQUIVALENT:**  
Battleship

### Systems Status Display



**TMF: 120**  
**NPV: 390**

**First encountered: 2189.**

One of the smaller of the so-called "Leader Ships" (the Sa'Vasku term for its capital ship classes) the Ann'Var'Teth is a main battleline unit that can deal out a huge amount of firepower thanks to its extensive generator capacity, and it is well protected by a screen system and a reasonably strong carapace.

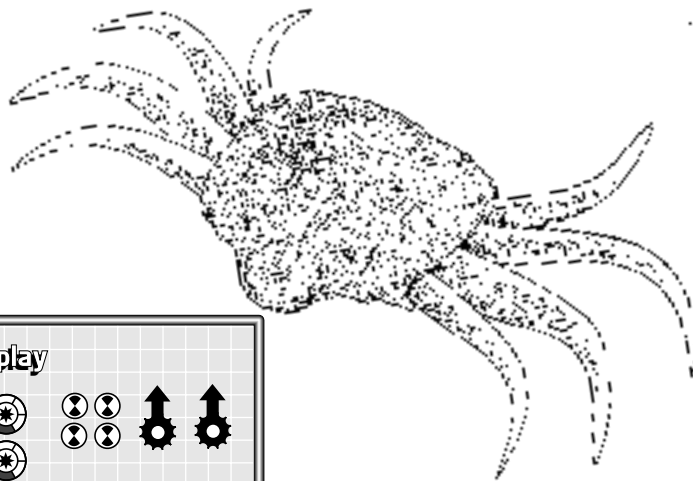
### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Battleship  
**Displacement:** 12000 tonnes  
(MASS factor 120)  
**Hull Biomass:** 30  
**Carapace**  
**Integrity:** 9  
**Power Gen:** 30

**Armament:** 4 x Stinger nodes,  
2 x Pod Launcher nodes  
**Defences:** 1 x Screen node,  
4 x PD Spicules  
**Sensor Suite:** Standard sensors,  
3 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node

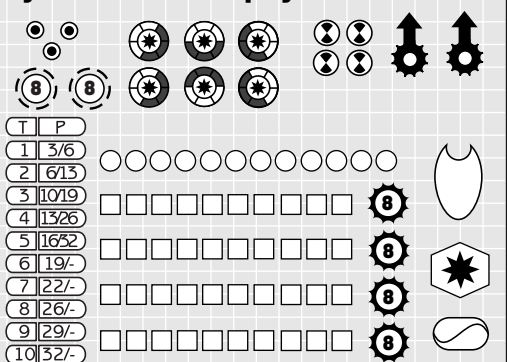
## Sla'Tha'Rosh class LEADER SHIP

**TMF: 160**  
**NPV: 527**



**SLA'THA'ROSH CLASS  
LEADER SHIP**  
(UN codename **SPECTRE**)  
**HUMAN CLASS  
EQUIVALENT:**  
Battledreadnought/  
Heavy Battleship

### Systems Status Display



**First encountered: 2190.**

The Sla'Tha'Rosh is a powerful battle construct, and the smallest regular warship (ie: non-Broodship) type to carry a drone womb in addition to its other offensive and defensive systems. Its hull biomass level is particularly high to allow sufficient spare biomass to generate the necessary drone groups.

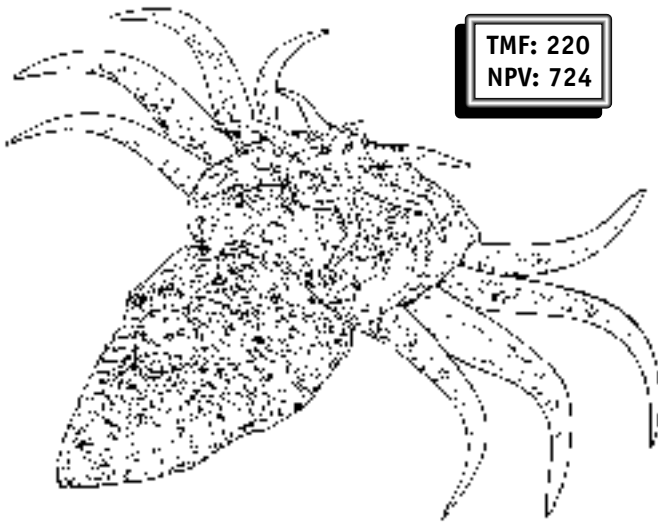
### TECHNICAL SPECIFICATIONS:

**Human Class Equivalent:**  
Battledreadnought/Heavy Battleship  
**Displacement:** 16000 tonnes  
(MASS factor 160)  
**Hull Biomass:** 40  
**Carapace**  
**Integrity:** 12  
**Power Gen:** 32  
**Armament:** 6 x Stinger nodes,  
2 x Pod Launcher nodes  
**Defences:** 2 x Screen nodes,  
4 x PD Spicules  
**Sensor Suite:** Standard sensors,  
3 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node  
**Drone  
Capability:** 1 x Drone Womb

# SA'VASKU SPACE COMBAT CONSTRUCTS



## Vas'Sa'Rosh class ELDER LEADER SHIP

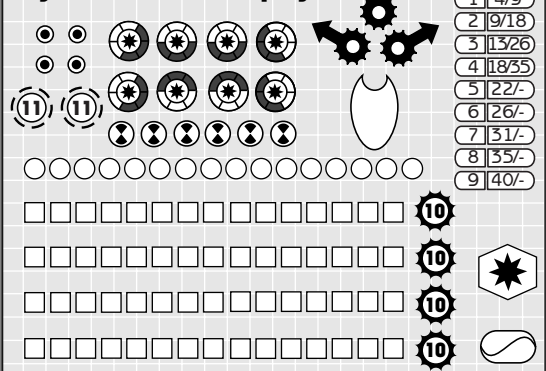


TMF: 220  
NPV: 724

### First encountered: 2188.

The Vas'Sa'Rosh is a massive construct that fulfils the role of dreadnought and fleet flagship within the Sa'Vasku space combat forces. Its huge power generation ability allows it to produce a focussed energy beam of phenomenal range, or to unleash a horrific amount of lower-level firepower at closer targets, and its thick carapace and screen nodes will shrug off a large amount of incoming fire. On the very rare occasions that an actual Sa'Vasku leaves one of the homeworlds, a Vas'Sa'Rosh is usually its means of transport.

### Systems Status Display



VAS'SA'ROSH CLASS ELDER LEADER SHIP (UN codename SANDCRAB)  
HUMAN CLASS EQUIVALENT: Superdreadnought

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Superdreadnought  
**Displacement:** 22000 tonnes  
(MASS factor 220)  
**Hull Biomass:** 60  
**Carapace**  
**Integrity:** 16  
**Power Gen:** 40

**Armament:** 8 x Stinger nodes,  
3 x Pod Launcher nodes  
**Defences:** 2 x Screen nodes,  
6 x PD Spicules  
**Sensor Suite:** Standard sensors,  
4 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node  
**Drone**  
**Capability:** 1 x Drone Womb

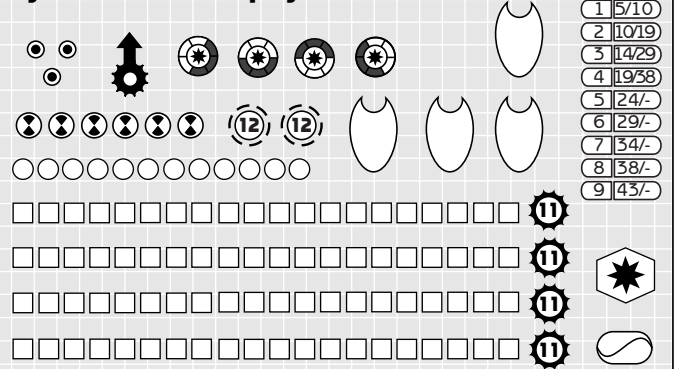
## Vas'Sa'Teth class ELDER BROODSHIP



### First encountered: 2190.

The huge Vas'Sa'Teth is a variant of the Vas'Sa'Rosh dreadnought, but optimised as a drone producer and mothership (known to the Sa'Vasku as a Broodship). Four separate drone wombs allow the Vas'Sa'Teth to create and hold up to four drone groups ready for launch at one time, and it has enough biomass to produce two or even three full waves of four groups. The Broodship is well armed and defended, though it is usually accompanied by a flotilla of escorting ships to protect it during the times that it spends most of its energy on drone creation.

### Systems Status Display



VAS'SA'TETH CLASS ELDER BROODSHIP  
(UN codename SIDEWINDER)  
HUMAN CLASS EQUIVALENT: Heavy Fighter Carrier

TMF: 240  
NPV: 779

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Heavy Fighter Carrier  
**Displacement:** 24000 tonnes  
(MASS factor 240)  
**Hull Biomass:** 80  
**Carapace**  
**Integrity:** 12  
**Power Gen:** 44

**Armament:** 4 x Stinger nodes,  
1 x Pod Launcher node  
**Defences:** 2 x Screen nodes,  
6 x PD Spicules  
**Sensor Suite:** Standard sensors,  
3 x Cortex nodes  
**Drive Systems:** Main Drive node,  
FTL (jump) node  
**Drone**  
**Capability:** 4 x Drone Wombs





# XENO FILE 3: THE PHALONS

Phalon biology is quite similar to humans in many ways; they are carbon-based oxygen breathers, and though their ideal climate conditions are hotter and more humid than preferred human norms, each race can survive quite happily on each other's worlds.

The Phalons' physical appearance is distinctly non-humanoid - they are bipeds with bilateral symmetry, but there the resemblance ends; their limbs each have one more joint than those of humans, their short and podlike bodies are protected by an exoskeletal carapace and their wide, flat heads are dominated by a single large trilensed optic.

The Phalons have three sexes - fertile males and females (though the difference can be hard for human observers to discern) and a sterile asexual third variety which is far more numerous than the other two and seems to form much of their fighting forces, along with a good proportion of their leaders. The females are oviparous, laying clutches of one to five eggs. Throughout most of their cultures, after hatching the young are raised in extended family units much like those found in many human societies.

Despite their very alien appearance, the Phalons are very like humans in their thought processes, to the point where meaningful communication is relatively straightforward once translation hurdles have been overcome. Their speech is soft and hissing with occasional sharp clicking sounds, and is manageable by most humans with some practice - in their turn, Phalons can speak a lisping and heavily-accented but understandable form of Anglic.

To human standards, the Phalons appear to be completely amoral. If they want something, they will take it; if opposed in any way, they will use force without a second thought - if this is impractical, they will negotiate to try and get what they desire. Any bargains or agreements with the Phalons are strictly temporary, however - they will renege on anything at a moment's notice if they feel the balance of advantage has shifted. When questioned about this trait, their response is to the effect of "that was then, this is now" - they seem quite unable to grasp why humanity should see this as unreasonable.

Temporary alliances with the Phalons are possible, especially where they see the situation as being of mutual benefit, but should be approached with great caution - if the common enemy is defeated then the Phalons are very likely to immediately turn on their former "allies" if they feel they can gain the upper hand.

