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Introduction:

This module for Star Fleet Battles is the first in a series for use with the Star Fleet Battles game system. The races presented within this module do not dwell within the milky way galaxy. Instead, they are all found in the pinwheel galaxy, also known as NCG 2523.

It is widely recognized that a number of SFB players are interested in experimenting with new races. However, there are seriouis historical and play balance problems that would arise from introducing any new races to the milky way galaxy. Any major race introduced would require a complete re-write of the history of the galaxy, which would be a very major headache.

Please note that there is no historical interaction between the races of the milky way galaxy and the pinwheel galaxy. For this reason, no effort has been put forth to balance these races against the previously published races. However, it would be quite reasonable for the curious to use these races in the simulator against milky way races.

Early ships from five races are presented here. These races are the Olthenians, the Velrons, the Alhordians, the Daalmari, and the Kakrea.

The new races that are presented here are not meant to be 'better' races. There are no heavy cruisers with ninety warp boxes, nor any omnipotent weapons or invulnerable defense systems. These races are meant to be very *different* races from the galactics, which will require a new way of thinking about combat in the SFB system.

Suggested tournament cruisers for these five races are also given. These are in no way official at this time, however, we hope that they will be considered for use in future tournaments.

In conclusion: Take these races, use them as you see fit, and enjoy yourself.

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Original Concept

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Ship Design

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Olthenian Concept

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Alhordian Concept

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Daalmari Concept

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Velron Concept

Timothy E Janota, Ronald A Mulder

Kakrea Concept

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(E201.0) MAGNETIC CANNON

A comparatively weak heavy weapon, the magnetic cannon is used by the Kakrea, who invented it, and the Yunderians, who copied the design from a derelict Kakrea vessel. The magnetic cannon fires a series of magnetic energy pulses, inflicting fair damage at short ranges. A maximum of three pulses may be fired in any given turn, but only one pulse per impulse per weapon mounted.

(E201.1) DESIGNATION

Each "MC" box on an SSD represents one magnetic cannon. Each weapon is recorded and fired separately.

(E201.1.1) DAMAGE: The magnetic cannon is destroyed on "Drone" hits.

(E201.1.2) **REPAIR:** The magnetic cannon repair cost is five (5) points. There is no option to "under-repair" the weapon. Any energy allocated to the weapon when it was destroyed is lost.

(E201.2) ARMING PROCEDURE

(E201.2.1) PROCEDURE: Magnetic cannons are armed by allocating one, two, or three points of energy. Each magnetic cannon is armed separately and may be allocated up to three points each. Power may not be transferred between different magnetic cannons after energy has been allocated. Each point of energy allocated to the weapon allows the weapon to fire one pulse, up to a maximum of three pulses in a given turn.

(E201.2.2) SOURCE: Energy to power a magnetic cannon may come from any source. This may be allocated at the beginning of the turn, or drawn from reserve/battery power later in the turn.

(E201.2.3) HOLDING: Magnetic cannons may not be held. Any energy allocated to the weapon that is not used by the end of the turn is lost.

(E201.3) FIRING PROCEDURES

(E201.3.1) FIRING: Magnetic cannons are fired during the Direct-Fire stage of the Impulse Procedure. Damage is determined by cross-referencing a single d6 roll against the range on the MAGNETIC CANNON TABLE (E201.4). The damage is resolved immediately with other direct fire weapons.

(E201.3.2) RATE OF FIRE: A given magnetic cannon may be fired up to three times in any turn, each firing of the weapon costs one energy point, either allocated or drawn from reserve. Previous firings of the weapon do not affect subsequent firings with the restriction that no more than three pulses may be fired within an eight (8) impulse period.

(E201.3.3) FIRING DELAY: The maximum number of shots that a magnetic cannon may fire in an eight impulse period is three. This holds true even if there is a turn break during the eight impulses. Thus, if a magnetic cannon was fired once in the previous turn on impulse 32, than the weapon may only be fired twice in the following turn before impulse eight (a maximum of three shots in eight impulse period.) (E201.3.4) RANGE: The maximum range for the magnetic cannon is fifteen hexes, the minimum range is zero. There is no feedback damage for firing at range zero.

(E201.3.5) RANGE EFFECTS: When the true range differs from the effective range; use the effective range to determine hit probability and the true range to determine damage.

(E201.3.6) FEEDBACK: The weapon never scores feedback damage regardless of range.

(E201.4) MAGNETIC CANNON TABLE

Range	0	1	2-3	4-6	7-10	11-15
Hit	1-6	1-5	1-4	1-3	1-2	1
Damage	6	5	4	3	2	1

(E201.5) OVERLOADS

There is no overload function for the magnetic cannon.

(E202.0) MAGNETIC TORPEDOES

Another relatively weak heavy weapon used by the Kakrea, the Magnetic Torpedo uses a collapsing magnetic field around its target to produce severe electro-magnetic disruptions to electronics and power systems. While producing an impressive amount of damage in standard and overload settings, this potential is severely weakened do to the "spreading" of the damage to all six shield facings. The Kakrea are the only race known to have deployed this weapon.

(E202.1) DESIGNATION

Each "MT" box on an SSD represents one magnetic torpedo. Each is recorded and fired separately.

(E202.1.1) DAMAGE: The magnetic torpedo is destroyed on "Torpedo" hits.

(E202.1.2) REPAIR: A destroyed magnetic torpedo requires eight (8) repair points to be functional again. Any energy stored in the magnetic torpedo when it was destroyed is lost. The magnetic torpedo may not be "under-repaired".

(E202.2) ARMING PROCEDURES

(E202.2.1) PROCEDURE: The magnetic torpedo is a two turn arming weapon. Two (2) points of energy must be allocated for the first and second turns of arming, the second turn must be allocated, power may not come from reserve power during the turn. Reserve power may be used for the first turn of arming, see (H7.32). A magnetic torpedo can be overloaded, see (E202.5).

→ (E202.2.2) SOURCE: Energy for the magnetic torpedo may come from any source. It must be allocated during the energy allocation sequence.

(E202.2.3) HOLDING: Magnetic torpedoes may not be held. If a non-overloaded weapon is not fired by the end of the second turn of arming it may be "rolling delayed"; the first turn of arming is lost and the second turn becomes the first turn. An overloaded magnetic torpedo that is not fired on its second turn of arming is discharged harmlessly into space; all power in the weapon is lost.

(E202.3) FIRING PROCEDURE

(E202.3.1) PROCEDURE: Magnetic Torpedoes are direct fire weapons fired during the Direct-Fire stage of the Impulse procedure. Hit probability is determined by referencing the range on the MAGNETIC TORPEDO TABLE (E202.4). Roll a single d6, if the result falls within the stated range, then a hit is scored. If a hit is scored, the warhead does 2 points of damage on all six shield facings in standard mode. An overload does 3 points of damage to each shield facing.

(E202.3.2) RANGE: The maximum range for the magnetic torpedo in standard mode is 30 hexes; in overload the maximum range is 8 hexes. A magnetic torpedo in standard mode may not fire at true range zero (0).

(E202.3.3) RANGE EFFECTS: When the effective range differs from the true range, then effective range is used to determine hit probability.

(E202.3.4) DAMAGE ALLOCATION: A successful magnetic torpedo hit will score two points per shield facing in standard mode and three points per shield facing in overload. Any damage points that penetrate the shields are resolved as one volley with an incoming direction of all six shield facings. Resolve all magnetic torpedo hits after all other direct fire has been resolved, damaged caused by any magnetic torpedo hits are resolved as a single, separate volley. (The exception is the hellbore, which may be resolved before or after the magnetic torpedo at the discretion of the hellbore firing ship.)

(E202.3.4.1) Shield Reinforcement: If a ship with general shield reinforcement is hit by magnetic torpedoes and no other direct fire weapons, the general shield reinforcement is applied to all shields as evenly as possible before any specific reinforcement. If the ship is hit by direct fire in the same impulse it is hit by magnetic torpedo fire, then the general shield reinforcement and any specific shield reinforcement of the shield struck by the direct fire is applied to the direct fire before magnetic torpedo resolution. Any remaining reinforcement will affect the magnetic torpedo as normal.

(E202.3.4.2) Unshielded Targets: If a magnetic torpedo hits a target with no shields (fighter, shuttles, drones, missiles, some monsters, etc.) or which have only one shield, then apply all damage to the target as if it were a normal (non-enveloping) weapon

(E202.3.4.3) Andromedans, Interceptors, and Monsters: Simply resolve the damage as if it comes in from all six shield facings.

(E202.3.4.4) Ground Bases and Planetary Installations: See (P2.7331) for a procedure for magnetic torpedo hits to ground bases. Treat the weapon as a hellbore with a warhead strength of twelve (12) for standard or eighteen (18) for overload.

(E202.3.4.5) ESG Interaction: In the Pinwheel Galaxy no races use the expanding sphere generator, but studies have shown that the magnetic torpedo would interact with the sphere in a manner similar to the Hellbore-ESG interaction. Damage that exceeds the ESG would be applied to the ship in as evenly a possible manner, with odd points being applied to the shield of the defender's choice.

(E202.4) MAGNETIC TORPEDO TABLE

Range	0	1-4	5-8	9-15	16-22	23-30
Hit	1-6	1-5	1-4	1-3	1-2	1
Damage,standard		2x6	2x6	2x6	2x6	2x6
Damage,overload	3x6	3x6	3x6			

(E202.5) OVERLOADS

(E202.5.1) ENERGY: The magnetic torpedo can be overloaded. Four (4) points of energy must be allocated on the final turn of arming instead of two. This energy cannot be applied on the first turn of arming and an overload cannot be held. The energy to overload a magnetic torpedo may come from any source. Reserve power may be used during the turn to overload a standard torpedo for an extra two points of energy (bringing the total power for the turn to the required four).

(E202.5.2) HOLDING: An overloaded magnetic torpedo may not be held and must be fired on the turn it is overloaded. It may not be rolling delayed. If the torpedo is not fired, it must be discharged (and the fact announced) and all energy is lost.

(E202.5.3) DAMAGE: The warhead damage is increased by 50%; three points of damage are applied to each shield facing of the target ship.

(E202.5.4) RANGE: An overloaded magnetic torpedo is limited to an effective range of eight (8) hexes. The overload may fire at range zero (0) with feedback damage.

(E202.5.5) RANGE ZERO and FEEDBACK: If an overloaded magnetic torpedo is fired at a true range of zero (0), and a hit is scored, the firing ship will take feedback damage of one point on each shield (a total of six points of damage). Damage from feedback will be resolved as if the ship had been struck by a magnetic torpedo of warhead strength six.

(E202.5.6) NON-REVERSIBLE: Once a magnetic torpedo has been overloaded the weapon cannot fire as a standard load. The weapon must be fired or discharged by the end of the turn, and it may not be "rolling delayed".

(E203.0) WARP LANCE

Invented in YP 63 by the Velron Nobles while under the harsh regime of the Emperor Clavaxis, this devastating close range weapon has been battle proven repeatedly in numerous wars, including the Velron Civil War and the Olthenian War of YP 99. It functions by distorting the firing ship's warp field into a "lance" of disrupted subspace, this lance is then projected forward into the target. The effects at close range are devastating, the weapon is quite capable of punching holes through the hulls of ships and the subspace distortion can wreak havoc on power systems and electronics. The main drawback to the weapon is that it is the ship's warp field that is being used to do the damage, and restabilizing that warp field can place severe restrictions on the firing ship, often costing twice as much energy to stabilize as it cost to fire.

(E203.1) DESIGNATION

Each "WL" or "W Lance" box on an SSD represents one warp lance. Each weapon is fired and recorded separately.

(E203.1.1) DAMAGE: The warp lance is destroyed on "torpedo" hits.

(E203.1.2) **REPAIR:** The warp lance cost twelve (12) repair points to fix. The weapon may not be "under-repaired". Any energy allocated to the weapon when it was destroyed is lost.

(E203.1.3) TACTICAL INTELLIGENCE: Due to the nature of the weapon (it has no discharge ports) tactical intelligence may never tell the number of unarmed warp lances on a ship. Due to the effect an armed warp lance has on the ship's warp field, the number and status of any armed warp lances can be determined at tactical intelligence level C.

(E203.2) ARMING PROCEDURE

(E203.2.1) PROCEDURE: A warp lance is armed by allocating two (2) points of energy for a standard or three (3) points of energy for an overload. This energy is used to reshape the warp field in preparation for firing. If the weapon is not fired by the end of the turn, the energy is lost and the weapon may be rearmed the following turn. If the weapon is fired, the warp field must be restabilized, and the firing weapon may not be rearmed during this restabilization process. See (E203.4) for restabilization procedures and restrictions. Please note, for the warp lance to function, at least one movement point for the ship must come from warp power, see (E203.3.5)

(E203.2.2) SOURCE: Energy to fire the warp lance must come from the warp engines. Impulse power, APR, AWR, and batteries are all unsuitable for arming a warp lance. This power may be from reserve warp, and may come from any operational warp engine.