## THE PHALON CONGLOMERATE

"Phalon" is an Anglicised rendition of the race's name for themselves in their own primary language, "Phey-lon'a", which literally translates as a something like "The Peoples of the Worlds". The space forces of the Phalon Conglomerate are known as the "Phey-aaksha-tath'a" (literally, "Grand Fleet of the Peoples").

The Phalon Conglomerate is a loose, highly balkanised federation of individual worlds, including the Homeworld (Cho-Ilon) and many colonial settlements. The various worlds of the Conglomerate are populated by many differing racial and tribal groupings of Phalons, but the differences can be hard for humans to discern - the overall alienness overrides the minor variations. In the same way, the Phalons think we humans all look alike. There are numerous sets of political systems and religious beliefs within the peoples of the Conglomerate, exhibiting a cultural diversity almost as wide as that of humanity.

Normal interrelations in Phalon society are complex and competitive, but when threatened by outside forces (such as the Human/Kra'Vak conflict) they will become remarkably co-operative with each other, as they all see the mutual benefit in it. Age-old rivalries and hatreds, though never solved, may be put aside for the duration of the crisis only to resurface afterwards, with even more petty grievances and grudges added to the ever-growing list from events and actions (real or perceived) which occurred during the period of co-operation.

The Phalons have been spacefaring for a while longer than Humanity or the Kra'Vak, but they are still one of the "younger" races in comparison with the Sa'Vasku. The Conglomerate has been aware of the Humans and the Kra'Vak for a considerable time, and has watched them fiercely expand their territories until the two met; Conglomerate space adjoins both the Human and Kra'Vak spheres of influence, and the Phalons had already fought several low-intensity border wars with Kra'Vak forces prior to either race becoming known to Humanity.

The sudden escalation of Human/Kra'Vak hostilities to all-out war has inevitably dragged the Conglomerate into the fighting, though they resolutely refuse to commit themselves to one side or the other - as always with the Phalons, the only side they are on is their own.

First contact between Humanity and the Phalons occurred in 2191, with a skirmish between a lone Phalon ship and an FSE task group; since that incident Conglomerate naval units have fought human fleets and the Kra'Vak star forces on many occasions, but equally have acted as "allies" (albeit temporary ones, and then strictly for their own ends) to both sides in other confrontations.

## PHALON WARSHIPS

Phalon warship types are divided into three major class groupings, called "Protectors" (equivalent to human escort classes), "Warriors" (the cruiser classes) and "Great Warriors" (the capital ships). Within each grouping, the Phalons appear to only differentiate the ship types by class name rather than by description - for example, a Tsaara and a Keraph are both called "Warriors", though the former equates to a Human light cruiser and the latter a battlecruiser. The term "Mothership" is commonly used to refer to Phalon fighter carriers, though these vessels also fall into the Great Warrior category.

Phalon ships are snail-like constructions from organic materials; unlike the Sa'Vasku, whose ships are actual living creatures, the Phalons use advanced biotechnology in a similar way to that in which humans use metal and plastics based materials technology - Phalon ships (or any of their other equipment) are constructed with components manufactured from biotech materials, but are not living entities in their own right, any more than a human ship which is built of alloys and polymers.

The internal crew spaces in Phalon ships are rounded, moist and quite disturbing to human senses - the first human officer to board a crippled Phalon vessel, FSE Captain Yvette Delacroix, was quoted in the news media as commenting "...now I know how Jonah must have felt...". According to the memoirs of one of the Legion Marines who accompanied her on the boarding, what she ACTUALLY said was more along the lines of "...now I know how my gynaecologist must feel...".

A Phalon hull is constructed with a relatively weak inner hull structure protected by a hardened outer "shell" which is composed of organic and crystalline materials. On the larger ships, the shell is formed in multiple layers (as many as four in the biggest classes), and forms a very effective protection against even armour-penetrating weapons like the Kra'Vak kinetic guns.

The most common Phalon antiship weapon is an energy projector known as a "pulser", which is in many ways similar to the standard human beam weapons. Unlike human beams, however, the pulser is an adjustable weapon that may be "tuned" to give a very long-ranged but low power beam, a short-ranged but extremely lethal output or a mid-range setting that is a compromise between the two. Each pulser battery may be configured to one of these long (L), medium (M) or close (C) range settings at the choice of the ship commander, though the adjustment between settings is a lengthy process that requires the ship's offensive systems to be shut down - it thus cannot be done in mid-battle, and each pulser battery's configuration must be chosen prior to engagement with the enemy.

The Phalons' other primary weapon is the Plasma Bolt Launcher, normally mounted in the "head" of the Phalon ship's long forward structure (though some of the very large classes carry additional launchers in dorsal-mounted pods). This system can fire a projectile of fusing plasma, of varying strength depending on the size of the launcher system, which then explodes at a pre-set distance from the firing ship doing damage to any target within the radius of its burst with a searing wavefront of expanding plasma and hard radiation. The magnetic fields around the muzzle of the launcher which actually project the plasma bolt also allow the bolt to be "steered" when it is fired, permitting it to be aimed at any target point within a 180 degree arc of the launcher's direction of fire. The large amount of power required by the Plasma Bolt Launcher means that the system needs a significant recharge time between shots.

The Phalons use fighters in much the same way as human fleets, with each fighter being piloted by one to three Phalon crew. Several different types of Phalon fighters have been observed, the most common being the Nith class multirole (UN codename PEG), the Tuus class heavy fighter (UN codename PUD) and the Vaan class interceptor (UN codename PAM).

Rather than use specialised point-defence weapons against incoming fighters they can use their main pulser batteries in a low-power, rapid-fire point-defence role - in this mode they are also effective against Human missiles and the Phalons' own plasma bolts.

A particular point of note is that so far ONLY Phalon Motherships have been observed to carry a fighter complement. The human approach of deploying small numbers of fighters from Dreadnoughts and other large non-carrier warships does not appear to be part of Phalon naval doctrine.

The Phalons' willingness to talk and negotiate with anyone (especially when they have something to gain) means there has been enough verbal contact between Humanity and the Phalon race for each to learn much of the other's spoken and written languages. Human forces thus know what the Phalons call their ship classes, though the UNDTA codenames (POGO, PINBACK etc.) are still used to identify Phalon ships in most combat situations and reports.

In human military slang the Phalons are known by various nicknames, "Shellies" being a common example in reference to both the snail-like appearance of the ships and the external carapaces of individual Phalons.

# XENO FILE 3: THE PHALONS

## GAME NOTES FOR PHALON PLAYERS

Phalon fleets are in some ways more like human forces than the other alien races in this book. Though their ship technology is constructed in very different ways, their drive systems are equivalent to those of human ships, and many of their weapons use similar principles. The design of the Phalon pulser weapons means that some ships will be optimised for close, medium or long range combat, and they must be deployed accordingly to get the maximum benefit - a ship configured with Pulser-C batteries will be devastating at short ranges, but completely useless if the enemy insists on keeping the range open.

The deployment of Vapour Shrouds needs careful judgement, since they are very effective protection but severely inhibit the ship's own offensive capabilities while they are in use.

Players should be aware that Phalon ships are individually quite powerful - many are in fact equivalent to a human warship of one class larger; for example, the Keraph-class "battlecruiser-sized" warrior is quite closely matched to most human battleships. The human class equivalents listed only refer to the overall mass of the ship, not its actual combat potential. The POINTS VALUES (NPV) of the Phalon ships will give a more accurate comparison of their combat power than their mass - the ships are "expensive" in points terms, so 1000 points of Phalon ships will be fairly balanced with 1000 points of human ships (or any other race).

## PHALON SHIP DESIGN AND SYSTEMS

### DRIVE SYSTEMS AND MOVEMENT

Phalon drives (both Main Drives and FTL Drives) are treated exactly as per standard FT rules (ie: exactly as for human ship drives). The MASS requirement for main drives is 5% of ship mass per thrust factor, with a cost of 2 points per MASS used, and FTL drives take up 10% of ship MASS, again with a cost of 2 points per MASS. Odd-numbered thrust factors are allowed.

Phalon ships may be played using either vector or cinematic movement, according to which system the players have decided to use in a given game.

### HULL INTEGRITY AND "SHELL" ARMOUR

Phalon hull integrity (the inner structure of the ship) takes 1 MASS per hull box, and costs 2 points per MASS. The hull boxes are arranged in four rows using the standard rules, with the upper rows being the longer ones if the hull integrity does not divide exactly by four.

One hull box is lost to each point of damage that penetrates the shell and other defences.

Typically, the hull integrity of a Phalon ship is quite low - around 20% of the ship mass - but it is protected by the shell armour.

The protective "shells" of Phalon ships follow the same rules as human armour, with the exception of the way the boxes are laid out; any amount may be used, at 1 MASS (and 2 points cost) per shell box, and one damage point destroys one shell box.

Phalon shells, unlike standard armour, may be multi-layered - the shell boxes may be stacked in anything up to four layers (and theoretically even more if required). The first layer is the inner layer, the one nearest the hull (ie: the "bottom" layer on the ship diagram), the second layer the one above it, and so on. The topmost layer on the diagram is always referred to as the "outer" layer. Generally, the outer layers will be weaker (shorter rows) than those beneath them, but this is not a specific requirement. The points cost of a shell boxes depends on the layer it is in: the cost is 2 x layer number, so a box in the inner (first) layer costs 2 points, a second layer box 4 points, third layer 6 points and fourth layer 8 points.

When hit by weapons that do not bypass armour, shell boxes are crossed off the outermost (top) layer, just like hull boxes (moving onto the next layer down if the top one is all gone). Weapons that do half armour/half hull damage have their effects applied half to the outermost layer of shell, and half to the next layer in.

Weapons that do reroll damage apply the effects of each successive reroll to the next layer in - so if the player is lucky enough to get a double reroll (2 sixes in a row) then some of the damage may penetrate as many as the three shell layers (or directly to the hull if it is only a 2-layer shell).

Kra'vak K-gun hits expend 1 damage point on EACH layer of shell, taking out one box from each successive layer and doing any remainder to the hull if the damage reaches that far.

*Example:*

*Take a large Phalon ship which has three layers of shell boxes; if it is hit by a beam shot that rolls a 6, and then scores a 4 on the reroll, then the original 2 DP are taken by the outer shell layer (third layer), and the 1 point of reroll damage goes down to*

*the second (middle) layer. If the hit was from a pulse torpedo instead, which rolled a 5 for damage, the 5 DP would be split between as 3 DP to the outer and 2 DP to the middle layer.*

*If the same ship was hit by a small K-gun round that did 2 DP, it would suffer 1 DP to the outer layer and one to the second layer; if the K-gun was a larger round that did 6 DP, it would inflict 1 DP to the outer (third) layer, 1 to the middle (second) layer, 1 to the inner (first) layer and its final 3 DP to the hull itself.*

### PULSER BATTERIES

The Phalons' primary anti-ship weapon is the Pulser, which is an energy weapon very like the standard human beam systems. There is only one "class" of pulser, and it may have one, three or six arcs of fire - the MASS requirement is 2, 3 or 4 MASS respectively according to the number of fire arcs chosen, and the cost is 5 points per MASS used.