(E203.2.3) HOLDING: Armed warp lances may not be held. If the armed weapon is not fired during the turn it was armed, the weapon will discharge out into space. This energy cannot be regained. Discharge of the weapon in standard load does not constitute firing, and does not require restabilization of the warp field, the weapon may fire on the next turn (provided it is re-armed).

(E203.3) FIRING PROCEDURE

(E203.3.1) PROCEDURE: Warp lances are fired during the Direct-fire Weapons Stage of the Impulse Procedure. Hit probability is determined by referencing the range in hexes on the WARP LANCE TABLE (E203.5). A single d6 is rolled, if the result falls within the stated range, then a hit is scored. Damage inflicted by the warp lance is determined by the range in hexes, if a hit is scored reference the type of warhead against the range on the WARP LANCE TABLE to determine the damage done. Damage from a warp lance is applied along with all other direct fire weapons.

(E203.3.2) RATE: A given warp lance may only fire a maximum of every other turn. There is no provision for firing the warp lance in consecutive turns. If extended restabilization is used, the weapon must wait two full turns before it may fire again.

(E203.3.3) RANGE: The maximum range of a standard armed warp lance is 30 hexes, the maximum range of an overloaded warp lance is eight (8) hexes. Both the standard and overloaded warp lance may fire at a true range of zero (0).

(E203.3.4) RANGE EFFECTS: When the effective range of a warp lance is different from the true range, the effective range is used to determine hit probability and the true range is used to determine the damage.

(E203.3.5) FIRING ARCS: The warp lance is a manifestation of the ship's warp field, and for this reason, the firing arcs of the weapon are dependent on the movement of the ship. If, at the time the weapon is fired, the ship is moving forward with at least one movement point from warp power, then the weapons have a FA firing arc. If, at the time the weapon is fired, the ship is moving in reverse with at least one movement point from warp power, then the warp lance has a RA firing arc. If, at anytime, the ship is at speed zero, is performing tactical warp maneuvers, impulse maneuvers, or is moving under impulse power alone, then the warp lance may not fire. For the purpose of this weapon, power applied to HET does not count toward the need for warp power applied to movement.

(E203.4) WARP RESTABILIZATION

The firing of a warp lance is very stressful on the warp field of the firing ship. On the turn Immediately following the firing of one or more warp lances the ship's warp field must be restabilized, it is not an optional procedure. The ship may perform one of three restabilization methods, and during the time of the restabilization, the warp lances that fired may not fire until the restabilization process is done. Warp lances that did not fire are not restricted on the following turns, even if other warp lances (which did fire) are restabilizing the warp field.

(E203.4.1) STANDARD RESTABILIZATION (METHOD #1): The most common method used to restabilize a warp field, this method allows the weapon to fire every other turn.

(E203.4.1.1) Procedure: Double the firing energy spent the previous turn must be allocated to restabilizing the warp field. Four (4) points to restabilize a standard, six (6) to restabilize an overload. This energy must be recorded on the corresponding line on the energy allocation form for each warp lance fired. This energy must be paid to use this restabilization method, even if the warp lance that fired was destroyed, and each warp lance fired must spend the energy. If three warp lances fired on standard (2 points each to fire), then all three warp lances must pay four points each to restabilize (4 points each for a total of 12 points). The energy for the restabilization must come from the warp engines; impulse, APR. AWR. and batteries are unacceptable for this purpose. The energy must be allocated at the beginning of the turn, and may not come from reserve power.

(E203.4.1.2): The restabilization energy paid to restabilize the warp field does not interfere with the operation or firing of any previously unfired warp lance or other weapon(s).

(E203.4.1.3): The ship may perform movement action without penalty while restabilizing. (E203.4.1.4): A ship is never forced to use this particular method to restabilize. Any ship may

 use extended restabilization or static restabilization as long as one of the three methods is used. (E203.4.1.5): Restabilization energy must be paid, even if the warp lance is destroyed after firing. The only exception to this is if the warp engines are destroyed or jettisoned (in which case the ship will be performing a form of static restabilization.)

(E203.4.2) EXTENDED RESTABILIZATION (METHOD #2): This method requires less energy on the turn immediately following the turn of firing, but requires an additional turn of restabilization during which the warp lance may not fire. This method effectively makes the warp lance a three turn arming weapon.

(E203.4.2.1) Procedure: For each warp lance fired, an amount of energy equal to the firing cost must be paid on each of two consecutive turns to restabilize the warp field. Two (2) points of energy on the following two turns for a standard load, three (3) points on two turns for an overload. This energy must come from the warp engines; impulse, APR, AWR, and batteries are not acceptable. This energy should be recorded in the corresponding warp lance line on the energy allocation form. This energy must be allocated, and may not come from reserve warp. Reserve warp *can not* be used to convert an extended restabilization to a standard restabilization in mid turn.

(E203.4.2.2): The restabilization does not interfere with the function of any previously unfired warp lance or other weapon(s).

(E203.4.2.3): It is possible to have some weapons using extended restabilization and some using standard restabilization at the same time.

(E203.4.2.4): Restabilization does not interfere with any maneuvers performed by the ship. (E203.4.2.5): A ship is never forced to use this form of restabilization.

(E203.4.2.6): The energy for this restabilization must be paid even if the warp lance is destroyed before restabilization is complete.

(E203.4.2.7): If a ship has partially restabilized the warp field using this method (i.e., has completed one turn) and then executes a static restabilization on the second turn, the restabilization is completed at no extra cost (i.e., the ship does not have to pay for the second turn of the extended restabilization).

(E203.4.3) STATIC RESTABILIZATION (METHOD #3): There may be a time when, due to battle damage, a ship cannot pay the restabilization costs required of the other two methods. There may be times when it also tactically inadvisable to pay those costs. For those occasions, this method may be used.

(E203.4.3.1) Procedure: On any turn in which the ship's warp field must be stabilized (whether directly following the firing of one or more warp lances, or during the second step of extended restabilization) this method may be used. The ship must, during the allocation phase, announce a speed of zero, and must remain there for all 32 impulses of the turn. One half of the current power from the warp drives must be allocated to restabilizing the warp field, this cost is regardless of the number of warp lances fired or the mode of the warp lances when fired. The energy should be marked on the first available warp lance line on the energy allocation form, an "R" behind this number will help designate that it is for restabilization. At the end of the turn, the warp field will return to "normal" and the ship may continue function without restriction.

(E203.4.3.2): During the static restabilization the ship may not fire or arm any warp lance system, regardless of the current status of the weapon. The firing of non-warp lance weapons is not affected in any way.

(E203.4.3.3): The ship executing the static restabilization may not use any warp power for forward or reverse movement. The remaining one-half of the warp power may be used to

execute warp tacs or HETs. The energy may not be used for erratic maneuvers. These restrictions do not apply to impulse movement or docking thrusters.

(E203.4.3.4): The ship can be forced to use this method of restabilization if it is incapable of paying the energy costs associated with the first two methods of restabilization. Ships that have lost their warp engines (technically) perform this form of restabilization.

(E203.4.3.5): The turn after the static restabilization is executed all undamaged warp lances function normally and may be armed and fired. The ship is still under all associated restrictions for a previous turn's speed of zero.

(E203.4.3.6): An emergency stop executed mid-turn may not be used to satisfy the 32 impulse speed zero clause. A previous turn's speed zero may not be used to complete the 32 impulse speed zero restriction.

(E203.5) WARP LANCE TABLE

Range	0	1	2	3	4	5-6	7-8	9-10	11-20	21-30
Hit	1-6	1-5	1-5	1-5	1-5	1-4	1-3	1-2	1	1
Damage, standard	16	15	14	13	12	10	8	6	4	2
Damage, overload	24	22	20	18	16	14	12			

(E203.6) WARP LANCE OVERLOADS

(E203.6.1) ENERGY: The energy to fire an overloaded warp lance is three (3) points. This power must come from the warp engines; impulse power, APR, AWR, and batteries are unacceptable power sources. Reserve energy may be used to arm a previously empty warp lance, or to overload a standard warp lance mid-turn (the cost to overload a standard is one (1) point). Once the energy has been allocated, the weapon may not be fired as a non-overload.

(E203.6.2) HOLDING: An overloaded warp lance may not be held. If it is not fired by the end of the turn, the warhead is discharged and the energy is lost.

(E203.6.3) RESTABILIZATION: Regardless of whether the warp lance was fired or discharged, the strain on the warp field is to great and must be restabilized the next turn as if fired. This may be done with six (6) points per warp lance overloaded with standard restabilization, three (3) points per overload per turn with extended restabilization, or using static restabilization.

(E203.6.4) EFFECT: The warhead strength of the overloaded warp lance is increased over the standard warhead as shown on the WARP LANCE TABLE (E203.5).

(E203.6.5) MAXIMUM RANGE: The maximum range of the overloaded warp lance is 8 hexes. This applies only to true range, not adjusted range.

(E203.6.6) FEEDBACK: There is no feedback damage from an overloaded warp lance.

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(E205.0) KINETIC ENERGY WEAPON (KEW)

The kinetic energy weapon (the KEW) was developed by the Alhordian Confederation in YP 57 in response to the Tethalve wars. Originally envisioned as a planetary bombardment weapon, its use as a ship to ship weapon became readily apparent in initial trials. This weapon is present on most Alhordian vessels and is responsible for the unique configuration of their ships.

It functions essentially as a warp version of a mass driver by collecting residual space debris and gasses, stripping the atoms of this debris of their electrons, and then propelling the resulting proton-heavy mass at the designated target at trans-warp speeds. The resulting collision of the mass with its target is not unlike a collision between a ship and an asteroid. There is no degradation due to range of this weapon, making it particularly effective in its intended bombardment role.

Each ship has only one such weapon mounted, as the weapon must be centrally located on the axis of movement. It would theoretically be possible to mount one forward and one backward, but the configuration has never been attempted. Stations, due to their stabilizers, can mount more than one. These weapons vary in size and damage inflicted depending on the ship the weapon is mounted on.

(E205.1) DESIGNATION

Each "KEW" box on the SSD represents one part of the weapon system. The power consumption and damage capabilities of the weapon are dependent on the number of functioning KEW boxes. If all KEW boxes are destroyed, the weapon cannot function, but if one KEW box is repaired, the weapon system will again function properly. The weapon system itself can only be destroyed by destroying the ship it is mounted on.

(E205.1.1) DAMAGE: KEW boxes on a ship are destroyed on every second "phaser" hit. This rule supersedes the normal phaser damage priority rules. A KEW destroyed by a point of damage does not count as a phaser on the phaser priority rules.

(E205.1.1.1) Optional: As an optional method for KEW hits, any phaser hit scored on 2 through 6 on the DAC are KEW hits, any phaser hit scored on rows 7 through 12 are scored as regular phaser hits.

(E205.1.2) REPAIR: KEW boxes cost four (4) repair points to repair. Any energy allocated to the KEW when destroyed is lost and cannot be regained.

(E205.2) ARMING PROCEDURE

(E205.2.1) PROCEDURE: Each KEW box mounted on a ship may be powered with one (1), two (2), or three (3) points of power. The first point of power indicates a standard load, the second indicates an overload, the third is an extended overload. Each KEW box can be armed with a different amount of power--they do not have to agree, and some KEW boxes can be left unarmed even while some are armed at extended overload. However, once loaded, the energy is not necessarily associated with any particular KEW box on the SSD, instead, it is considered to be part of the entire weapon's energy loading.

(E205.2.2) RECORD KEEPING: The following system is recommended for keeping track of the arming of the KEW. Due to the large number of KEW boxes on some ships (one of the DN built by the Alhordians has 15 KEWs) it is impossible to provide enough room on the energy allocation form to accommodate all individually.

(E205.2.2.1) Use the heavy weapon row "A" to record the number of energy points allocated to standard loads. This may range from zero to the number of KEWs mounted on the ship. (E205.2.2.2) Use the heavy weapon row "B" to record the number of energy points allocated to overload. This may range from zero to the number of points allocated to the standard load. (E205.2.2.3) Use the heavy weapon row "C" to record the number of energy points allocated to extended overload. This may range from zero to the number of points allocated to extended overload. This may range from zero to the number of points allocated to extended overload. This may range from zero to the number of points allocated to overload.

(E205.2.2.4) The total number of standard loads can never exceed the total number of operational KEWs; the total number of overloads can never exceed the total standard loads; the total number of extended overloads can never exceed the total overloads.

(E205.2.3) CHANGES IN ARMING ENERGY: During a turn the arming status of the weapon may be changed by reserve energy or by damage to the ship. At all times, rule (E205.2.2.4) must be obeyed, and any change in the weapon status must change to reflect this rule.

(E205.2.4) SOURCE: Energy to fire the KEW can come from any available source. This energy can be allocated or drawn from reserve power.

(E205.2.5) HOLDING: An armed KEW can never be held. If energy is allocated to the weapon and it is not fired by the end of the turn, the energy is lost and cannot be regained. This discharge does not constitute firing and does not delay the arming and fire on the subsequent turn.

(E205.2.6) WEAPON STATUS: The KEW is never armed at any weapon status, however, at WS-0 the entire KEW system requires two (2) points of energy for one complete turn (regardless of the size of the KEW system) to become "warmed-up" before individual KEW boxes can be armed.

(E205.3) FIRING PROCEDURE

(E205.3.1) PROCEDURE: The KEW is fired on the Direct-Fire Weapons Stage of the Impulse Procedure. The hit probability for the weapon is determined by referencing the range on the KEW Table (E205.4). Warhead strength is determined by the arming status of the weapon, see (E205.3.2). A single d6 is rolled, if the result of the die roll falls within the stated range on the KEW Table, then the weapon hits and damage is scored with all other direct fire weapons.

(E205.3.2) WARHEAD STRENGTH: The warhead strength of the KEW is determined by the following formula: Warhead = (standard load energy x 2) + (overload energy) + (extended overload energy x 2). Thus, a weapon with three points in standard load, three points in overload, and two points in extended overload would have a warhead of thirteen ($(3 \times 2) + (3) + (2 \times 2) = 13$)

(E205.3.3) FIRING CHART USED: If the only allocated energy to the KEW is standard load, then the "Hit, standard" row is used to determine hit probability. If there is one or more points of overload energy, but no extended overload energy, then the "Hit, overload" row is used to determine hit probability. If there is one or more points in extended overload, then the extended overload row is used.

(E205.3.4) RANGE: The maximum range of a KEW is forty hexes. Note that the standard load KEW cannot fire at true range zero (the firing computers will not allow the weapon to fire, as it would damage the shields). The maximum range for the overload is fifteen hexes, and the weapon can fire at true range zero. The maximum range for the extended overload is five (5) hexes.

(E205.3.5) RANGE EFFECTS: When the true range differs from the effective range, use the effective range to determine hit probability. Regardless of the effective range, there is no warhead degradation in the damage caused be a KEW.

(E205.3.6) RATE: The entire KEW system may fire only once per turn, and must wait 8 impulses between turns before it may fire again. This is regardless of the number of KEW boxes that were armed when the weapon was fired. The weapon *cannot* be fired with some of the boxes, then have others later armed and fired in the same turn.

(E205.3.7) COMPLETENESS OF FIRE: All KEW boxes armed in a turn must be fired. Energy cannot be "held back" to fire at a later time. The KEW may never fire twice in one turn.

(E205.4) KINETIC ENERGY WEAPON TABLE

Range	0	1	2	3	4	5	6-8	9-10	11-12	13-15	16-30	31-40
Hit,standard		1-2	1-3	1-4	1-5	1-5	1-4	1-3	1-3	1-3	1-2	1
Hit, overload	1-6	1-5	1-5	1-5	1-4	1-4	1-4	1-3	1-2	1		
Hit, extended overload	1-6	1-5	1-4	1-3	1-2	1						

(E205.5) OVERLOADS AND EXTENDED OVERLOADS

A kinetic energy weapon may be set to one of two overload modes, overload or extended overload. If one point of energy is allocated to overload, but not extended overload, then the entire system is considered to be at overload status. If one point of extended overload is allocated, then the entire system is considered to be at extended overload regardless of the energy placed in standard and overload status. Extended overload energy takes precedence over overload energy in determining the weapon system status for firing.

(E205.5.1) ALLOCATION: The energy to overload or extended overload a KEW can be allocated at the beginning of the turn or provided from reserve power mid-turn. Once energy is allocated to overload or extended overload it cannot be fired as a non-overloaded weapon (see (E205.5.5.1) for an exception). An overloaded or extended overloaded KEW may not be held and must be fired or discharged at the end of the turn.

It is not possible to discharge the overload/extended overload and then use reserve to rearm the weapon to fire at different (or even same) level within the same turn.

(E205.5.2) RANGE: The maximum range for the overloaded KEW is fifteen hexes. The maximum range for the extended overload is five hexes. Both the overload and extended overload may fire at true range zero (see (E205.54) FEEDBACK).

(E205.5.3) EFFECTIVE RANGE: If the effective range differs from the true range, use the effective range to determine hit probability.

(E205.5.4) FEEDBACK: An overloaded KEW can fire at range zero (0). The hit probability is 1-6, insuring a hit if there are no modifiers. If an overloaded KEW is fired at true range zero feedback damage will be inflicted on the front shield of the firing ship, regardless of the arc fired into and whether the weapon scores a hit or not. This feedback is due to the inability of the targeting computer to safely modulate the shield to allow the weapon to pass through. The warhead effectively "rips" through the front shield.

1/4 of the warhead strength will be scored as feedback on the front shield of the ship. This does not reduce the damage done by the warhead to its target, nor does it affect any other ship. The damage is applied to the front shield immediately, before any incoming damage is resolved. If the shield is reduced to zero before all the damage from the feedback is resolved no further damaged is scored. This feedback damages only the shield, and does not score internal damage.

(E205.5.4.1) EXTENDED OVERLOAD FEEDBACK: There is no safe way to modulate the shield to allow an extended overload to pass through the shields. Regardless of the range to the target, and whether the weapon scores a hit or not, the KEW will score feedback damage as in (E205.5.4).

(E205.5.5) RESOLVING DAMAGE TO THE KEW: If the KEW boxes on a ship with loaded a loaded KEW are destroyed, energy within the warhead must be reduced to agree with (E205.2.2.4). This must be done immediately after all fire is resolved. Any energy lost due to the destruction of KEW boxes is lost and may not be regained.

(E205.5.1) Voluntary Reductions: If a KEW takes damage, the owning player may voluntarily remove one point of overload or extended overload energy per KEW box destroyed as long as rule (E205.2.2.4) is not violated. This energy is lost and may not be regained. This is the only exception to (E205.5.1).

(E205.6) OBVIOUSNESS OF THE WEAPON

The energy stored in the KEW system is partially stored in energy fields outside of the ship. This makes the weapon status of a KEW much more obvious to all observers.

(E205.6.1): If not using Tactical Intelligence, the player with the armed KEW must announce the total number of points of power in the weapon and the firing mode in which the weapon is ready to fire. If there is any change in the status of the weapon, it must be declared immediately.

(E205.6.2) If using Tac Intel:

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(E205.6.2.1): At level A, the presence of a loaded KEW must be announced. The energy and firing mode are not known at this level. No information is gained on the status or presence of unloaded KEW boxes.

(E205.6.2.2): At level B, the presence and number of energy points in a loaded KEW must be announced. The firing mode is not known at this level. No information on the presence or status of unloaded KEW boxes is known.

(E205.6.2.3): At level C, the presence, amount of energy, and firing mode of any loaded KEW is known. The status and presence of any unloaded KEW boxes is not known at this level.

(E207.0) LIGHT PROJECTILE LAUNCHER (LPL)

This weapon was developed as a smaller version of the KEW by the Alhordians in YP 73. It originally proved to be extremely inadequate in ship-to-ship combat and was quickly shelved. Over three decades later the weapon was revived by Alhordian scientists in response to the increased use of fighters. Launching a much smaller projectile than the KEW, the LPL suffers from none of the mounting restrictions of the heavy KEW. It does, however, sorely lack in its ability to damage large ships and is used only as a secondary weapon to defend against fighters and missiles (which it does superbly). Alhordian fighters that mount this weapon are some of the best superiority fighters in the galaxy. This weapon did give rise to the interesting Alhordian ship designated the ACV, or anti-carrier. The ship mounts no heavy weapons and instead employs eleven LPL's in a fighter-hunter role.

(E207.1) DESIGNATION

Each "LPL" box on the SSD represents one light projectile launcher. Each LPL is recorded and fired separately.

(E207.1.1) DAMAGE: The LPL is destroyed on "drone" hits.

(E207.1.2) REPAIR: The LPL cost 4 repair points to be fixed. Any energy stored in the weapons capacitor is not lost when destroyed and may be used for other LPLs on the ship. The weapon may not be "under-repaired".

(E207.2) ARMING PROCEDURE

(E207.2.1) **PROCEDURE:** All light projectile launchers on a given ship have a unified energy reserve from which to fire. Each LPL allows one point of power to be allocated for firing LPLs. This is similar to the phaser battery capacitor system, except that energy may not be held from turn to turn.

(E207.2.2) SOURCE: Energy to fire LPLs can come from any source. This power may be allocated at the beginning of the turn or drawn from reserve power mid-turn.

(E207.2.3) HOLDING: The energy stored in the capacitor may not be held. Any energy left at the end of the turn is lost and may not be regained. Energy from the LPL capacitor may not be transferred out of the capacitor after it has been allocated.

(E207.2.4) FIRING COST: Firing an LPL in long range mode costs 1/2 a point of power from the capacitor. Firing in short range mode costs 1 point of power from the capacitor. See (E207.3)

(E207.3) FIRING PROCEDURE

(E207.3.1) PROCEDURE: LPLs are fired in the Direct-Fire Weapons Stage of the Impulse Procedure. The effect of the weapon is determined by a die-roll and recorded immediately with all other direct fire weapons. Refer to the Light Projectile Launcher Table (E207.4) to determine the hit probability. Roll a d6. if the result falls within the listed range, the weapon scores a hit.

(E207.3.2) RATE: The rate of fire for the LPL is based on the mode used. The LPL may fire twice in one turn if both shots are in LR (long range) mode. If SR (short range) mode is used, then only one shot may be fired. An LPL may not fire one LR shot and one SR shot in one turn.

(E207.3.3) FIRING DELAY: A given LPL may not fire within 8 impulses of a previous shot, whether across turns or within a single turn in any mode.

(E207.3.4) DAMAGE:

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(E207.3.4.1) SR Mode: While in short range mode if a hit is scored: a size class 7 unit is destroyed; a size class 6 unit takes six (6) points of damage; a size class 5 or larger unit takes three (3) points of damage if the shield is down or two (2) points of damage if the shield is up or there is general shield reinforcement. If fire from the LPL is combined with other direct fire, then the damage from the LPL is scored before any other direct fire is scored. Internals from the LPL are still scored in the same volley as other direct fire weapons.

(E207.3.4.2) LR Mode: While in long range mode if a hit is scored: a size class 7 unit is destroyed; a size class 6 unit takes four (4) points of damage; a size class 5 or larger unit takes one (1) point if the shield are down, and no damage if the shield is up or there is general shield reinforcement. If fire from the LPL is combined with other direct fire, then the status of the shields before any direct fire is resolved is used to determine the possible damage.

(E207.3.5) RANGE: The maximum range of an LPL in LR mode is 15 hexes. The maximum range for an LPL in SR mode is 5 hexes. An LPL in LR mode may not fire at true range zero (0).

(E207.3.6) RANGE EFFECTS: If there is a range modifier, such as a damaged scanner track, this modifier is added to the die roll, not to the effective range. (Yes, range modifiers severely limit the LPL.) ex. A cloaked ship, which is normally double the range and add 5 hexes is, effectively for the LPL, *add* to the die roll the true range plus 5. (to hit, the LPL would need a "1" at range zero in SR mode, at range one it would be at +6 on a d6 (added to die roll at range 1 would be 1 (range in hexes) + 5 (range in hexes added by the cloaking effect) for a total modifier of +6).

(E207.3.7) SMALL TARGET MODIFIERS: The LPL has special tracking computers, and is there for not subject to the small target ECM modifier listed in (E1.7). The LPL may also engage mines like a phaser with no weapon penalties, though a non-minesweeper is still subject to the 4 points of ECM while shooting mines. An LPL is not subject to penalties for firing on drones, see (FD1.51),(FD1.52).

(E207.3.8) SENSOR CHANNELS: An LPL fired once in a turn while in LR mode does not blind a sensor channel. A second shot from the same launcher will blind a channel. An LPL fired in SR mode will always blind a channel.