The differences between pulsers and standard beams are as follows:

- i) The pulser delivers a set amount of power (ie: die rolls) over its full effective range (unlike beams, whose number of dice rolled degrades with increasing range), and:
- ii) Each pulser system may be "configured" before each battle as a LONG range weapon (pulser-L), MEDIUM range (pulser-M) or CLOSE range (pulser-C).

The different configurations roll different numbers of dice per shot, as below:

LONG range mode (pulser-L):	range 0-36mu	1 die per shot
MEDIUM range mode (pulser-M):	range 0-24mu	2 dice per shot
CLOSE range mode (pulser-C):	range 0-12mu	6 dice per shot

Any mix of pulser configurations may be chosen by the Phalon player for each of his ships before the game, and the relevant letters (L, M or C) written into the blank pulser icons on the ship SSD. Under no circumstances may the configuration be altered DURING a game.

[For an added twist, if Phalon ships are attacked unexpectedly (eg: an ambush scenario) and do not have time to adjust the tuning of their pulsers to suit the coming battle, players may agree to choose the settings at random - roll a D6 for each pulser battery: on 1 or 2, it is currently configured as a pulser-L, on 3 or 4 as a pulser-M, and on 5 or 6 a pulser-C.]

Pulser fire dice are read as for standard beam weapon fire, ie: 1-3 = no effect, 4-5 = 1 Damage Point, 6 = 2DP plus a reroll.

Screens ARE effective against pulser fire as per standard rules, as are the Phalons' own vapour shrouds (see below).

Pulser fire is non-penetrating (ie: damage is taken on armour first) with the exception of damage inflicted by rerolls.

All Pulsers, regardless of current configuration, can function as PDS instead of anti-ship fire in any given turn, using the normal PDS rules, ranges and effects - see point defence rules below.

### POINT-DEFENCE AND AREA-DEFENCE

Phalon ships do not have separate point-defence system (PDS); instead, they may elect to use any of their pulser batteries as PDS during the point-defence phase, firing at any one fighter group, missile salvo or plasma bolt that is attacking the firing ship. A pulser used in this mode fires exactly as for a standard PDS shot, with the same die rolls and effects. Any pulser used in the PDS mode rolls only ONE die, regardless of how the pulser is currently configured.

Unlike standard point-defence systems, pulsers can have limited arcs of fire - in this case, a pulser in PDS mode may ONLY engage a target (fighter group, missile salvo, plasma bolt etc.) that is actually within that pulser's normal fire arc(s). It is thus an acceptable tactic for fighters engaging a Phalon ship to try to manoeuvre so as to be out of the pulsers' defensive fire arcs, but this will often entail them making a secondary move and thus burning up a valuable combat endurance factor.

Phalon ships may carry ADFC (Area-Defence Fire Controls), advanced firecontrol systems that allow them to use their pulsers' point-defence capability to support any other ship that is within 6mu of the firing ship; they operate exactly as standard human ADFC systems\*, and have the same mass and cost requirements - 2 MASS and a cost of 8 points per ADFC.

Any pulser that fires in either the point or area defence mode may NOT also fire in anti-ship mode in the same turn.

As per the standard rules for PDS fire, the Phalons do NOT need a functioning fire control system in order to fire in the point-defence mode.

[\*Note that the ADFC system was introduced in Fleet Book 1 to replace the ADS used in FT 2nd edition; unlike the original ADS, the ADFC is not a weapon system in its own right - it is a specialised fire control director that allows the ship's PDS to function in the area-defence mode.]



# XENO FILE 3: THE PHALONS

## PLASMA BOLT LAUNCHERS

The Phalon Plasma Bolt Launchers (PBLs) are available in sizes from class-1 upwards, with class-6 being the largest commonly seen (though larger ones are possible). The launcher is a 3-arc (180 degree) system, and is normally (but not always) mounted to fire through the forward arcs of the ship (FP/F/FS).

A plasma bolt launcher of any size must spend 1 turn recharging between shots, so can only fire every OTHER game turn - whenever a ship fires a PBL, a note or mark should be made in the order-writing box for the next turn to indicate that the launcher is recharging and cannot be fired.

A plasma bolt launcher fires a bolt of a size equal to the launcher class, to a maximum range of 30mu; a suitable marker, numbered with the bolt size, is placed during the ordnance fire phase of the turn; it may be placed anywhere within the appropriate 180 degree fire arc.

During the point defence phase, any ship within 6mu of a plasma bolt marker may fire at the bolt with its PDS. Note that this does NOT require the use of an ADFC system, as all ships within 6mu of the bolt are considered to be "under attack" by the bolt.

Roll a D6 per PDS firing - each roll of 6 reduces the effective strength (class) of the bolt by 1, so one roll of 6 will eliminate a size 1 plasma bolt altogether, or reduce a size 4 bolt to a size 3, etc. These PDS hit effects are cumulative, so 3 hits on a size 4 bolt will reduce it to a size 1. The bolt marker should be exchanged for one of an appropriate number for the reduced bolt strength.

Phalon pulsers fired in PDS mode roll as for normal point defence systems against plasma bolts.

Class 1 beams and class 1 K-guns may NOT be used in their secondary PDS role against plasma bolts, but Kra'Vak scatterguns may, and are even more effective than standard PDS: they roll like a "beam" die, removing 1 strength from a bolt on a 4 or 5 result, and 2 strength classes on a 6 (NO reroll). Sa'Vasku interceptor pods may also engage plasma bolts, with the same roll as a Kra'Vak scattergun.

Fighter groups may target PBs if they are within 6mu; roll for each fighter as if it was a PDS (ie: each roll of 6 counts as a hit).

Ships with ADFC capability may add their PDS fire in support of any ships within 6 mu of them that are within the effect radius of a plasma bolt, even if the ADFC-equipped ship is itself outside the danger area.

After the PDS fire is completed, any remaining plasma bolts on the board explode; their burst radius is 6mu\* (irrespective of their size) and they inflict a number of full dice of damage (ie: damage points = number rolled) equal to their size, on ALL ships within that radius (roll individually for each ship that may suffer damage).

### Example:

*A class-5 plasma bolt is disrupted and weakened by two successful PDS hits, so when it explodes it will have an effective strength of a class-3 bolt. The bolt detonates, catching two ships in its burst radius. 3 D6 are rolled for each ship - the first rolls 2,3 and 6 and takes a total of 11 Damage Points, the second rolls 1,3 and 5 and takes 9 DP.*

Plasma bolt damage is non-penetrating, and takes all damage off armour /shell/carapace (if any) before damaging hull. There are NO rerolls for plasma bolt damage.

Screens (human or S'V) and the Phalons' own Vapour Shrouds are effective against PB damage - Level-1 Screens negate any rolls of 6, level-2 screens and Vapour Shrouds negate all rolls of 5 or 6. Thus, in the example given above, if the first ship had a level-1 screen up it would have only taken 5 DP (ignoring the 6 rolled), and if the second ship had a level-2 screen (or a vapour shroud) it would only take 4 DP (the 5 roll would be negated, as would any 6s that were rolled).

A Plasma Bolt Launcher system takes up a MASS of 5 times the class of the launcher. The points cost is 3 points per MASS.

[\* If using the vector movement rules from Fleet Book 1, you may wish to reduce the burst radius of plasma bolts to 4 (or even 3) mu to compensate for the more accurate prediction of target movement that occurs when using the vector system; a similar rule was suggested in FB1 with regard to the attack radius of salvo missiles, for the same reason. If you decide on this, ensure all your players know before the game which version you will be using - 6mu should be considered the default value unless agreed otherwise!]

## FIRE CONTROL SYSTEMS

Phalon ships carry fire-control systems that function exactly as their human equivalents; use all standard rules for them. A Phalon FC system requires 1 MASS and costs 4 points.

Note that an operational fire-control system is required in order for a Phalon ship to launch a plasma bolt, but the same fire-control may also be used for anti-ship pulser fire in the main fire phase.

## CREW FACTORS AND DAMAGE CONTROL

Phalon ships use the same rules for crew factors and damage-control parties as human ships; there is one crew factor for each 20 MASS of ship (or part thereof), so for example a MASS 30 Phalon ship has a crew factor of 2, and a MASS 41 ship a factor of 3.

There is no cost or mass requirement for crew factors.

The crew factors are indicated by small stars placed in some of the hull boxes on the SSD - the placement of the crew factors being determined by dividing the mass used for hull integrity by the total crew factor (and rounding UP in all cases): for example, a ship with a crew factor of 4 and a hull integrity of 17 would have a crew factor star placed in every FIFTH box on the damage track ( $17/4 = 4.25$ , rounded up to 5), and the last star in the last box - so the crew factors would be in the fifth, tenth, fifteenth and seventeenth (final) boxes.

When a hull box containing a crew star is lost to damage, that crew factor is lost due to accumulated crew casualties.

Crew factors represent the number of damage control parties (DCPs) available to the ship - one DCP for every remaining crew factor on the ship. DCPs may attempt to repair systems lost to threshold damage, with up to three DCPs being allocated to each attempted system repair - the basic roll of success in the repair attempt is 6 if one DCP is working on it, -1 for each additional DCP allocated to the task (so the allowed maximum of 3 DCPs will make a successful repair on a roll of 4+). Any one system may only be the subject of one attempted repair roll in any given turn.

## HANGAR BAYS

Phalon ships may carry hangar bays and fighter groups (or other embarked small craft) in exactly the same way as human ships, using all the standard rules. Refer to the Fighter Rules section for more details on the different Phalon fighter types available. Each Fighter Bay uses 9 MASS and costs 18 points; bays for other small craft use 1.5 x the MASS of craft carried, and cost 3 points per MASS used.

Note that in general only the Phalon "Motherships" carry fighter bays, though this is for doctrinal rather than technical reasons.

## FIGHTERS

The Phalons use fighters in much the same way as human fleets, with each fighter being piloted by one to three Phalon crew. Several different types of Phalon fighters have been observed, the most common being the Nith class multirole (UN codename PEG), the Tuus class heavy fighter (UN codename PUD) and the Vaan class interceptor (UN codename PAM).

Phalon fighter groups follow all the normal fighter rules, and have the usual points costs for their specialised types; the basic multirole type has a movement allowance of 24mu (plus 12mu secondary move) and a standard 1-die attack, and Heavy and Interceptor specialised variants all follow the relevant rules. If you are using the Fighter Morale rules, they apply to Phalons exactly as to human forces.



## VAPOUR SHROUDS

The Phalons have the ability to puff out a shroud of vapour droplets and ice crystals around their ships, which shields them from incoming fire but also blocks outgoing fire as well.

Deploying the shroud must be noted in movement orders, and affects the ship for the entire turn. A shrouded ship may move as normal, but may not fire any weapons at all, including point-defence fire.

A deployed shroud acts like a level-2 screen against all energy weapon attacks, including Phalon pulsers and plasma bolt damage, human beams etc. Weapons normally unaffected by screens (K-guns, Pulse Torps, SMs etc) are unaffected by vapour shrouds.

Fighters may attack a shrouded ship, but suffer the same penalty as other weapons fire - it is the same as attacking a screen-2 target, UNLESS they are using non-beam weapons (ie: Kra'Vak fighters, and other races' Torpedo fighters or equivalents). Phalon Motherships may not launch or recover fighters while their shroud is deployed.

System mass: 5% of total ship mass, minimum 1 MASS. Cost = MASS x 3.