(E207.4) LIGHT PROJECTILE LAUNCHER TABLE

Light Projectil	e Lau	ncner	I able	5				
Range	0	1	2	3	4	5	6-8	9-15
Hit, LR mode		1-2	1-4	1-4	1-5	1-5	1-4	1-3
Hit, LR mode Hit, SR mode	1-6	1-5	1-4	1-3	1-2	1		

(E207.5) OVERLOADS: There is no overload function for this weapon.

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(FP201.0) DAALMARI PLASMA TORPEDOES (TYPE Y AND Z)

The Daalmari of the Pinwheel Galaxy employ a form of the plasma torpedo as their primary weapon. However, this weapon differs enough from the regular plasma torpedoes to warrant its own section within the rules. These plasmas are not restricted to the three turn arming cycle of other plasma torpedoes, and may use an arming cycle of one to five turns. However, they have a less efficient energy to damage curve and never employed the use of psuedo-plasma torpedoes. Unless otherwise stated, all movement rules for plasma torpedoes apply to the type Y and Z torpedoes.

(FP201.1) DESIGNATION: Each Pl-Z on an SSD represents one plasma Z launcher. Each Pl-Y on an SSD represents a plasma Y launcher. Each plasma launcher is recorded and fired separately.
(FP201.1.1) DAMAGE: Plasma Z and plasma Y launchers are destroyed on "torpedo" hits. Rule (FP1.7), the ability to fire after destruction of the launcher, does not apply to plasma Y/Z.

(FP201.1.2) REPAIR: The repair cost for a plasma Z is fifteen (15) points, the repair cost for the plasma Y is eight (8) points. Any energy in the launchers is lost at the time of destruction and cannot be regained. There is no provision for firing plasma Y/Zs after destruction of the launcher.

(FP201.2) ARMING PROCEDURES

(FP201.2.1) PROCEDURE: Each plasma Y/Z may be loaded over a course of one, two, three, four, or five turns. Rolling delays may be used to extend the arming cycle. The plasma Z, being larger than the plasma Y, has an increased arming cost over the plasma Y.

(FP201.2.2) ENERGY COST FOR PLASMA Y: The energy cost for the plasma Y is: one (1) point on the first turn; two (2) points on the second turn; three (3) points on the third turn; four (4) points on the fourth turn; and five (5) points on the fifth turn. If launched, this arming cycle resets to turn 1 the turn following the launch. This increase in power cost can be delayed by use of the rolling delay.

(FP201.2.3) ENERGY COST FOR PLASMA Z: The energy cost for the plasma Z is: three (3) points for the first turn; four (4) points for the second turn; five (5) points for the third turn; six (6) points for the fourth turn; and seven (7) points for the fifth turn. If launched, this cycle resets to turn one the turn following the launch. This increase in power cost can be delayed by use of the rolling delay. At a cost of three (3) additional points the plasma Z can be overloaded.

(FP201.2.4) ROLLING DELAY: Rolling delay may be employed to halt the upward progression of the arming cost. Paying the previous turn's arming cost will "hold" the torpedo at that turn's warhead level. This rolling delay may be augmented later in the turn in a manner similar to (FP1.91). If rolling delay is used, the Turn and Arming costs for determining the warhead strength do not advance, and the warhead strength remains static.

(FP201.2.5) WEAPON STATUS: At WS-III the ship may, at its captain's discretion, have up to two turns of arming in the launchers. At WS-II the ship may have one turn of arming completed. At WS-I the ship has no turns completed, but the launchers are "warm". At WS-0 the ship must pay two (2) points per launcher to warm up the weapons before energy can be allocated. This warm-up period lasts one turn during which time the launchers may not arm.

(FP201.2.6) HOLDING: There is no formal holding procedure. If a torpedo is not fired, the torpedo may be held in rolling delay, or it may move on to the next step in arming. The torpedo may also be discharged. An overloaded torpedo may not be held, rolling delayed and cannot continue to the next level of arming. If the overload is not launched on the turn it is armed, it must be discharged.

(FP201.3) LAUNCHING AND FIRING ARCS

(FP201.3.1) LAUNCHING ARCS FOR THE PLASMA Y: All plasma Y launchers track and launch through 180[°]. Plasma Y launchers in the RP, LP, RRP, LRP, FP, and AP mounts follow normal swivel mount rules to determine torpedo facing (FP3.2). However, a plasma Y launcher in the LS or RS mounts may launch down all four hex rows. i.e. the LS mount can launch to directions #1, #6, #5, and #4, the RS mount can launch to directions #1, #2, #3, and #4. These launch arcs are identical to the launch arcs allowed the plasma D-rack.

(FP201.3.2) BOLT ARCS FOR THE PLASMA Y: The plasma Y launchers, due to their expanded swivel mounts, may also fire their bolts through the entire 180° arc. The restrictions of (FP8.35) do not apply to the plasma Y bolt.

(FP201.3.3) PLASMA Z ARCS: Plasma Z launchers follow all the standard non-swiveled plasma rules on launch and bolting. No plasma Z was given an arc greater than 120° .

(FP201.3.4) FIRING/LAUNCHING RATES: A given plasma Y/Z launcher may not launch or bolt a torpedo within eight (8) impulses of another launch or bolt from the same launcher.

► (FP201.4) WARHEAD STRENGTH: Use the following charts to determine warhead strength.

Range	0-5	6-10	11-15	16-20	21-25	26-30
Turn(energy)						
Turn 1 (3)	10	10	0	0	0	0
Turn 2 (4)	20	20	10	0	0	0
Turn 3 (5)	30	30	20	10	0	0
Turn 4 (6)	40	40	30	20	10	0
Turn 5 (7)	50	50	40	30	20	10
Bolt	1-4	1-3	1	-2		1
Overload 4+	-2+4					

Plasma	Y	Damage	Table
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- 0-5	6-10	11-15	16-20	21-25	26-30
6	3	0	0	0	0
12	6	3	0	0	0
18	12	6	3	0	0
24	18	12	6	3	0
30	24	18	12	6	3
1-4	1-3	1.	-2		1
	6 12 18 24	6 3 12 6 18 12 24 18 30 24	6 3 0 12 6 3 18 12 6 24 18 12 30 24 18	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

If the torpedo has been rolling delayed, then the turn(s) of rolling delay should be ignored for purposes of determining the warhead strength. For example, if a torpedo is armed turn 1, increased turn 2, rolling delayed turn 3, rolling delayed turn 4, and increased turn 5, the warhead strength would be for turn 3 (5 turns - 2 turns in rolling delay = 3 turns).

All plasma Y/Zs are speed 32, therefore, the range in hexes can also be read as the duration in impulses if using a 32 impulse turn.

(FP201.5) OVERLOADS

The plasma Z may be overloaded, which is, in effect, the closest the Daalmari ever got to the enveloping torpedo. An overloaded torpedo must be launched or bolted on the turn of arming, or the torpedo is lost and the energy cannot be regained.

(FP201.5.1) ALLOCATION: Three (3) points of energy must be allocated to the torpedo over-and-above the regular arming cost. This power may come from any source, including reserve power

(FP201.5.2) HOLDING: An overloaded torpedo may not be held or rolling delayed. It is too unstable to keep in the tubes and must be launched or bolted by the end of the turn. If it is not, the torpedo will be ejected and the energy lost. Ejection of the torpedo does not count as a launch or fire for (FP201.3.4).

(FP201.5.3) RANGE: Overloading the torpedo does not affect range in any way.

(FP201.5.4) DAMAGE: The damage inflicted by the torpedo is increased by 10 points. The damage is spread over three shields such that 4 points strike each of the two shields adjacent to the facing shield. 2 extra points of damage strike the facing shield. Thus, a turn 1 torpedo (normally launched for 3 points) is launched for 6 points of energy. It is overloaded, giving it a warhead of 4+12+4. If it hits Shield #1 of the target ship on impulse 6, it will do 4 points to shield #6, 12 points to shield #1, and 4 points to shield #2. The warhead addition caused by the overload does not degrade with range and remains a part of the torpedo until the torpedo itself runs out of time.

(FP201.5.5) DAMAGE TO THE TORPEDO: Any damage inflicted to the torpedo will be split among the three parts of the torpedo until nothing remains of the "wing" parts. This division of damage must be as even as possible. Any odd points of damage can be taken as the owner of the torpedo sees fit.

(FP201.5.6) BOLTED OVERLOAD: If an overloaded torpedo is bolted, add 4 points to the damage done by the torpedo. No extra damage is done to adjacent shields.

(FP201.6) BUILT-IN ECCM

Plasma Y/Z torpedoes have only two (2) points of built-in ECCM.

(FP201.7) ENVELOPING, SHOTGUN, AND PSEUDO-PLASMA TORPEDOES:

Plasma Y/Z torpedoes may not use shotgun or enveloping torpedoes. Psuedo-plasma torpedoes are not available to Daalmari ships. There is no PPT version of Daalmari plasma torpedoes.

(G201.0) SHIELD REGENERATOR

The shield regenerator is used exclusively by the Kakrea. Almost all races within the Pinwheel galaxy have discovered the principles of the shield regenerator, the immense radiation level emitted by the devices are only tolerated by the Kakrea. The device allows the Kakrea to repair shield boxes at a significantly improved rate over regular damage control.

(G201.1) DESIGNATION

Each "SR" or "S REG" box on an SSD represents one shield regenerator. Each regenerator is tracked separately.

(G201.1.1) DAMAGE: The shield regenerator is destroyed on "Flag Bridge" hits.

(G201.1.2) **REPAIR:** The shield regenerator cost 20 repair points to fix. The shield regenerator may not be "under-repaired".

(G201.2) OPERATION PROCEDURE

(G201.2.1) ALLOCATION: Each shield generator must be powered with one (1) point of energy to function. It must be allocated at the beginning of the turn and cannot come from reserve power. An unpowered regenerator offers no advantage to the ship (except as an extra hit).

(G201.2.2) SOURCE: The shield regenerator may be powered by any source except reserve power. The energy must be allocated at the beginning of the turn.

✔ (G201.2.3) EFFECTS:

(G201.2.3.1): Each powered shield regenerator is capable of repairing three (3) shield boxes per turn. This is cumulative with other shield regenerators and normal damage control. (G201.2.3.2): Any repair by shield regenerators happen immediately after repair of shields by (D9.2) and (D9.7). Shield regenerators operate independently of (D9.2) and (D9.7). (G201.2.3.3): A shield regenerator may repair any damaged shield box, even if the box was destroyed during the turn the regenerator was powered. The shield to be repaired is not written down at the beginning of the turn, instead, the repaired boxes are decided upon at the end of the turn. Shield regenerators may be powered even if no shield damage has been taken. This would be done in anticipation of shield damage occurring during the turn. If there is no shield damage, or less damage than the allocated amount of power would fix, the excess shield repairs are lost. The extra points may not be carried over to the next turn, and the energy may not be regained.

(G201.2.3.4) Only two boxes of shields per shield facing may be repaired per turn per powered shield regenerator.

(G202.0) PHASE DEVICE

The Phase device was developed and is exclusively used by the Olthenians. This technology was never given to the Penranni, and there is no indication that the Penranni ever - desired it.

Use of a Phase device allows an Olthenian captain to "phase out" of real space and enter an alternate reality called "phase space". During this time of "phasing" the Olthenian ship does not, in any way, interact with normal reality. It cannot be detected by any means, and it cannot detect what is happening in real space by any means. Even two ships in "phase space" cannot detect or communicate with each other.

Olthenian captains use this device defensively to avoid incoming attacks and offensively to enter enemy formations undetected. Used offensively, however, is a risky proposition, at best, as the phased ship cannot detect enemy ship movements and could emerge into real space in a very bad position.

Proper use of the phase device also requires the presence of one or more phase accumulators (G203.0)

(G202.1) OPERATION OF THE PHASE DEVICE

(G202.1.1) OPERATION: The phase device is activated or deactivated during the Activate/Deactivate Cloaking Devise Step of the Cloaking Device Stage of any impulse.

(G202.1.1.1): Turning on the device begins phase-out procedures (G202.1.4)

(G202.1.1.2): Turning off the device begins phase-in procedures (G202.1.7)

(G202.1.1.3): A Phase device can only be activated one time per 64 impulse period. Additionally, a phase device cannot be activated within 32 impulses of a previous deactivation. (G202.1.1.4): The phase-in or phase-out periods may cross turn breaks. e.g. the ship can announce phase-out on impulse 32 and complete phase out on the cloaking device stage of impulse 4 the following turn.

(G202.1.1.5): The Olthenian ship may abort phase-out at any point during the cloaking device stage of any impulse while phasing out. To do so requires the ship to immediately begin phase-in. The ship may not sit partially phased to "wait and see". If a ship aborts phase-out (G202.1.1.3) must still be obeyed. A phase-in may never be aborted and must always be completed.