# XENO FILE 3: THE PHALONS

## PHALON SHIP DESIGN PROCEDURE

- 1) SELECT OVERALL SHIP MASS.
- 2) SELECT HULL INTEGRITY VALUE and create Damage Track.
- 3) ADD ARMOUR SHELL.
- 4) SELECT MAIN DRIVE THRUST FACTOR.
- 5) INSTALL FTL DRIVE (if required).
- 6) TOTAL MASS USED SO FAR.
- 7) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEMS.
- 8) TOTAL POINTS VALUES to calculate NPV of ship.

### 1) SELECT OVERALL SHIP MASS

This may be any size desired, though most combat starships fall within 10-200 MASS.

*EXAMPLE: We choose to build a Phalon Warrior (cruiser) type ship with a total MASS factor of 100 which is towards the high end of the Warrior category. This gives us a basic hull that will take up to 100 MASS of drives, shell and other systems.*

### 2) SELECT HULL INTEGRITY LEVEL

Any amount of the available MASS may be used for HULL INTEGRITY, which represents the overall structural strength of the ship's hull and its ability to absorb damage. The only restriction is that the MINIMUM amount of hull integrity is 10% of the ship's total MASS.

The actual MASS of the Hull Integrity chosen is equal to the number of DAMAGE BOXES the ship has, which are then organised into four rows (in accordance with the Damage Track rules).

Crew factors should be worked out and indicated on the damage track at this point (mainly for Damage Control purposes), in exactly the same way as for human ship designs.

*EXAMPLE: Phalon ships generally use fairly weak internal hull structures protected by their special "shell" armour; we choose to allocate 20 MASS to Hull Integrity, so the ship has 20 Damage Boxes (which will be arranged on the Damage Track as four rows of 5). The points cost for the hull integrity will be 2 x MASS used, ie: 40 points.*

### 3) ADD ARMOUR SHELL

Phalon armour works in a different manner to that of other races, in that the "shell" of armour may be multi-layered; each SHELL box takes up 1 MASS, but its COST in points increases as more layers are added.

*EXAMPLE: We decide that our Phalon Warrior ship will allocate 12 MASS to its shell, giving us 12 boxes which may be arranged in any chosen pattern - we decide to have an inner (first) layer of 8 boxes (for a cost of 2 points per box, = 16 points) and an outer (second) layer of 4 boxes (at 4 points per box, = 16 points).*

### 4) SELECT MAIN DRIVE THRUST FACTOR

All ships require a Main Drive; the MD takes up 5% of the ship's overall MASS for every Thrust Factor of drive power.

*EXAMPLE: We decide to give our ship a Thrust Factor of 4, so this takes 4 x 5 = 20% of the overall MASS; 100 x 20% = 20, so the ship's Main Drive takes up 20 MASS. The Main Drive will cost 20 x 2 = 40 points.*

### 5) INSTALL FTL DRIVE (if required)

If an FTL drive is to be part of the design, it is fitted at this stage and uses up 10% of the overall ship MASS.

*EXAMPLE: Our Warrior ship needs an FTL drive; it will take up 100 x 10% = 10 MASS. The FTL drive will cost 10 x 2 = 20 points.*

### 6) TOTAL MASS USED SO FAR

Add up the total MASS used by the Hull Integrity, Shell, Main Drive and FTL Drive systems, and subtract this from the overall ship MASS to find the amount left for fitting-out with offensive, defensive and other systems.

*EXAMPLE: Our design has used 20 MASS for Hull Integrity, 12 for Shell, 20 for Main Drive and 10 for FTL Drive. This totals 62 MASS from the overall 100, so we are left with 38 MASS for fitting-out.*

### 7) INSTALL CHOSEN OFFENSIVE AND DEFENSIVE SYSTEMS

Choose the desired mix of weapon installations and other systems to suit the ship's intended mission profile, ensuring that the total MASS required for all the systems does not exceed the available MASS left from step 6.

*EXAMPLE: We choose a good suite of pulser batteries for our Warrior, with 2 single-arc pulsers firing in the Fore arc only, a single 3-arc (FP/F/FS) and a final pair of all-arc batteries. The configuration of the pulsers into C, M or L types will be chosen prior to each battle, but the most likely configuration that we have in mind when designing the ship will be for the single-arc systems to be used as a pulser-L long-range sniping weapons, the 3-arc one as a pulser-M for medium range firepower and the two all-arc batteries as pulser-Cs which will also serve in the point-defence role (ANY pulser battery may fire in PDS mode, but the all-arc ones will be the most versatile for this).*

*A Plasma Bolt Launcher of class-3 is fitted in the ship's bows, and the whole weapon suite is directed by three fire control systems.*

*The standard Phalon Vapour Shroud gland is fitted for passive defence when needed.*

2 x Pulser (1 arc) @ 2 MASS	= 4 MASS
1 x Pulser (3 arc) @ 3 MASS	= 3 MASS
2 x Pulser (6 arc) @ 4 MASS	= 8 MASS
1 x Plasma Bolt Launcher (class 3)	= 15 MASS
3 x Fire Controls @ 1 MASS	= 3 MASS
1 x Vapour Shroud gland	
@ 5% of overall ship MASS	= MASS 5

**Total MASS used for systems = 38**

### 8) TOTAL POINTS VALUES

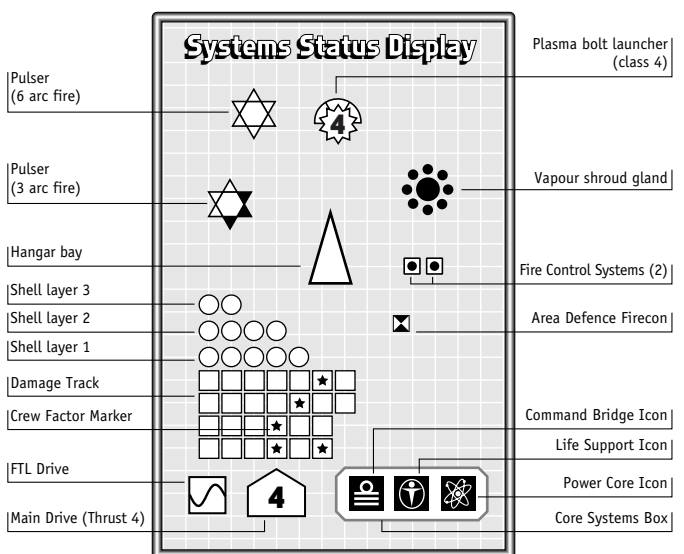
*EXAMPLE: The points costing of our example ship is:*

BASIC HULL (MASS 100)	MASS x 1	100 points
HULL INTEGRITY (MASS 20)	MASS x 2	40 points
SHELL (MASS 12)	(8x2) + (4x4)	32 points
MAIN DRIVE (MASS 20)	MASS x 2	40 points
FTL DRIVE (MASS 10)	MASS x 2	20 points
2 x Pulser (1 arc) (MASS 4)	MASS x 5	20 points
1 x Pulser (3 arc) (MASS 3)	MASS x 5	15 points
2 x Pulser (6 arc) (MASS 8)	MASS x 5	40 points
1 x PBL (class 3) (MASS 15)	MASS x 3	45 points
3 x Fire Controls (MASS 3)	MASS x 4	12 points
1 x Vapour Shroud (MASS 5)	MASS x 3	15 points

**Total cost (NPV - Nominal Points Value) 379 points**

## PHALON SYSTEMS STATUS DISPLAY (SSD)

The diagram below is an example of how to read the Phalon SSDs on the ship data panels. Please note that this is NOT an actual ship design, just a key to the symbols and icons used!

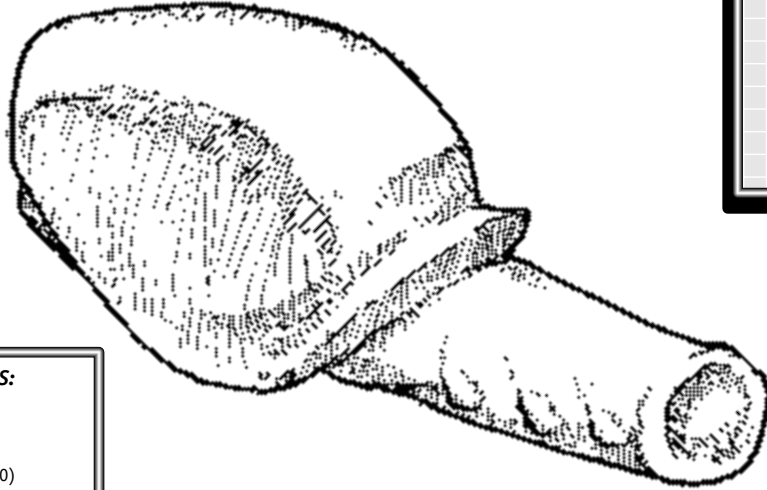


See page 45 for Phalon weapons and defences summary box

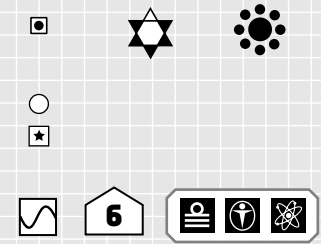


## Phyaa class PROTECTOR

**TMF: 10**  
**NPV: 39**



### Systems Status Display



#### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Recon Scout  
**Displacement:** 1000 tonnes  
(MASS factor 10)  
**Hull Integrity:** 1  
**Shell Strength:** Layer 1: 1  
**Crew:** 10 [Crew Factor: 1]  
**Armament:** 1 x Pulsar battery  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
1 Fire control system  
**Drive Systems:** Main Drive Rating 6,  
FTL (jump) drive

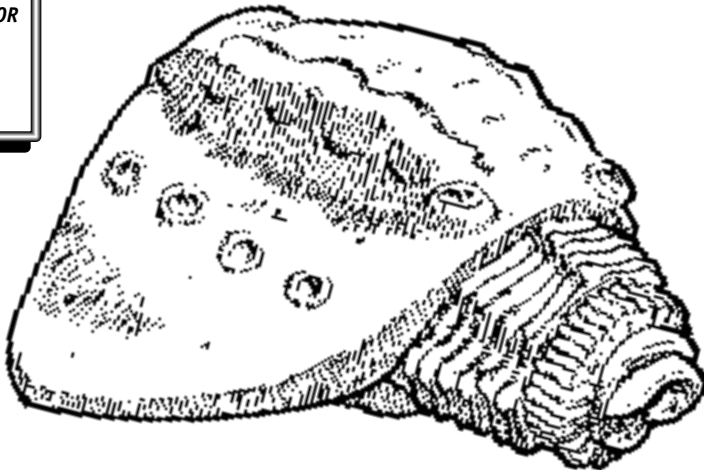
**PHYAA CLASS PROTECTOR**  
(UN codename *PIKE*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
*Recon Scout*

#### First encountered: 2191.

The tiny Phyaa recon scout is never meant to enter close combat; as its designation implies, it is primarily a reconnaissance and intelligence gathering ship. Its single one-arc pulsar battery is almost always configured in L mode, to give it the ability to snipe from long range where the enemy cannot effectively respond. If caught at closer ranges, the Phyaa will try to withdraw under the protection of its vapour shroud.