(G202.1.2) INDICATION AND KNOWN DATA: When a phase-out is not yet complete, the counter for the phasing ship remains on the board and is moved normally. All appropriate information is still gained by the phasing ship(s) and non-phasing ship(s). When the ship has completed phase out, the point of complete phase is marked with the ship's counter and a "phase" counter placed over it. At this time the phased ship no longer knows what is happening in real space, and ships still in real space do not know the status of the phased ship.

(G202.1.3) FIRE CONTROL: While the Phase device is active, phasing ships may have active fire control. However, incoming and outgoing fire may have reduced effects due to the phase device (see (G202.1.4.1)). While fully phased the phased ship may still have active fire control, but there is nothing to shoot at while in phase space.

(G202.1.4) ACTIVATING THE PHASE DEVICE: If the phase device is not operating, and satisfies (G202.1.1.3) then the owning player may announce that the phase device is being activated during the Cloaking Device Stage of any impulse. However, it takes four impulses for the phasing ship to fully phase-out. Each impulse advance in phase-out occurs during the Cloaking Device Stage of the impulse.

(G202.1.4.1): During the first and subsequent impulses of the phase-out the effect of fire to and from the phasing ship can be disrupted. Any direct fire or seeking weapon that attempts to impact on the ship has a chance of missing (see (G202.1.4.2) for seeking weapon rules). Any fire at the ship must roll on the following chart before attempting to roll a "to hit" roll. If the first roll fall within the listed range, the shot simply does not hit, and passes through the target as if it was not there. (this is the effect of being partially phased). The phasing ship must also roll on the chart if it attempts to fire while phasing out. Again, if it is within the listed

range, the phasing ship misses outright (the shot travels into phase space instead of real space). Note, all activities that require a lock-on constitute firing, including transporters.

(G202.1.4.1.1) Partial Phase Combat Chart

Impulse of Phase-out:	1	2	3	4
Fire at phasing ship misses:	6	5-6	4-6	3-6
Fire from phasing ship misses	5-6	3-6	1-6	1-6

This chart applies to normal phase-out, fast phase-out, and phase-in. The change of impulse happens on the Cloaking Device Stage.

(G202.1.4.2): Seeking weapons are under similar penalties. A seeking weapon or shuttle that is launched from a phasing ship must roll on table (G202.1.4.1.1). If the roll indicates a miss, the launch has entered phase space instead of real space and is lost forever (this includes manned shuttles). Seeking weapons targeted on the phasing ship that enter the ships hex must also roll on (G202.1.4.1.1) under the "fire at" row. If the roll indicates a miss, the seeking weapon passes through its target, but is not removed from the board (unless its duration has expired). Instead, the seeking weapon will remain in the hex to attempt to strike its target again. The weapon does not lose lock-on until the phasing ship has completely entered phase space. A seeking weapon that is legally allowed to execute an HET may legally do so to remain in the hex and attempt to hit the target on the next turn. Otherwise all seeking weapons must obey stated movement rules. Dropping mines from the shuttle bay also falls under this rule

(G202.1.5) LENGTH OF PHASE-OUT: The length of time that a ship may remain in phase space is determined by the amount of energy stored in the ship's phase accumulators (G203.0) Phase accumulators are used and their energy committed at the moment the ship fully enters phase space, which is the Cloaking Device Stage of the fifth impulse after phase-out was announced. It is the third impulse after phase-out announcement when fast phase-out is used (G202.2.2).

(G202.1.6) FULLY PHASED VESSELS: A ship that is fully phased may not gather any information about operations in real space. To reflect this, a ship completing phase-out must immediately interrupt the normal sequence of play on the Cloaking Devise Stage in which phase-out was completed. At this time, the player must determine how long the ship will remain in phase space, and must pre-plot the entire time the ship is to remain in phase space. This includes all movement and any energy allocation while in phase space. The ship may remain in phase space through a turn break as long as enough energy from phase accumulators was committed at the time of phase-out. The ship must be able to account for all movement to the phase-in point, and may freely use any normal movement allowed the ship in real space. After all movement and energy have been plotted the player may not make any adjustments until he has begun phase-in.

(G202.1.6.1) HETs and QUICK REVERSES: Any movement that requires a breakdown roll (such as HETs) must be rolled prior to play continuing. The player that has phased out may make more than the required number of rolls to help keep secret some of the phase ship's maneuvers, but the rolls must be made before play continues.

(202.1.6.2) BREAKDOWNS: Breakdowns in phase space are very bad. If a ship breaksdown in phase space, whether the ship tumbles or not, it immediately drops out of

phase. There is NO phase-in period. This lack of a phase-in period is very stressful on the crew, and one-half of the surviving crew, boarding parties, and deck crews are immediately killed (round down). Also, a ship that breaksdown and immediately enters real space suffers ten (10) random internals (this is from parts of the ship that did not quite return with the ship). This damage is over-and-above any inflicted by the breakdown.

(G202.1.6.3): Note that a ship may not use pursuit plotting (C1.322) while in phase space. It cannot see the ship it wants to pursue.

(G202.1.6.4): There are restrictions placed on the movement speed of ships while in phase space, see (G202.2.1.1). A ship in phase space may not change speeds to violate these restrictions. If a ship starts phase-out with a plotted mid-course speed change that would violate any speed restrictions it must correct the plot, if possible. If it is not possible, the ship will begin phase-in immediately after phase-out is complete or before any speed violation would occur.

(G202.1.7) PHASE-IN: Phase-in immediately and automatically follows after the impulses of phase travel are expended. It also occurs when phase-out is aborted for any reason. It does not occur if a ship suffers a breakdown or hits a gravity-well while in phase. Phase-in lasts one (1) impulse, and during this impulse all fire to and from the ship suffers as per the first impulse of phase-out (see G202.1.4). On the impulse after phase-in begins the ship is in real space and may conduct normal operations.

(G202.1.8) DESTRUCTION OF THE PHASE DEVICE: The Phase device is an integral part of the ship and cannot be destroyed. There is no box on the SSD and it cannot be targeted by a hit-and-run raid. The device is destroyed on the last "excess damage" hit.

(G202.1.9) DOCKING: All units docked inside a phasing ship are assumed to phase with the ship and are not required to pay a phasing cost. Units that are docked inside a larger unit may not independently phase while so docked.

(G202.2) ENERGY COST FOR THE PHASE DEVICE:

(G202.2.1) ENERGY COST: Energy must be paid to activate the Phase device. This is usually paid during energy allocation, but may be paid with reserve warp. This energy must be warp power from the warp drives. Impulse, APR, AWR, and batteries are unsuitable for activating the device. The energy for activating a Phase device is equal to six (6) movement points for the ship.

1/4 movement cost=1 1/2 warp points.

- 1/3 movement cost=2 warp points.
- 1/2 movement cost=3 warp points.
- 2/3 movement cost=4 warp points.
- 3/4 movement cost=4 1/2 warp points.
- 1 movement cost=6 warp points.
- 1 1/4 movement cost=7 1/2 warp points.
- 1 1/2 movement cost=9 warp points.
- 2 movement cost=12 warp points.

This cost is paid only once per phase-out (activation) even if the phase period crosses a turn break.

(G202.2.1.2) Phasing-out and flight while phased has the effect of raising the ship's practical speed by 6 for purposes of maximum speed (the ship is figuratively moving 6 hexes at a right

angle to reality...). The ship cannot phase-out if this addition would violate the ships maximum speed or the speed of 31 (no ship can have a speed of greater than 31) as per (C2.411). This effect lasts through the phasing-out period, the fully phased period, and the phasing in period. However, if a ship that is phasing is tractored, calculate the psuedo-speed without considering the phase "speed".

(G202.22) FAST PHASE-OUT: An Olthenian ship may elect to use a fast phase-out instead of the normal phase-out. The effect is to be fully phased on the third impulse instead of the fifth, the disadvantage is that it costs the ship 12 movement points worth of warp power instead of six movement points. It must be allocated before phase-out begins, it may not be added after announcement to "speed things up". The practical speed of the ship increases by 12 when using fast phase-out for the entire duration of the operation.

(G202.23) BASES: No bases may Phase-out, or are even equipped to do so. No unit that lacks warp engines may phase, including units that have dropped their warp engines.

(G202.3) COMBAT WHILE PHASING-OUT or PHASING-IN:

(G202.3.1) DIRECT FIRE WEAPONS: All direct fire weapons have the chance of having no effect on the phasing ship. See (G202.1.4.1).

(G202.3.2) TRANSPORTERS: Transporters, like direct fire weapons, require a lock-on to function, therefore, transporters must roll on the chart listed in (G202.1.4.1.1). Any items transported into phase space are lost forever.

(G202.3.3) TRACTOR BEAMS: A ship that is phasing-in or phasing-out may not use tractor beams, however, it is possible for the phasing unit to be tractored. The ship that is attempting to tractor the phasing unit must roll on (G202.1.4.1.1) to determine if the tractor has locked on to the unit or if it misses (the power is still expended, whether a link is established or not).

(G202.3.3.1) EFFECTS OF A TRACTOR LINK: If a tractor link is established with a phasing unit, then the phasing-out process is involuntarily reversed. The next impulse will be the phasing-in impulse, and the following on the unit will be back in real space. The ship may not attempt to enter phase again for 64 impulses after first announcing phase-out (see (G202.1.1.3). Establishing a tractor link to a unit that is phasing-in has no extra effects.

(G202.3.3.2) CONTINUING TRACTOR LINKS: If a tractor link was established on a phasing-out unit, then the tractor link must roll again on table (G202.1.4.1.1) on the following impulse (the phase-in impulse) in order to maintain the link. Even if the link is not maintained, the phasing unit must complete phase-in and is still under the restriction of (G202.1.1.3).

(G202.3.3.3) ANTI-TRACTOR ENERGY: Anti-tractor is expressed inefficiently by a ship that is phasing. Each point of anti-tractor requires two points of energy from a phasing ship. This is only in effect while the ship is phasing-out or phasing-in. Once the ship has fully entered real space, anti-tractor reverts to its normal 1:1 ratio. This can result in the breaking of a tractor link without an increase in anti-tractor.

(G202.3.4) PSUEDO-FIGHTERS, INTERCEPTORS, FIGHTERS, and SHUTTLES: Any launch of psuedo-fighters, interceptors, fighters, or shuttles will be treated like a launch of a weapon. All launched units must roll on (G202.1.4.1.1). If the launched unit enters into phase space instead of real space it is lost forever.

(G202.3.5) WILD WEASELS: Wild weasels may not be employed by a phasing ship as its practical speed is above 4.

(G202.3.6) SPECIAL SENSORS: Special sensors from other ships may not affect a phasing unit. A phasing unit may only use mounted special sensors for defensive purposes on itself. (It may only lend itself ECM, no other function will work.)

(G202.3.7) MINES, T-BOMBS, SHIP EXPLOSIONS: A ship that is phasing-in or phasing-out will detonate mines normally and take full damage from mines it detonates. However, any explosions, mine or otherwise, not directly caused by the ship's movement must roll on (G202.1.4.1.1) to determine if the explosion affects the phasing ship.

(G202.3.8) ESG and OTHER TERRAIN: All terrain effects, including ESGs, webs, asteroids and pulsars, but not gravity waves, must roll on (G202.1.4.1.1) to determine if the phasing ship is unaffected. This is done once per impulse regardless of the number of effects that are incoming. Black hole gravity is not subject to this roll.

(G202.3.9) LOCK-ONs: Lock-ons to the phasing ship or by the phasing ship are unaffected during the phasing periods. All lock-ons between a phasing ship and all other units are lost after the phasing ship has completed phase-out.

(G202.4) GRAVITY WELLS: The Olthenian Phasing device does not operate within strong gravity, and any ship encountering a strong gravity well will phase in immediately.

(G202.4.1) EFFECT: If a vessel is within the range effect of a gravity well (G202.4.2) then the ship may not activate its phasing device. Additionally, it may never plot a course while in phase space that would take it into the range effect of a gravitational source. If this cannot be accomplished, then the ship may not announce phase out. If for any reason, a ship does enter a gravity well while phasing-out or in phase space, then it immediately begins phase-in.

(G202.4.2) RANGE OF EFFECT: The following large objects will interfere with the operation of the phasing device at the listed ranges:

Small Moon: 2 hexes. Planet: 3 hexes. Gas Giant: 5 hexes from outer atmosphere. Neutron Star: 10 hexes. Black Hole: 15 hexes. The following will interfere with the function on the Phasing device in their hex only: Any Nebula hex. Any Radiation Zone hex

(Both of these terrain features are massive enough because they encompass the entire hex)

(G203.0) PHASE ACCUMULATORS

These devices are required by a ship equipped with a Phase Device if they wish to stay in phase space for any length of time. The phase accumulator is used only by the Olthenian, and are only mounted on ships equipped with the Phase Device.

(G203.1) DESIGNATION

Each "PHASE" or "PHASE ACC" box on an SSD represents one phase accumulator. Each device is recorded separately

(G203.1.1) DAMAGE: Phase accumulators are destroyed on "drone" hits.

(G203.1.2) **REPAIR:** It costs 15 repair points to repair a phase accumulator. There is no option to "under-repair" a phase accumulator. Any energy stored in the phase accumulator when it is destroyed is lost.

(G203.2) OPERATION OF THE PHASE ACCUMULATOR:

(G203.2.1) ENERGY: Power may be stored in the phase accumulator for future use. This power must come from AWR or warp power, and must be allocated. Reserve power may not be used. Only one point of energy may be allocated to the phase accumulator per turn. No fractional energy may be stored.

(G203.2.2) STORAGE LIMIT: The storage limit of any given phase accumulator is 5 points of energy.

(G203.2.3) HOLDING COST: Once a phase accumulator has begun to hold energy, a holding cost of one point of power must be paid per turn, regardless of the amount of energy stored. This holding energy may come from any source.

(G203.2.4) ALLOCATION IN PHASE: A ship that is in phase space may continue to put energy in the phase accumulators, but this energy may not be used to extend the current plotted phase-space duration.

(G203.2.5) WEAPON STATUS: The amount of power stored in a phase accumulator before a scenario starts depends on the weapon status of the ship:

WS 0 or WS 1: no energy is stored.

-

WS 2: 1 point of energy in each phase accumulator.

WS 3: 2 points of energy in each phase accumulator.

(G203.3) DISCHARGE OF ENERGY FOR PHASE: On the Cloaking Device Stage of the impulse that the ship fully enters phase space the ship may discharge one or more phase accumulators to remain in phase space (if the ship does not discharge energy, then it immediately begins phase-in). A given phase accumulator must be completely discharged, there is no provision for partially discharging a phase accumulator. However, the duration of time that the discharged energy provides need not all be used. Any unused time is lost. Multiple accumulators may be discharged, but are not required to.

(G203.3.1) TIME IN PHASE: Each point of energy discharged from a phase accumulator in (G202.1.5) allows the ship to remain in phase space for (4 x energy discharged)/(movement cost of the ship). Any fractions are rounded down. Example: A light cruiser (2/3 movement cost) discharges 3 points of energy upon entering phase space. This energy allows the light cruiser to remain in phase space for 18 impulses ((4 x 3 energy)/(2/3 move cost) = 18 impulses).

(G203.3.1.1): A ship is under no obligation to stay in phase space for the entire length of time indicated. It may stay in phase space for 1 impulse up to the maximum number of impulses

calculated by (G203.3.1). This length of time must be plotted with the movement plot.

regardless of the amount of time spent in phase space, all energy discharged is lost.

(G203.3.1.2): If no phase accumulators are available, or the player chooses not to discharge any power, then the ship does not enter phase space and instead begins phase-in.

(G203.4) DESTRUCTION OF THE PHASE ACCUMULATOR: Any energy present in the phase accumulator when it is destroyed is lost. The destruction of all of the phase accumulators on a ship before it can enter phase space will prevent it from entering phase space (G203.3.1.2). Energy may not be discharged early for the purposes of (G202.1.5).

(G205.0) LINK SYSTEM

The link system is used by the civilian tug as a mechanical linkage for its pods and skids.

(G205.1) DESIGNATION

Each "LNK" or "LINK" box on an SSD represents on link system. Each link system is recorded separately.

(G205.1.1) DAMAGE: The link system is destroyed on "hull" hits.

(G205.1.2) REPAIR: The link system may not be repaired by continuous damage control.

(G205.2) PROCEDURE: There is no arming cost for the link system. The link system may attach any other undamaged link system. Each individual link may attach to two other link systems.

(G205.2.1) DOCKING: In order for the link to be established both the linking unit and the object to be linked with must be in the same hex, at speed zero, for 32 impulses. There does not need to be a functioning tractor. At the end of the 32 impulses the objects are linked and may assume normal operations.

(G205.2.2) DESTRUCTION OF THE LINK: If the link system is destroyed while attached to another link, then the link is severed and the damaged unit, along with all units connected through the damaged link, immediately disconnect from the "towing" ship. If the towing ship was traveling at warp speeds, then all pods so lost immediately breakdown.

(R200.0) General Units of the Pinwheel Galaxy

(R200.3) CLASS C FREIGHTER (FT-C): The ship shown is an Alhordian design. Other races have functionally identical designs with only cosmetic differences. The Alhordian version of this ship was in service in YP 22. Both the GSA and the YCC produce competing versions of this ship, with many of them exported to the Velrons, Daalmari, and even Olthenians. Over two thirds of all class C freighters originated in Alhordian shipyards.

(R200.6) CIVILIAN TUG (CIV-TUG): This ship was designed in direct competition to the standard freighter designs. This ship could carry up to eight cargo skids, four in front and four in back. Although it was slow and fragile, the main advantage of the ship was in the loading and unloading operations. While freighters needed to spend large amounts of time loading and unloading their cargo at bases, the tug could simply drop off one or more skids, to be unloaded at leisure. Thus, a cargo system based upon tugs and skids would be slower, but also cheaper in final analysis. The advantages and disadvantages of both systems have been debated endlessly, but sales of both freighters and tugs are steady. Additionally, all races except the Kakrea used the civilian tug in their military operations in order to set up bases and the like.

The phaser-1 of the tug has a 360 degree arc of fire if there are no skids connected. If one or more skids is connected to the front of the ship, the phaser has an RX arc. If one or more skids is connected to the rear of the ship, the phaser has an FX arc. If there are skids in the front and the rear, as pictured on the SSD, the phaser has an arc of L+R.

Skids other than cargo skids are available for the civilian tug, but they will be discussed in future products.

(R200.7) CIVILIAN POLICE SHIP: Like most of the civilian designs, this one had its genesis in Alhordian space. The primary mission of this ship was to monitor shipping between systems and to apprehend suspected smugglers. It could also function as a convoy escort. This ship was another heavily exported ship by the Alhordian shipbuilding companies, and was produced by all three major shipbuilding companies at one time or another.

(R200.9) OUTPOST STATION: This small station served as a border sentry for all races except the Kakrea. Although small, it has a fully functional stabilizer and can use phaser-4s. A civilian tug with two oversized pods can carry all of the parts of an outpost station to a site. Construction typically takes one to three weeks. In the early years, this unit was the primary line of warning against invasions by other races. A single outpost station was capable of supplying and maintaining a cruiser squadron for over a month, if that became necessary.

(R201.0) The United Federation of Olthenia

(R201.0.1) BACKGROUND:

Of all the races in the pinwheel galaxy, the Olthenians were the first to discover the principles of warp travel. Discovery of the principles of the phase device followed soon afterwards.

The government on olthenia at the time of the discovery of warp travel was a loose confederation of nations. Colonization of the neighboring star systems took a distant second place to the machinations and political intrigues of the homeworld. Other less technological races were discovered at this time, but the Olthenians only buzzed the planet and kidnapped a few specimens of each type for study without establishing any formal contact with the races.

Then an Olthenian by the name of Katharnel the Prophet appeared in the history books. Claiming visions of the future, and of far away places, he attracted a large following behind him. He teachings were of balance in all things, and the formation of a unified olthenia which could take its rightful place as the race chosen to deliver this message to the stars.

The leaders of the day did not agree with him, and attempted to have him killed. But he survived and left the planet accompanied by over ten thousand loyal followers. They established a colony on a nearby habitable planet of Savarel V. All was quiet for ten years...

Katharnel's visions of a far away galaxy had given him knowledge of a devastating weapon known as a 'plasma torpedo'. From what Katharnel could recollect of this, the engineers that

accompanied him managed to duplicate it. The seven ship that they had arrived in were equipped with these weapons, refitted, and flown back to olthenia for a day of reckoning.

When Katharnel arrived, he found a planet in turmoil. The small number of followers that he had left behind on olthenia had grown to a huge number. The governments were attempting to stamp out the teachings of Katharnel, but were having little success.

There was only one battle between the prophet's space forces and the government's forces. The result was decisive and devastating for the government forces. The only victory that they scored was the destruction of the flagship, and the death of Katharnel.

His followers made him a martyred saint and took control of the planet. With the teachings of Katharnel to guide them, a holy council was formed to rule the planet. The day that Katharnel returned to Olthenia is called the Day of the Prophet. A new calendar was established then, counting the number of Olthenian years that had passed since that event. This is recorded as Year of the Prophet, or YP.

In YP 30, the Vaen, a pre-warp race that the Olthenians had known about previously, was incorporated into the Olthenian federation. In YP 38, the Anhak, another pre-warp race, was incorporated into the Olthenian federation only after a long and bloody ground war. And in YP 49, the Olthenians encountered the pre-warp Bahlandari. Attempts to incorporate this race resulted in the destruction of the entire race as they employed fusion bombs on their own planet against the invading Olthenians.

Physically, the Olthenians are humanoid, with elongated arms and hands. Their heads are also large and elongated, with large, clear, teardrop shaped eyes that have no visible pupil or iris. They are mammalian, and there are two sexes in the race.

(R201.0.2) GENERAL OLTHENIAN RULES:

(R201.0.2.1) WARP DRIVE: The warp drive listed on the SSD may be hit on left warp, right warp, or center warp. The BPV of all Olthenian vessels includes the phase device, unless otherwise noted.

(R201.0.2.2) REFITS: The plus refits added additionally power systems to the Olthenian ships, and were made a part of new shipbuilding in YP 125. However, the process of refitting the older ships proceeded slowly, starting in YP 123, and the process was finally completed in YP 135.

(R201.3) FAR MISSIONARY SURVEY CRUISER (FM): Five of these ships were launched in YP 86, with the purpose of discovering new races and bringing the word of Katharnel to the ignorant heathens. For most other races, the first Olthenian ship encountered was a Far Missionary. Because it was expected to explore unknown, potentially hostile space completely on its own, with no support, it was designed to be a fully functional warship, capable of standing up to most cruisers. After YP 100, all of the far missionaries were recalled for use as fleet scouts, a job which they were more than adequate for.

(R201.4) HEAVY CRUISER(CA): This ship is the mainstay of the Olthenian fleet. The first one was built in YP -1 as a conversion of an early Olthenian cruiser. The only three early heavy cruisers in existence at the time were taken by Katharnel and his followers in YP -10. The SSD shows the ship with the plasma torpedoes installed. After the theocracy was established, all existing heavy cruisers were given plasma torpedoes and all new construction had them installed.

This ship exemplified the shipbuilding philosophy of the Olthenians. The ship is disk shaped, which has the infinite symmetries of a circle. All weapons are 6-fold symmetrical, without any particular arc being stronger than any other. This has a practical use when emerging from phase space as the enemy could appear in any weapons arc. This ship was the favorite of the early religious leaders, as no other ship had such a multiplicity of symmetries.

(**R201.5**) LIGHT CRUISER (CL): The first Olthenian light cruiser was built in YP 30. It has four plasma torpedo launchers, but has two phase accumulators. This arrangement allows this ship to remain in phase space for a longer period of time than the larger heavy cruiser. These ships were often used in pairs to patrol the borders of Olthenian space.

(R201.6) DESTROYER (DD): Another extremely common ship, especially in the early days of the theocracy. It has three-fold symmetry in its weapons, which was not as aesthetically pleasing as the heavy cruiser's weapon arrangement. However, they were much easier to construct than the

heavy cruiser. Note that this ship has its phasers in unusual arcs. There are phasers in the LRP arc and in the RRP arc. These are normally swiveled plasma arcs, however, for symmetry reasons, the phasers use the same 180 degree arcs that the plasma torpedoes would normally use.

(R201.7) FRIGATE (FF): This ship was popular neither with the council nor with the captains. It carried only two plasma-F torpedoes, and had only a two-fold symmetry in weapons. Considered undergunned even for a frigate, its only redeeming value was that it was able to stay in phase space longer than a destroyer could. Fleet commanders greatly preferred to have the superior destroyers in their fleet, but at times only frigates were available because of extensive battle losses of the destroyers. The frigate was typically relegated to the role of local planetary patrol and as a convoy escort.