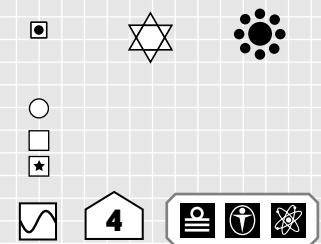
## Vlath class PROTECTOR

**VLATH CLASS PROTECTOR**  
(UN codename *POGO*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
*Battle Scout*



**TMF: 12**  
**NPV: 51**

### Systems Status Display

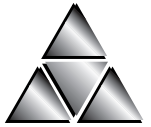


#### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Battle Scout  
**Displacement:** 1200 tonnes  
(MASS factor 12)  
**Hull Integrity:** 2  
**Shell Strength:** Layer 1: 1  
**Crew:** 12 [Crew Factor: 1]  
**Armament:** 1 x Pulsar battery  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
1 Fire control system  
**Drive Systems:** Main Drive Rating 4,  
FTL (jump) drive

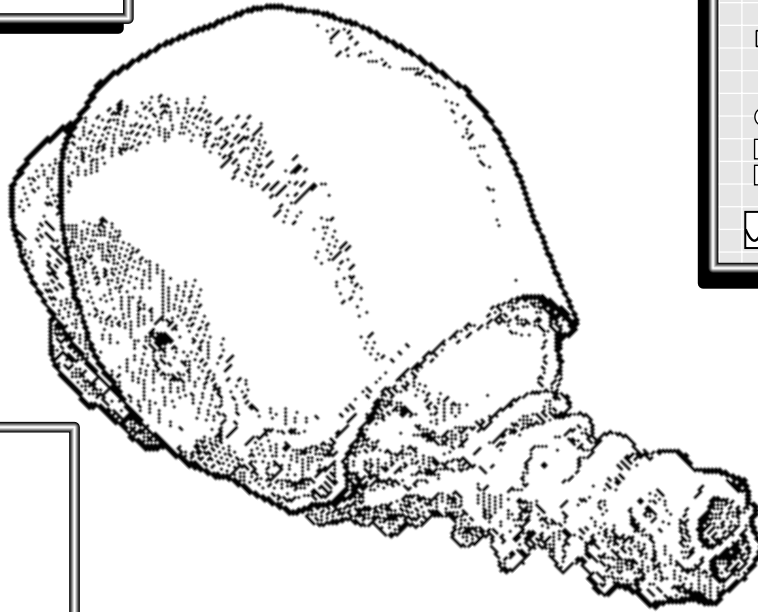
#### First encountered: 2192.

Classed as a "Battle Scout", the little Vlath is a fragile ship with a big punch - its single all-arc pulsar is most often encountered in C mode for maximum fire output at short range, and squadrons of Vlaths have been known to "swarm" a larger enemy ship and pound it rapidly to death from all sides before it can kill all the tiny attackers.

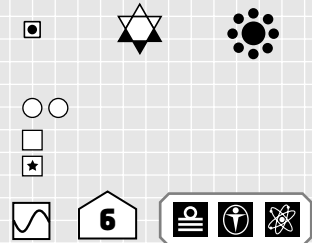


## Dorrth class PROTECTOR

TMF: 16  
NPV: 60



### Systems Status Display



#### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Corvette  
**Displacement:** 1600 tonnes  
 (MASS factor 16)  
**Hull Integrity:** 2  
**Shell Strength:** Layer 1: 2  
**Crew:** 16 [Crew Factor: 1]  
**Armament:** 1 x Pulsar battery  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 6,  
 FTL (jump) drive

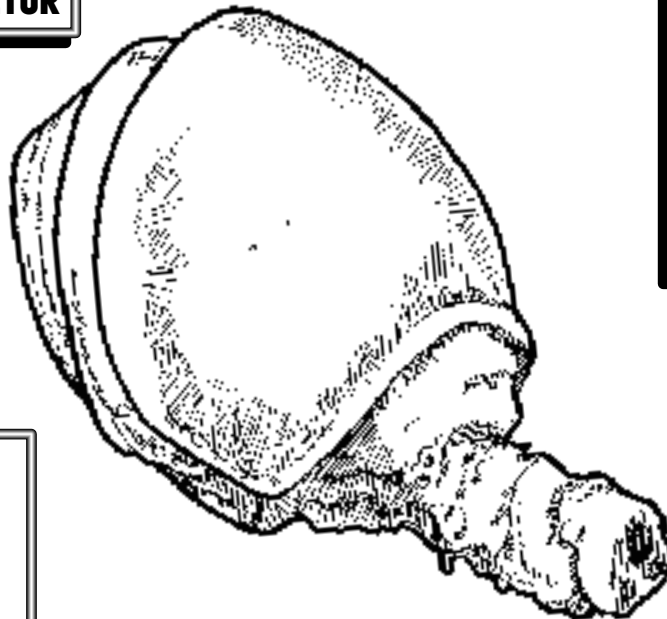
**DORRTH CLASS PROTECTOR**  
 (UN codename *PHONY*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Corvette

#### First encountered: 2191.

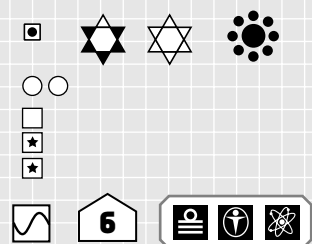
The Dorrth class fills the "corvette" role in Phalon naval forces, being a small Protector ship designed to escort convoys and act as outriders to combat task groups. The single limited-arc pulsar battery is most often configured as either a long-range sniping weapon or a close-range shipkiller, depending on the role that the ship is assigned to at that time.

## Tyaph class PROTECTOR

TMF: 21  
NPV: 84



### Systems Status Display



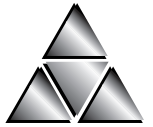
#### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Frigate  
**Displacement:** 2100 tonnes  
 (MASS factor 21)  
**Hull Integrity:** 3  
**Shell Strength:** Layer 1: 2  
**Crew:** 21 [Crew Factor: 2]  
**Armament:** 2 x Pulsar batteries  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 6,  
 FTL (jump) drive

**TYAPH CLASS PROTECTOR**  
 (UN codename *PINKY*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Frigate

#### First encountered: 2192.

The Tyaph class is slightly smaller than its Phun class sister ship, and lacks the latter's plasma bolt system, but makes up for this with twin pulsar batteries. As a close escort for major fleet units, the Tyaph is most often encountered with both pulsers tuned for C mode to give a very large fire output against any enemy ships that venture too close to the Phalon fleet.

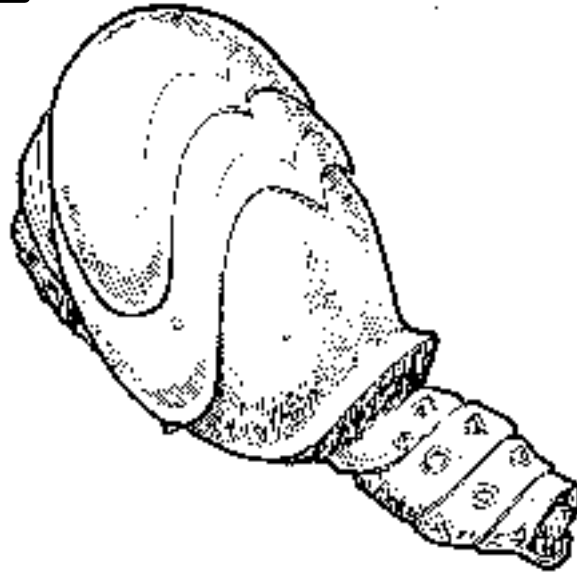


## Phuun class PROTECTOR

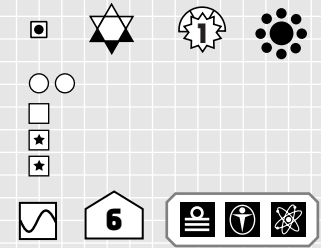
TMF: 24  
NPV: 89

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Frigate  
**Displacement:** 2400 tonnes  
 (MASS factor 24)  
**Hull Integrity:** 3  
**Shell Strength:** Layer 1: 2  
**Crew:** 24 [Crew Factor: 2]  
**Armament:** 1 x Pulsar battery,  
 1 x Class-1  
 Plasma Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 6,  
 FTL (jump) drive



### Systems Status Display



**PHUUN CLASS PROTECTOR**  
 (UN codename *PERKY*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Frigate

### First encountered: 2192.

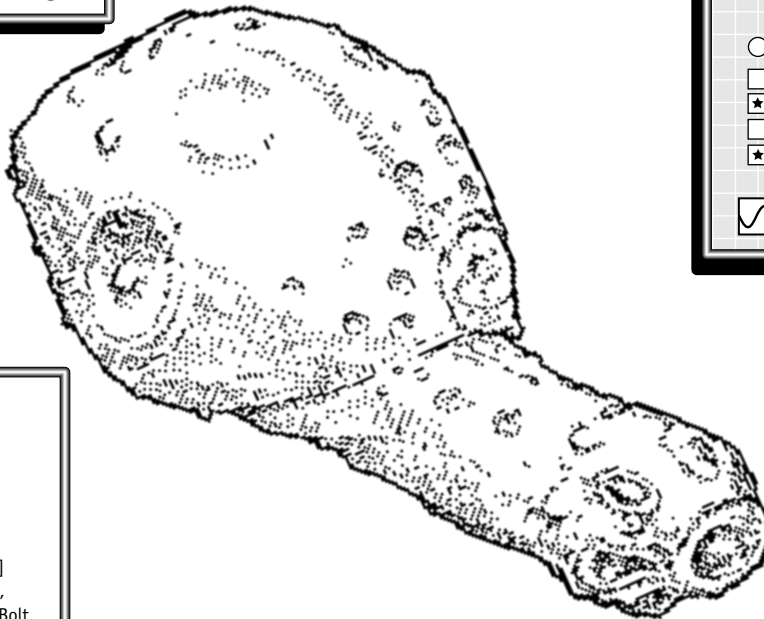
The Phuun is the smallest Phalon ship class in regular use to mount a plasma bolt launcher system, and the mass of this weapon leaves little room for other armament; a single pulsar battery bears only through the three frontal arcs of the ship, leaving the Phuun very vulnerable to attacks from its aft arcs. Phuun class ships have been encountered with all configurations of their pulsar battery, but the most commonly it is tuned to M mode.

## Dinth class PROTECTOR

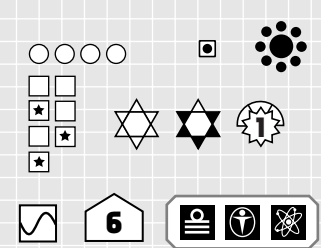
TMF: 41  
NPV: 150

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Heavy Destroyer  
**Displacement:** 4100 tonnes  
 (MASS factor 41)  
**Hull Integrity:** 7  
**Shell Strength:** Layer 1: 4  
**Crew:** 41 [Crew Factor: 3]  
**Armament:** 2 x Pulsar batteries,  
 1 x Class-1 Plasma Bolt  
 launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 1 Fire control system  
**Drive Systems:** Main Drive Rating 6,  
 FTL (jump) drive



### Systems Status Display



**DINTH CLASS PROTECTOR**  
 (UN codename *PISTOL*)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Heavy Destroyer

### First encountered: 2192.

The largest of the Protector group of escort classes, the Dinth is equivalent to a heavy destroyer in human naval terms. It is most commonly found accompanying major task forces as a heavy fleet escort, but has also been encountered as a solo commerce raider. The Dinth has a high thrust rating and is protected by a single layer shell of reasonable strength. The most common configuration for its pulsar suite is the single-arc battery in M mode, and the all-arc in C mode.