(R202.0) THE ALHORDIAN CONFEDERATION:

(R202.0.1) BACKGROUND:

Within the Alhordian confederation there are over a dozen spacefaring races. However, the largest number of them are members of the Alhordian race. Physically, they are 2.5 meter tall bearlike mammals with a covering of short body hair. An odd quirk of the race is that 95% of them have seven fingers and a thumb on their right hand and five fingers and a thumb on their left. The other 5% has the opposite arrangement. They have two sexes, bear their young live, and are thoroughly omnivorous.

The Alhordians were a sublight spacefaring race in YP -40, and had planted two colonies on rather hostile worlds by YP 5. Fifteen years later, in YP 20, the discovery of warp travel brought these colonies back in contact with the homeworld.

By YP 25, the Alhordians had discovered six other sentient races within range of their ships, three of which were very near the discovery of the warp drive. After over a year of agonizing by the Alhordian rulers, it was decided that other races were to be left alone unless they obviously posed a threat to the Alhordian race.

The sphere of Alhordian influence expanded, and more colonies were planted. In YP 32, one of the previously discovered races, the avian Lavesia, discovered warp travel.

An Alhordian vessel met the first warp capable lavesia ship before it had even exited its own star system. After some rather tense communications, the Alhordian vessel flew to the lavesia home world and brought diplomats back to Alhordia.

In YP 34, the lavesia were made members of a newly formed Alhordian confederation, and this event served as an example for future foreign policy. Any warp capable starfaring race would be invited into the Alhordian confederation as long as it agreed to respect the ways and planets of all of the other member races. By YP 53, four more races had been invited to join the Alhordian confederation.

The kinetic energy weapon was invented in YP 57, after the Alhordians had discovered the Tethalve race. The race had native psychic abilities, and rapidly stole the secrets of warp travel from the Alhordians. A war between the confederation and the Tethalve lasted from YP 56-58, and was ended by a massive bombardment of the Tethalve homeworld with this new weapon. The Tethalve are believed to be extinct.

The Alhordians proceeded much more cautiously with contacts with new races, but by YP 82, five more races had joined the confederation. Additionally, by this time, three large multi-planet corporations had built extensive shipyards, and were competing with each other to supply the Alhordian member planets with ships for their navies.

In YP 83, an Alhordian patrol cruiser found itself nose to nose with four ships of the Velron holdings. Claiming that the Alhordians had intruded upon their territory, the Velron captain challenged the Ahlordian captain to a duel of honor to settle the matter, ship to ship.

The Alhordian cruiser nearly destroyed the Velron cruiser, but took crippling damage itself. The Velron captain, finding the Alhordians to be honorable opponents, invited the Alhordians to send a delegation to meet him when he recovered from his injuries.

The relationship between the Alhordians and the Velrons was built upon mutual respect, marred only by the squabbling of individual border worlds over bits of territory. In YP 86 the

Alhordians were contacted by the enigmatic Coldarins. Although cautious at first, the Alhordians opened limited trade relations with them in YP 87,

YP 88 brought the shock of encountering yet another starfaring race. This time, it was the fanatical Olthenians with their disappearing vessels. The Alhordians warned the Velron of the existence of the Olthenians, and found themselves in a series of border incidents with the Olthenians in YP 90 as the Olthenians sent missionaries to convert the heathens of the Alhordian border planets. This sparked a spurt of ship contracts by local planets, but the expected war with the Olthenians did not materialize.

(R202.0.2) ALHORDIAN RULES:

There are three distinct divisions within the classes of the Alhordian warships. As warships were bought and sold as a part of a free-market economy, three separate corporations went into the business of supplying the ships.

The first company to enter the business was the General Shipbuilders of Alhordia. Founded in YP 7, their ships were considered to be solid, reliable warships.

In YP 76 there was a massive internal dispute in the ranks of GSA. As a result, a number of the best engineers and managers left to start their own company. With backing, they build several secret shipyards in a lifeless system, and in YP 84, the first ship of the ICI, or Interstellar Construction Company, was launched.

Yaven Construction Consortium [YCC] was established in YP 94 by the avian Yaven race after they were appalled at the high prices of the GSA and ICI ships. They build the cheapest ships of the three companies, but you do get what you pay for...

The single warp drive of GSA ships is hit on left warp, right warp, and center warp hits.

(R202.0.2.1) PLUS REFITS: The refits were installed on the Alhordian vessels in large part due to the advent of fighters after the second incursion. These refits typically added the LPL system, which was a rather effective anti-fighter and anti-missile system.

(R202.2) HEAVY CRUISER (CA): This ship, constructed by the GSA, is considered to be the archetypical Alhordian ship. Although the rear shielding was not generous, the large amount of internal structure allowed the ship to take a pounding and still fight effectively. The slight limitation on the arcs of the rear phaser-2s was not considered to be a problem by the designers, as they were designed to be defensive phaser systems for the rear arc of the ship. GSA vessels typically were not equipped with phaser-3 systems. Instead, the larger and more flexible phaser-2 systems were employed for rear arc coverage.

(R202.5) LIGHT CRUISER (CL): This GSA vessel is considered to be solid, if not spectacular. It was designed as a less expensive, but less capable, version of the heavy cruiser. Its offensive ability was nearly equal to the heavy cruiser, but the ship was less durable.

(R202.8) DESTROYER (DD): This GSA ship was often one of the first ships purchased by successful colony worlds. It was a solid fleet support ship, and could be counted on to repel the occasional hostile incursion.

(R202.19) SCOUT (SC): This GSA ship is a pure scout, with no heavy firepower. The main customer for this ship was the Alhordian National Fleet. Sales of this ship fell off when the ICI introduced their line of dual-function scout-warships.

(R20.11) FRIGATE (FF): This was the 'economy' ship marketed by the GSA. It was touted as being inexpensive, yet perfectly functional. Strong sales of this ship indicate that the advertising was accurate.

(R202.1) HEAVY CRUISER (CAC): This ICI ship was dubbed the 'command cruiser' by non-Alhordians, and could function quite well in that capacity. It compared favorably to the CA in the power systems, shielding, and the choice of weapon systems. Instead of the defensive phaser-2 systems, the designers opted for improved arc phaser-1 systems that could be effectively employed in an offensive fashion. The only drawback was a 4-6 breakdown rating, which the GSA salesmen would point out at every opportunity.

(R202.3) K-17 HEAVY CRUISER (K-17): This ship was advertised by the YCC as the least expensive heavy cruiser available. However, as their competitors were quick to point out, you get what you pay for. This ship was not popular with the captains, as its phasers were the less effective phaser-2s. However, this ship was popular with planets that were on a tight budget that did not expect to get into an actual war. The refit, touted as the YCC 'command cruiser', is known as the K-18.

(R202.12) K-3 FRIGATE (K-3): The ultimate in economy ships by the YCC. This ship could more properly be classified as a police boat. However, it could be produced cheaply and quickly, and served as last minute reinforcements for more than one planet that was anticipating a visit from the Kakrea. There was no refit for this ship.

(R203.0) VELRON HOLDINGS:

The Velrons are an insectoid race, averaging 2.8 meters in height and 2.5 meters in length. Their color varies from shiny gold and silver to iridescent greens, blues, and purples. Four of their limbs are used for walking, while the front two are equipped with six fingers each. The large sharp mandibles are indicative of the carnivorous eating habits. They have vestigial wings that are used to convey emotion to other Velrons.

The Velrons are not as numerous as the other spacefaring races, but they are long lived. It is not uncommon for a Velron to have a natural lifespan in excess of 150 years. For most of the 10,000 years of written history, the Velrons have been organized into feudal holdings.

The Velrons first launched sublight colony ships in YP -140. The first one arrived in YP -50, on the planet of Tarel. The planet was already inhabited by a pre-industrial race of bipedal humanoid mammals.

The Velrons that landed immediately used their superior technology to take over the planet and divide up the planet amongst the nobility. Indeed, with so many native serfs, all of the Velrons on the planet found themselves with a title and lands.

The Velrons were not cruel masters of their conquered people. Indeed, with Velron technology now being applied for medicine and agriculture, the population of the native Tarellians exploded. Uprisings of the natives were rare and were put down quickly with a minimum of bloodshed.

In YP 30, a Velron ship equipped with warp drive appeared over the skies of Tarel. It carried hundreds of refugees from the homeworld who were fleeing the rule of Emperor Clavaxis. He ruled the homeworld with an iron fist and killed all that would stand in his way.

The Velrons on Tarel rushed to duplicate this discovery, and by YP 33 they had built their first warp capable ship based upon the refugee's ship. With no knowledge of the emperor's fleet or desire to find them, the Velrons of Tarel did not send a ship back to the homeworld. Instead, they started to colonize the nearby worlds. They brought along the natives of Tarel as well, to serve them on these new planets.

The emperor's fleets stormed into space in YP 40. Far larger than any colonial vessels, they took control of the spaceways and blockaded Tarel and its colonies. The emperor demanded that each Velron of the rank of duke and higher travel to Velron and swear an oath of fealty to him, or be killed.

Seeing no other choice, the colonists reluctantly complied. Future colonization slowed to a crawl as the emperor would not allow the expansion of Velron space to outpace his ability to control it. No ships were allowed to be built outside of the shipyards of the Velron homeworld, and all ships were captained by persons of known loyalty to the emperor.

In YP 50, an imperial scout landed on the planet of Yannas. The native reptilian race captured the scout ship, and by YP 58, they had built a fleet and launched their first attack against imperial Velron ships.

With limited shipyards, the war went poorly for the emperor. Reluctantly, to prevent certain eventual defeat, he allowed the colony worlds to build their own vessels. He restricted the size and weapon mounting of these ships by the rank of the noble that owned it. Additionally, he demanded that the vessel be personally captained by the owner at all times, and have one or more imperial advisors onboard at all times.

With Velron expertise and Tarel manpower, the colonists took to their task with a vengeance. By YP 60, the first colonial ship joined the fight against the Yanna.

The colonial Velron shipwrights found themselves revered by all other colonial Velrons. They built the best possible ships that they could under the emperor's restrictions, using the more accurate phaser-1s in place of the horde of phaser-2s present on imperial ships. Their shielding was just barely under the imperial limits. There was no limit on maneuverability, so the turn mode and HET capabilities were increased to the limit of the designer's abilities. With a massive research effort, the warp lance was invented in YP 63. As it was effectively just a modification of the engine and functioned by distorting the ship's own warp field, it did not count against the emperor's restriction on weapon ports.

The colonials did not reveal this new technology to the emperor, but built this into all of their ships. Even without the Velrons employing the warp lance, the Yannas were on the defensive in YP 64. By YP 67, the Velron had begun to siege the home world of the Yannas. In YP 69, the Yannas fleet was destroyed and the planet surrendered.

The colonists wasted no time in staging a rebellion. Under the leadership of Duke Kastell, a colonial fleet engaged an imperial fleet in YP 70. The warp lance was devastating against the imperial ships. There were four more defeats for the empire's fleets in YP 71. By YP 72, Duke Kastell had assembled a fleet to assault the homeworld and remove Clavaxis from power.

The Emperor fled, rather than face certain destruction. The colonial fleet met little resistance, and found an empty palace. Attempts to capture the emperor failed, as his ships had fled in multiple directions.

In YP 73, the Council of Tarel met to discuss the future of the Velron peoples. Consisting of all nobles of the rank of duke or higher and a number of the lower ranked nobles, the discussion was heated and intense. It was decided that there would be no central ruler or king, and no one would ever be allowed to ascend to that title again. However, there might be a time when another threat outside of the Velron holdings would arise, such as the Yannas. Therefore, at all times one of the nobles would hold the elected rank of president, for a period of three years. He would have the power to call the dukes and earls together for a council, and would command a fleet in times of war.

The restrictions on shipbuilding were held intact. While surprising to an outsider, this decision makes sense if the dueling code of the Velron is mentioned. The council of Tarel decided that matters of honor could be decided between nobles by ship-to-ship combat. The point of this is to test the courage and intelligence of the captains, not to see who has the bigger or better ship. However, rank has its privileges, and a lower ranked noble would be at a disadvantage challenging a higher ranked one.

Colonization was rapid after the fall of the Emperor. Velrons of the homeworld were eager to leave, as all of the drudgery would be done by the tarellian colonists that would also land there.

In YP 80, a far traveling Velron destroyer encountered a destroyer class Coldarin vessel. It took almost a day for the two vessels to establish communication, and it was then discovered that the Coldarins wished only to establish trade and safe passage through the Velron holdings.

The Velron baron agreed to trade with the Coldarins, and profited greatly from it. Other Velrons, learning of his prosperity, sought out the Coldarins and made their own deals. By YP 86, the Coldarins had been granted almost unlimited travel rights through the Velron holdings.