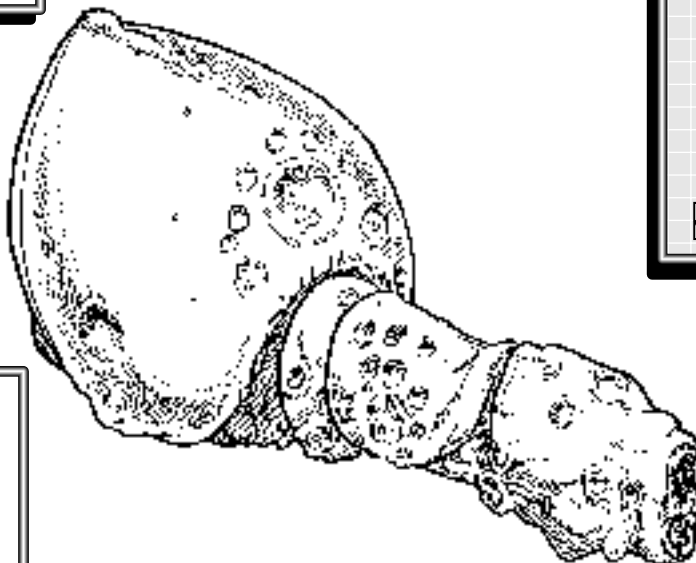


## Tsaara class WARRIOR

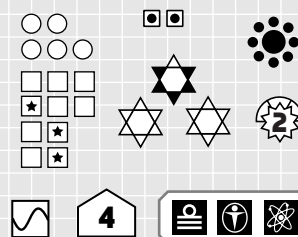
TMF: 58  
NPV: 225

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Light Cruiser  
**Displacement:** 5800 tonnes  
 (MASS factor 58)  
**Hull Integrity:** 10  
**Shell Strength:** Layer 1: 3, Layer 2: 2  
**Crew:** 58 [Crew Factor: 3]  
**Armament:** 3 x Pulser batteries,  
 1 x Class-2 Plasma  
 Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 2 Fire control systems  
**Drive Systems:** Main Drive Rating 4,  
 FTL (jump) drive



### Systems Status Display



**TSAARA CLASS WARRIOR**  
 (UN codename **PINBACK**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Light Cruiser

### First encountered: 2191.

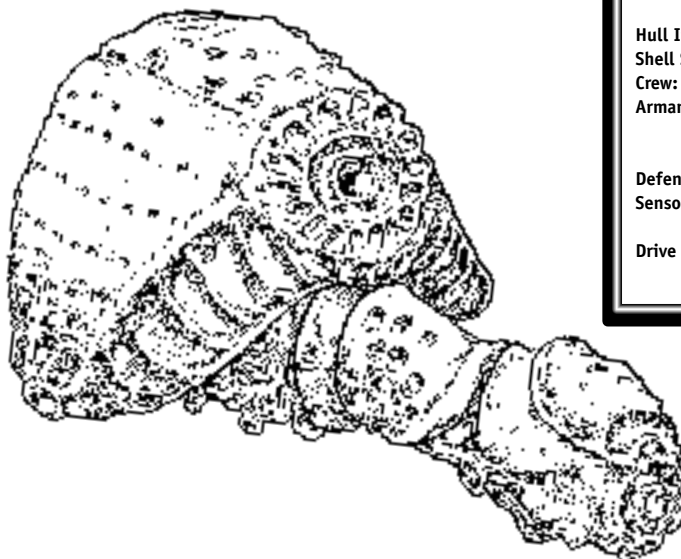
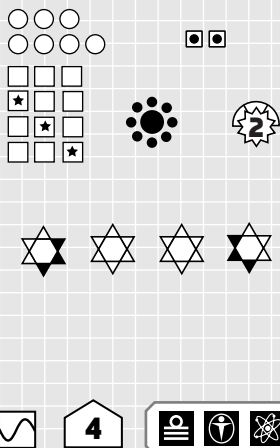
The Tsaara CL was the first Phalon ship to be encountered by human forces, in mid 2191. The Tsaara class ship "Tojhaa" was attacked by a small FSE task group while engaged in reconnaissance near the outpost station at Rhone III. The Tojhaa began to withdraw under the cover of its vapour shroud after a hectic exchange of fire with the FSE group, but was caught by a final missile barrage from a Trieste DDH and destroyed with no survivors. Only upon examination of the debris did the FSE forces realise that this was a new, third race of alien beings hitherto unknown to humanity.

## Huulth class WARRIOR

TMF: 70  
NPV: 276

**HUULTH CLASS WARRIOR**  
 (UN codename **PACKER**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Medium Cruiser

### Systems Status Display

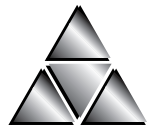


### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Medium Cruiser  
**Displacement:** 7000 tonnes  
 (MASS factor 70)  
**Hull Integrity:** 12  
**Shell Strength:** Layer 1: 4, Layer 2: 3  
**Crew:** 70 [Crew Factor: 4]  
**Armament:** 4 x Pulser batteries,  
 1 x Class-2 Plasma  
 Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 2 Fire control systems  
**Drive Systems:** Main Drive Rating 4,  
 FTL (jump) drive

### First encountered: 2191.

The Huulth is a good all-round warrior (cruiser) design, found in most Phalon battlefleets and independent squadrons. There is a specialised anti-fighter escort version of the Huulth that loses the Plasma Bolt launcher and replaces it with two additional all-arc pulser batteries plus an ADCF (Area Defence Fire Control) system; its mass is the same as the standard Huulth, but its NPV rises to 294. This variant is known to the Phalons as a Klashh-Huulth, and to humans as the PACKER-E.



## Tuuloth class WARRIOR

### TECHNICAL SPECIFICATIONS:

#### Human Class

**Equivalent:** Heavy Cruiser

**Displacement:** 8000 tonnes  
(MASS factor 80)

**Hull Integrity:** 16

**Shell Strength:** Layer 1: 6, Layer 2: 3

**Crew:** 80 [Crew Factor: 4]

**Armament:** 3 x Pulsar batteries,  
1 x Class-3 Plasma  
Bolt launcher

**Defences:** Vapour shroud gland

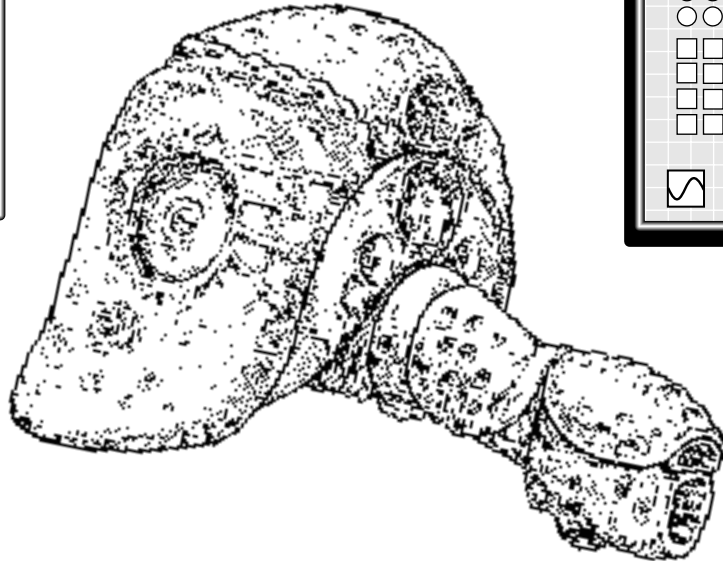
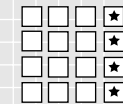
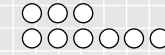
**Sensor Suite:** Standard sensors,  
2 Fire control systems

**Drive Systems:** Main Drive Rating 4,  
FTL (jump) drive

### First encountered: 2192.

The Tuuloth is the standard Phalon heavy cruiser design, and is a reasonable all-round compromise of mobility, defence and offensive weaponry. A two-layer shell gives good protection to its relatively weak inner hull, and a class-3 plasma bolt system gives the Tuuloth a significant punch at long range. The pulser fit is not huge, but is adequate, and is normally found configured with the two 3-arc mounts in L or M mode and the single all-arc battery in C mode. The Tuuloth is often used as heavy support to small raiding parties of Protector class ship.

### Systems Status Display



### TUULOTH CLASS WARRIOR

(UN codename PAVANE)

HUMAN CLASS

EQUIVALENT:

Heavy Cruiser

TMF: 80  
NPV: 299

## Keraph class WARRIOR

TMF: 104  
NPV: 398

### KERAPH CLASS WARRIOR

(UN codename PAGAN)

HUMAN CLASS

EQUIVALENT:

Battlecruiser

### TECHNICAL SPECIFICATIONS:

**Human Class**

**Equivalent:** Battlecruiser

**Displacement:** 10400 tonnes  
(MASS factor 104)

**Hull Integrity:** 20

**Shell Strength:** Layer 1: 8, Layer 2: 4

**Crew:** 104 [Crew Factor: 6]

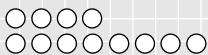
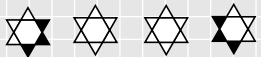
**Armament:** 5 x Pulsar batteries,  
1 x Class-3 Plasma  
Bolt launcher

**Defences:** Vapour shroud gland

**Sensor Suite:** Standard sensors,  
3 Fire control systems,  
1 ADFC

**Drive Systems:** Main Drive Rating 4,  
FTL (jump) drive

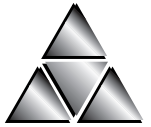
### Systems Status Display



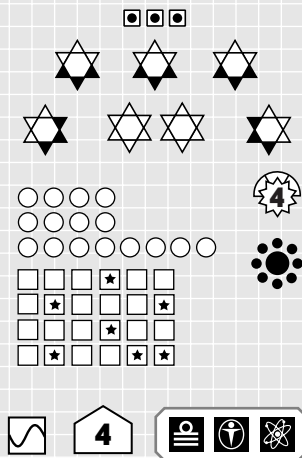
### First encountered: 2192.

The Keraph is the only Phalon warship class to mount an ADFC (Area-Defence Fire Control) system as a standard fitment; other classes do carry ADFCs, but only as special variants, while all Keraph class ships encountered have been so equipped. As such, the Keraph is most commonly found as a dedicated anti-fighter ship to protect larger fleet units, though it is also used as part of some independent warrior (cruiser) squadrons.

# PHALON CONGLOMERATE GRAND FLEET



## Systems Status Display

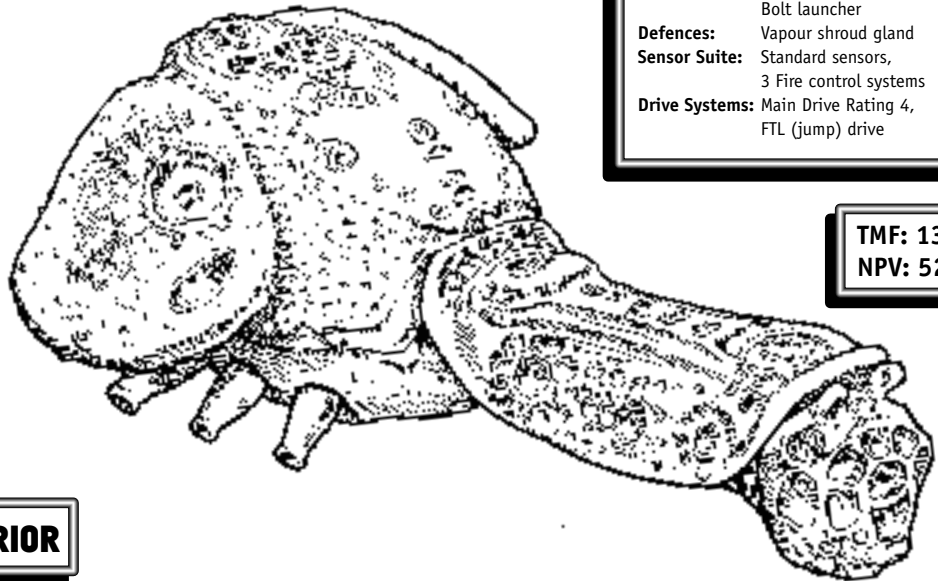


### First encountered: 2192.

The Ptath is the smallest of the "Great Warrior" group of capital ship classes, and equates to a Battleship in human naval terms. It is also the smallest common Phalon ship to carry a 3-layer shell, and with a good thrust level and an extensive pulser fit (normally configured to give a mix of long and short range fire, but Ptaths have been encountered with all their pulsers tuned for one extreme or the other) it is an effective all-round combat ship that often forms the core of small task forces.

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Battleship  
**Displacement:** 13200 tonnes  
 (MASS factor 132)  
**Hull Integrity:** 24  
**Shell Strength:** Layer 1: 8, Layer 2: 4,  
 Layer 3: 4  
**Crew:** 132 [Crew Factor: 7]  
**Armament:** 7 x Pulser batteries,  
 1 x Class-4 Plasma  
 Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 3 Fire control systems  
**Drive Systems:** Main Drive Rating 4,  
 FTL (jump) drive



TMF: 132  
 NPV: 522

**PTATH CLASS  
 GREAT WARRIOR**  
 (UN codename **PLONKER**)  
**HUMAN CLASS  
 EQUIVALENT:**  
 Battleship

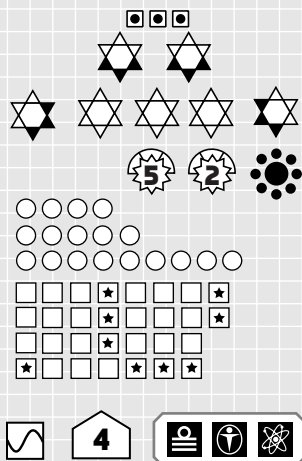
## Ptath class GREAT WARRIOR

## Saath class GREAT WARRIOR

TMF: 170  
 NPV: 658

**SAATH CLASS  
 GREAT WARRIOR**  
 (UN codename **PAYCHECK**)  
**HUMAN CLASS  
 EQUIVALENT:**  
 Battledreadnought

## Systems Status Display



### TECHNICAL SPECIFICATIONS:

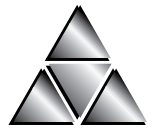
**Human Class**  
**Equivalent:** Battledreadnought  
**Displacement:** 17000 tonnes  
 (MASS factor 170)  
**Hull Integrity:** 30  
**Shell Strength:** Layer 1: 9, Layer 2: 5,  
 Layer 3: 4  
**Crew:** 170 [Crew Factor: 9]  
**Armament:** 7 x Pulser batteries,  
 1 x Class-5 Plasma  
 Bolt launcher,  
 1 x Class-2 Plasma  
 Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 3 Fire control systems  
**Drive Systems:** Main Drive Rating 4,  
 FTL (jump) drive

### First encountered: 2193.

The Saath differs from its smaller counterparts in that it mounts two Plasma Bolt launchers - a large class-5 in the usual spinal mount, plus a smaller class-2 in a dorsal weapons pod. Because of the amount of mass used by these systems, its pulser fit is no more extensive than that of the much smaller Ptath BB, but is still enough to make the Saath a very capable ship, good for both independant and fleet operations.



# PHALON CONGLOMERATE GRAND FLEET



## Voth class GREAT WARRIOR

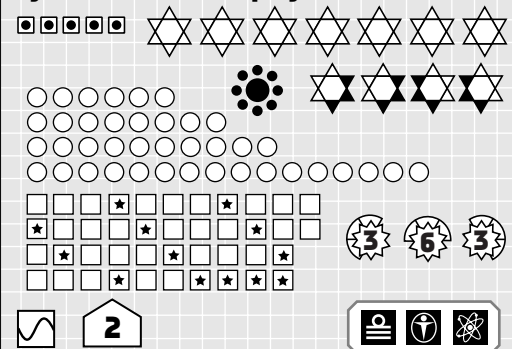
TMF: 250  
NPV: 1041

### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Superdreadnought  
**Displacement:** 25000 tonnes  
 (MASS factor 250)  
**Hull Integrity:** 42  
**Shell Strength:** Layer 1: 16, Layer 2: 10,  
 Layer 3: 8, Layer 4: 6  
**Crew:** 250 [Crew Factor: 13]  
**Armament:** 11 x Pulsar batteries,  
 1 x Class-6 Plasma Bolt launcher,  
 2 x Class-3 Plasma Bolt launchers  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 5 Fire control systems  
**Drive Systems:** Main Drive Rating 2,  
 FTL (jump) drive



### Systems Status Display



**VOTH CLASS GREAT WARRIOR**  
 (UN codename **PACHYDERM**)  
**HUMAN CLASS**  
**EQUIVALENT:** Superdreadnought

### First encountered: 2192.

The Voth class (along with their fighter-mothership counterparts, the Draath class) are the largest Phalon warships in common use. Protected by a massive four-layered shell, a Voth can withstand multiple hits from the most powerful of weapons before it takes damage to its soft inner hull. An array of no less than three plasma bolt launchers (a huge spinal class-6 and two smaller class-3s mounted in dorsal weapons pods) and an array of eleven pulsar batteries allow the Voth to put out a phenomenal amount of firepower; normally the pulsar systems are configured as a mix of C, M and L versions to give optimum coverage at all combat ranges, but Voths have been encountered with almost all their pulsars tuned for close-range combat only - in this mode they can launch a volley that can shred a dreadnought in one pass. Several variants of the Voth have been noted, including one (PACHYDERM-E) that carries two ADFC systems in place of one of its all-arc pulsar batteries.

TMF: 170  
NPV: 641

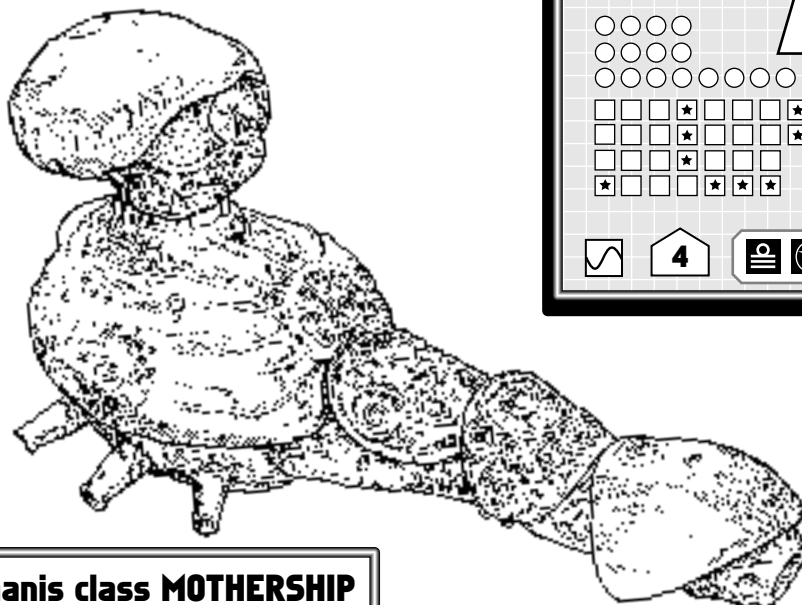
**TAANIS CLASS MOTHERSHIP**  
 (UN codename **PANDORA**)  
**HUMAN CLASS**  
**EQUIVALENT:**  
 Light Carrier

### First encountered: 2193.

The Taanis is based on the same main structure as the Saath battledreadnought, with a fighter hangar/launch pod replacing the dorsal weapons pod of the Saath. It is the smallest Phalon carrier in regular service, and is usually found as a fighter support ship in small and medium sized task force groups. The Taanis retains the standard plasma bolt and pulsar armament mix of almost all Phalon ships, but this is significantly downrated from the fit carried by the Saath in order to allow for the mass of the fighter bays.

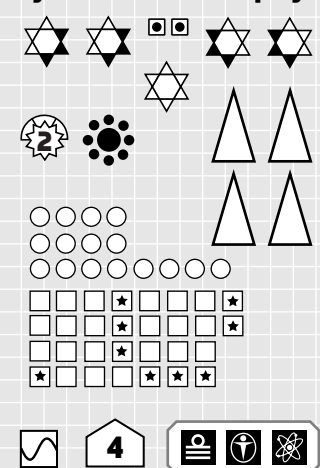
### TECHNICAL SPECIFICATIONS:

**Human Class**  
**Equivalent:** Light Carrier  
**Displacement:** 17000 tonnes  
 (MASS factor 170)  
**Hull Integrity:** 30  
**Shell Strength:** Layer 1: 8, Layer 2: 4,  
 Layer 3: 4  
**Crew:** 170 [Crew Factor: 9]  
 + fighter crews  
**Armament:** 5 x Pulsar batteries,  
 1 x Class-2 Plasma Bolt launcher  
**Defences:** Vapour shroud gland  
**Sensor Suite:** Standard sensors,  
 2 Fire control systems  
**Drive Systems:** Main Drive Rating 4,  
 FTL (jump) drive  
**Hangar bays:** 4 bays each holding  
 6 fighters. (fighter cost not included)



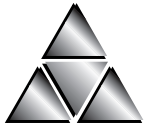
## Taanis class MOTHERSHIP

### Systems Status Display





# PHALON CONGLOMERATE GRAND FLEET



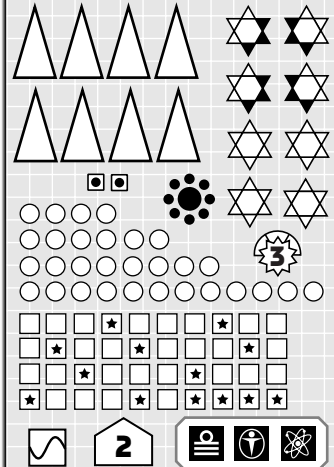
**TMF: 250**  
**NPV: 1002**

**DRAATH CLASS MOTHERSHIP**  
(UN codename **PARADOX**)  
**HUMAN CLASS EQUIVALENT:**  
Heavy Carrier

**First encountered: 2193.**

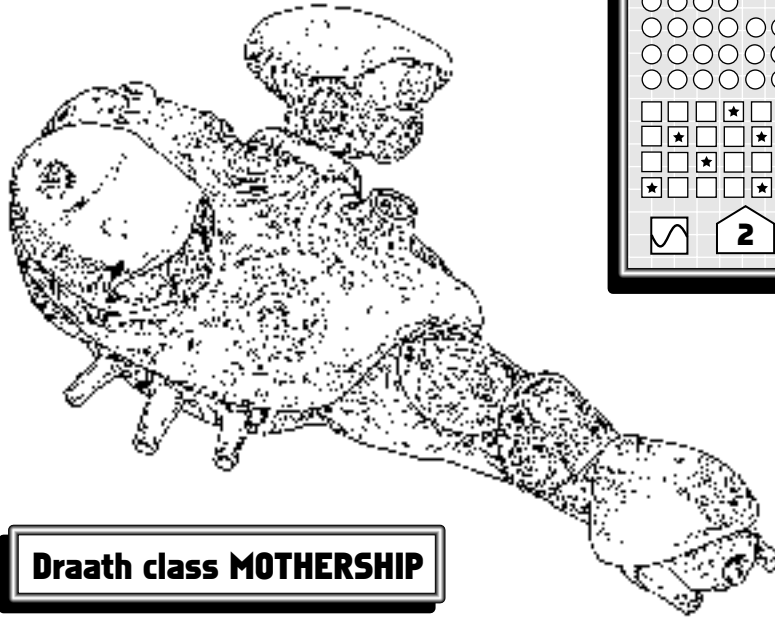
The Draath is the largest Phalon mothership (carrier) so far encountered; its complement of eight full fighter groups is massive, greater than even the huge FSE Jeanne D'Arc class which outmasses the Draath by some 3000 tonnes. On top of this large fighter force the Draath also mounts an extensive pulser array (normally configured into a mix of M and C modes) and still has room for a class-3 plasma bolt system, making it a versatile combat ship. Its low thrust level is somewhat mitigated by its very powerful 4-layer defensive shell.

**Systems Status Display**



**TECHNICAL SPECIFICATIONS:**

- Human Class Equivalent:** Heavy Carrier
- Displacement:** 25000 tonnes (MASS factor 250)
- Hull Integrity:** 40
- Shell Strength:** Layer 1: 12, Layer 2: 8, Layer 3: 6, Layer 4: 4
- Crew:** 250 [Crew Factor: 13] + fighter crews
- Armament:** 8 x Pulser batteries, 1 x Class-3 Plasma Bolt launcher
- Defences:** Vapour shroud gland
- Sensor Suite:** Standard sensors, 2 Fire control systems
- Drive Systems:** Main Drive Rating 2, FTL (jump) drive
- Hangar bays:** 8 bays each holding 6 fighters. (fighter cost not included)



**Draath class MOTHERSHIP**

**PHALON WEAPONS AND DEFENCES SUMMARY**

**PULSER BATTERIES**

Each pulser must be configured before the game to L, M or C mode.

- LONG range mode (pulser-L): range 0-36mu 1 die per shot
- MEDIUM range mode (pulser-M): range 0-24mu 2 dice per shot
- CLOSE range mode (pulser-C): range 0-12mu 6 dice per shot

Pulser fire dice are read as 1-3 = no effect, 4-5 = 1 Damage Point, 6 = 2DP plus a reroll.

Level-1 screens negate rolls of 4; level-2 screens and vapour shrouds negate rolls of 4 or 5.

Pulser fire is non-penetrating with the exception of damage inflicted by rerolls. All Pulsers can function as PDS instead of anti-ship fire in any given turn, using the normal PDS rules, ranges and effects (limited-arc pulsers may only fire at targets within their valid fire arcs).

ICONS (examples):

One-arc pulser configured in M mode



Three-arc pulser configured in L mode



All-arc pulser configured in C mode



**ADFC (AREA-DEFENCE FIRE CONTROL)**

Allows ship to use its pulsers in area-defence mode to protect any other ships within 6 mu. An ADFC is only an enhanced point-defence fire director - it is not a weapon in its own right and cannot function as a regular fire control.

ICON:

**PLASMA BOLT LAUNCHERS**

Plasma Bolt Launchers (PBLs) are available in sizes from class-1 to class-6 or larger. Launcher is a 3-arc (180 degree) system. Target point marker is placed during ordnance fire phase.

All plasma bolt launchers may only fire once every other turn.

Bolt strength is equal to launcher class; maximum range is 30 mu.

Point-defence fire against plasma bolts reduces strength of bolt - refer to rules for effects of different types of PD fire.

Burst radius of all plasma bolts is normally 6 mu. Each ship in radius takes 1 D6 damage per strength of bolt.

ICONS (examples)

Class-2 plasma bolt launcher



Class-5 plasma bolt launcher



**VAPOUR SHROUDS**

Use must be noted in orders for that turn; blocks all outgoing fire, and acts as a level-2 screen against incoming fire (no effect against weapons that normally ignore screens).

ICON:





# BACKGROUND

## TIMELINE CONTINUATION

The main timeline in Full Thrust 2nd Edition brought the "official" background history up to 2183, just before the first contact with the Kra'Vak. This continuation shows how things develop from there.....

**2183:** The UNSC Survey Cruisers McCaffrey and Niven are attacked by unknown forces off Lagos IV on the Pan African Rim; the Niven is completely destroyed, and the McCaffrey disappears without trace.

Later in the year, The PAU Battlecruiser Kinshasa is engaged and destroyed by an unidentified hostile in the New Lusaka system.

**2184:** Unexplained attacks and incidents increase in frequency, affecting not only PAU space but other nations as well; with the ongoing state of war between the NAC and ESU, much blame is placed by each power on the other. Both blocs, however, begin to realise that something far more important is happening.

Late in 2184, NAC Fleet Intelligence recovers the first identifiable alien debris following an encounter near Angel II in which a Confederation squadron managed to destroy two ships from an attacking alien group. For the first time, Humanity has positive proof that the attackers are another sentient life-form.

**2185:** The first co-operative action between the ESU and NAC against the Kra'Vak occurs at the Battle of Sulaxar. Although tensions still run high (especially in diplomatic circles), the militaries of all the major powers - plus several smaller nations - are coming inexorably together in the face of a much greater threat. On 28.07.85, the UN Assembly declares that a state of war now officially exists between all the nations of Humanity and the race known as the Kra'Vak; the First InterSentient War (rapidly christened the Xeno War by the popular media) has truly begun.

**2186:** Early in the year, the advances towards joint ESU/NAC response to the Kra'Vak aggression falter when a Eurasian naval unit fails to assist a Confederation squadron under attack by alien forces off Caleb. Finally escaping with barely 25% of his force and men, Commodore Farris accuses the ESU of standing off from the action in order to gain control of the Caleb system. The diplomatic repercussions gradually settle, but illustrate the deep distrust that still exists between the major powers.

The Kra'Vak offensive gathers momentum, and very late in the year reports begin to come in of the first surface assaults by Kra'Vak forces.

**2187:** The first major success against Kra'Vak ground forces is reported on the NSL outworld of Rheinhold, where a combined force of NSL and NAC Marines supporting local Militia units manage to beat off an attempted planetary landing by the alien invaders. Rheinhold then survives five months of protracted siege and repeated landing attempts before the Kra'Vak are driven outsystem by the arrival of a large joint task force of NAC, NSL, Dutch and Free Cal-Tex ships.

Elsewhere, humanity does not fare so well, and the aliens continue to make inroads toward the core systems. Virtually no information is released to the public concerning what is happening on worlds taken by the Kra'Vak, which causes widespread panic as rumours of massacre and genocide spread. Public opinion on Earth, Centaurus and Barnard swings in favour of pulling all forces back from the outworlds to defend the core. Such a defensive concept does not find favour with the Military, nor (naturally) with the colonial population.

**2188:** Contact is made with a second Xenosentient species; the Sa'Vasku send a message to humanity by returning a survivor of the crew of the UNS McCaffrey, arranging a rendezvous that is attended by a joint NAC/ESU task force accompanied by a UN ambassador and xenospecialist team. After a very strange and inconclusive (to the humans) meeting between the UN delegation and the Sa'Vasku contact constructs, mankind is still not sure if it has found new friends, or new enemies.

Over the following years of the war, Sa'Vasku ships and fleets turn up apparently at random throughout human space, sometimes hostile, sometimes friendly and sometimes just observing; contact with them proves impossible unless they wish to initiate it, and mankind is still no nearer understanding their motives or agenda.

**2189:** The Kra'Vak push towards the core continues unabated, with mankind scoring only minor successes in space and planetside against the onslaught. Late in the year, a rapid thrust by Kra'Vak forces deep into Human space is only narrowly defeated when they attack Centaurus, a battle which causes heavy losses to the allied human fleets and great damage to the orbital colonies of the Centaurus system. The appearance of such a large enemy fleet deep within the core pushes all the human nations into closer co-operation in the fight to defeat the Kra'Vak.

**2190:** A brief lull occurs in the fighting while the Kra'Vak, presumably hurting from the defeat at Centaurus, consolidate their gains in human space and regroup for their next push. Towards the start of 2191 the offensive resumes, but with a steadier and more co-ordinated strategy than the piecemeal strikes of the earlier years. The human forces give ground slowly as the Kra'Vak waves strike at system after system.

**2191:** First contact between Humanity and the Phalon race, when a Phalon ship is fired on and destroyed by an FSE force in the Rhone system. Other encounters with the Phalons follow, including several retaliatory attacks, until proper communication is finally established and the two races begin to understand something of the other. In the event, diplomatic relations with the Phalons appear almost as unpredictable as with the Sa'Vasku, with different factions within the Conglomerate siding with either Humanity or the Kra'Vak seemingly at a whim.

**2192:** The Kra'Vak continue their pressure on the Hu'man. In July 2192 a small Kra'Vak deep penetration force actually slips through Sol's system defences and reaches as far as Mars orbit, hitting several orbital facilities before the defending fleets can intercept and destroy the invaders. Civilian panic on Earth rises.

**2193:** It becomes obvious that a major Kra'Vak push into the core, and probably to Sol itself, is very near. In desperation, the UNSC (co-ordinating the defence of the core systems) orders all human forces to withdraw their ships from the colonies to interdict the core worlds. While many units comply, others refuse to abandon their colonial home-systems which are still under attack from Kra'Vak forces. As the New Year approaches, the remnants of the UNSC/allied fleets begin to gather for a last-ditch defence of the core.

**2194:** While other battles still rage in many of the colonial systems, the Kra'Vak main force arrives at the core. Barnard and the already badly hurt Centaurus are attacked repeatedly by powerful Kra'Vak fleets. In May 2193 the first of the Kra'Vak attacks on the Earth's outer defences begin. The Siege of Sol has started.....

## CONTACT INFORMATION FOR GROUND ZERO GAMES

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# FULL THRUST STARSHIP MINIATURES

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