YP 83 brought another contact with an alien empire. A duke on patrol with three of his barons encountered a strange vessel in his space. He challenged the captain of the alien vessel to a duel to settle the dispute.

The alien vessel turned out to be Alhordian, and the duke lost by a narrow margin. After he recovered from his injuries, he welcomed the Alhordian captain on his colony world and, with the help of a visiting earl, gave the Alhordian captain the title of duke.

The Alhordians and the Velrons found themselves with no reason to go to war with each other. The Velrons politely declined an invitation to join the Alhordian confederation.

In YP 98, the Velrons encountered the fanatical Olthenians. Warned by the Alhordians of their existence, the duke on patrol challenged the Olthenian cruiser captain to a duel of honor. The Olthenians proved to be dishonorable opponents, and the duel degenerated to a general free for all. As a result of this, the President called a council together, and by YP 99, the Velrons were at war with the Olthenians.

By the year YP 100, there was one insectoid Velron for every 10 mammalian Tarellians in the Velron holdings.

(R203.0.2) GENERAL VELRON RULES:

(R203.0.2.1) PHASER REFITS: The phaser refits listed on the ship SSDs are not available until YP 101. They were installed to augment the firepower of these vessels against the Kakrea. Use of these weapons in a duel of honor was not sanctioned until YP 120, when all new ships constructed had these phasers installed.

(R203.0.2.2) MANEUVER RULES: All Velron warships have very good turn modes and two HET bonuses, unless otherwise noted. However, this is due to very special engineering techniques on the part of the Velron artisans. No Velron of frigate size or larger is nimble, in spite of the double HET bonuses and favorable turn modes.

(R203.3) HEAVY CRUISER (CA): This is the largest ship available to a duke under the terms of the council of Tarel. It was also frequently used by earls if they did not think that a battlecruiser was necessary. With 4 warp lances, this ship could gut an opposing cruiser at close range.

(R203.4) CRUISER (C): This is the original Velron cruiser built to fight against the emperor. It has the same heavy weaponry as the heavy cruiser, however, it was too easily taken out of action in fleet combats to stay popular.

(R203.5) LIGHT CRUISER (CL): This is the largest ship that a count is allowed to have. Built on the same hull as a heavy cruiser, it has a smaller main engine and only three warp lances.

(R203.6) DESTROYER (DD): The barons of the Velron holdings will captain destroyers. Although small, with two warp lances it still must be respected at close range. The turn mode is a fantastic AA and it has two HET bonuses, but the ship is not considered to be nimble.

(R203.11) SCOUT (SC): This was a very uncommon ship in the Velron holdings. With no heavy weapon capabilities, it was hardly capable of being used in a dueling situation. However, a few deeply indebted barons managed to bargain their way out of debt by agreeing to provide scout support for their liege.

(R203.7) FRIGATE (FF): This ship is the only one available to lords of the Velron holdings. With one warp lance, this ship does not pack a great deal of damage and can easily be disarmed by a penetrating volley. However, in groups they can be very dangerous. Like the destroyer, this ship has a turn mode of AA and has two HET bonuses, but is not considered to be nimble.

(R204.0) THE DAALMARI:

(R204.0.1) BACKGROUND:

The Daalmari are a race of shapeshifters. Their metabolism is reptilian, and in their most relaxed shape they resemble a rather rotund snake. Making crude limbs of various sorts requires a day or two of effort, while exactly copying the details of an alien race can take months. Regardless of their external shape, their metabolism remains reptilian, and they cannot make extensive internal modifications to their organs to survive hostile environments.

The Daalmari achieved warp travel relatively late compared to other races, without ever launching sublight colony vessels to other planets. Their first warp capable ship was constructed in YP 46, and by YP 50, they were actively colonizing nearby worlds.

The Daalmari did not find any other races during the first three decades of colonization. But in YP 80, an exploration ship intercepted weak transmissions from the direction of the spoke.

The Daalmari listened closely, but did not explore further in the direction of the signals. From the messages that were intercepted, it appeared that the other race used some sort of plasma energy as a weapon. This sparked a research effort upon the part of the Daalmari to develop a weapon for an expected future conflict. Additionally, they built a large listening station at the periphery of their territory in order to listen more closely to these transmissions.

By YP 85, the plasma-Y had been developed. The Daalmari finished refitting their ships with these weapons by YP 90. Finally, in YP 92, the Olthenians made first contact with the Daalmari.

The Daalmari took every opportunity to study the physical appearance of the Olthenians, and

within two months, several shapeshifting adepts had taken Olthenian forms. Their listening station had also overheard an Olthenian transmission that mentioned the discovery of another race that called itself the Kluzz. It was not yet warp capable, and the Olthenians were preparing to contact them and convert them to their cause.

This information triggered the Daalmari to act. In YP 93, the Daalmari struck suddenly and unexpectedly against the Olthenians. Within months, they found the homeworld of the Kluzz and isolated it from any possible Olthenian contact.

By this time, their agents in Olthenian space had ascertained that the Olthenian empire was far larger than the Daalmari and would eventually win by simply out producing the young Daalmari. With an eye for gaining an ally, Daalmari agents took the form of the Kluzz and dropped down to their homeworld, with the secret of warp drive and weaponry.

The Kluzz were much farther along than either the Olthenians or Daalmari had expected. They were highly industrialized and almost warp capable before the Daalmari had come with their care package of technology. In many areas, including computers and materials processing, the Kluzz were even more advanced than either the Daalmari or the Olthenians.

The protective shield of Daalmari ships around the Kluzz homeworld finally crumbled in YP 95. They had lost contact with their agents on the planet, but they knew that there were several ships under construction in Kluzz shipyards.

The Daalmari were ecstatic when they saw the Kluzz engage the Olthenians in combat in YP 96 and send the Olthenians running. Eager for an ally, they sent diplomats to the Kluzz, expecting to find a race that was grateful for their aid.

They were killed on sight. The Kluzz had uncovered the shapeshifting Daalmari within their ranks and had reacted poorly. In fact, the Daalmari briefly found themselves defending against a Kluzz offensive.

In YP 97, the Daalmari had discovered the Plasma-Z torpedo. Their few larger ships were rapidly fitted with the weapon, and fortunately these refits were complete by YP 99.

The Daalmari retreated to study the situation. They were still studying when the Kakrea invaded in YP 100.

The Daalmari are a very regimented, hierarchically organized people. There is a very strict line of command that extends even down to the common citizenry. On the rare occasions when upheavals have occurred, the struggles were brief, very bloody, and resulted in the change in ruling powers. The structure of the government has remained unchanged for the last five centuries.

Perhaps one in five thousand Daalmari achieve the rank of *heserstai*. This rank indicates that the individual is outside the normal command structure, subject to none except the highest ruling council. These individuals serve as inquisitors, spies, scientists, and any other role that requires creativity and autonomy.

(R26.0.2) SPECIAL DAALMARI RULES: (R26.0.2.1) PLASMA Z LAUNCHERS:

Before YP 97, all Daalmari ships had only plasma-Y launchers. To reflect this, replace each FA Plasma-Z launcher with a FP plasma B launcher in a scenario before this date. This is indicated on the ship type with a '-' after the ship designation. Example: CA-, CL-, Decrease the

indicated on the ship type with a '-' after the ship designation. Example: CA-, CL-. Decrease the BPV by 7 for each torpedo so downgraded. (R26.0.2.2) POWER/SHIELD REFITS: These refits were instituted as a response to the first

Kakrea incursion. First available in YP 102, the refits were not complete until YP 109. This is indicated on the ship type with a '+' after the ship designation. Example: FF+, CA+

(R204.3) HEAVY CRUISER (CA): The first of these ships was in service in YP 91. Before the invention of the Plasma-Z torpedo, the construction of heavy and light cruisers was limited to fulfilling the need for durable command ships. The invention of the Plasma-Z torpedo in YP 97 caused a sharp increase in the construction of heavy cruisers. With 2 Plasma-Z and 2 plasma-Y torpedoes, this ship had firepower on par with other races heavy cruiser.

(R204.4) CRUISER (C): This ship was the earliest size class 3 warship built by the Daalmari, and was something of an oddity. First in service in YP 87, the designers made a trade-off that resulted in poor fire control for four of the ship's phasers. This design flaw was not repairable without a

refit that did not justify the returns. Interestingly, the ship continued to be produced as late as YP 125. It frequently served as a leader of a destroyer squadron.

(R204.5) LIGHT CRUISER (CL): First in service in YP 89, this ship was sparsely produced until the invention of the Plasma-Z torpedo. Before YP 97 this ship had the same heavy firepower as a destroyer, which relegated it to the role of being a large destroyer leader.

(R204.6) DESTROYER (DD): This is the mainstay of the Daalmari fleet. With three plasma-Y torpedoes, it could put out a considerable amount of plasma damage for a ship of its size. The first such ship was in service in YP 85. Before that, the destroyers did not have plasma-Y launchers.

(R204.7) FRIGATE (FF): Another common ship in the Daalmari fleet. Its two plasma-Y torpedoes were considered to be superior to the two plasma-F torpedoes present on the Olthenian frigate. First in service in YP 85.

(R205.0) THE KAKREA

(R205.0.1) BACKGROUND:

There are unconfirmed reports that an Olthenian survey cruiser first encountered the Kakrea in YP 91. However, the ship did not return to tell the full story. The next encounter with the Kakrea was in YP 100, when they attacked every race in known space.

The Kakrea are actually a collection of a dozen or more insectoid races that appear to live together in perfect harmony. They vary from the 0.5 meter long beetles that swarm around the engines to the 3+ meter tall warriors that are fearsome in hand to hand combat. All of them appear to be capable of very rapid reproduction.

No one knows where their homeworld is, although it is theorized that it is either in or near the core of the galaxy. This is supported by the fact that they are all extremely resistant to radiation and can survive indefinitely in radiated environments that would be lethal to other races within hours.

They apparently roam freely in the unexplored space that is unclaimed by the known races. No communication has been established between the Kakrea and any other race. They do not have any defined political boundaries; and do not respect the boundaries of any other race.

Apparently at random, the Kakrea attacked and destroyed the spacegoing fleets of the known races. Sometimes, they would land on a planet and establish a colony. At other times, they would simply ignore a perfectly usable planet. The consequences of a Kakrea landing on a planet were severe. The Kakrea would strip the planet of resources with little regard for the ecosystem of the planet. The Kakrea population would skyrocket, and within a few years, the planet would start to produce ships. There are no specific colonization ships for the Kakrea. It appears that any Kakrea ship is capable of (crash) landing on a planet and starting a colony.

By YP 102, the Kakrea incursion ended as suddenly as it had started. Almost all races were hit very hard by this, with the Velrons suffering the most. Only the Kluzz emerged relatively unscathed from this. The galaxy breathed a collective sigh of relief, and resumed its previous squabbling.

YP 107 brought yet another incursion, although this one was quite brief. This triggered the famous (or infamous) 'bug hunts' by the various races to find and destroy the Kakrea infestations that existed outside of their borders. Some of these met with success, while other squadrons of hunters simply disappeared, never to be seen or heard from again.

For reasons that are not entirely clear, the Coldarins appear to have the biggest grudge against the Kakrea. They apparently have had dealings with them before they contacted the other races, and did not even try to talk to the Kakrea before engaging them in combat. Coldarins ships have been observed to fight it out to the bitter end against the Kakrea, rather than retreating to safer places.

(R205.0.2) KAKREA RULES

The Kakrea have abnormal damage control ratings and high life support costs. This is because the Kakrean ships have double the crew complement of any comparable ship of the other races.
(R205.0.2.1) LIFE SUPPORT: The Kakrean ships pay double the normal life support energy cost. This is the energy cost listed on the SSD. If a Kakrean ship qualified for emergency life support, it may use the zero power emergency life support option with negative side effects. If a Kakrean ship uses emergency life support, this will result in half of the crew and boarding parties being flushed into space. (It will take these crewmembers several hours to die -- the Kakrea are rather resistant to decompression) The damage control rating is cut in half, and the ship loses the advantages of (R205.22).

(R205.0.2.2) DAMAGE CONTROL: Kakrean ships have abnormally high damage control ratings due to their large number of crew units. Additionally, they may have two systems partially repaired at a time, unlike other ships. If they go to emergency life support, their damage control rating is cut in half. This will affect the total number of boxes that can be repaired. If, as a result of this change, the total number of repaired boxes meets or exceeds the adjusted damage control rating, no more boxes may be repaired by continuous damage control.

(R205.0.2.3) REFITS: The Kakrean ships received shield refits between the little incursion of YP 107 and the second incursion of YP 129. The additional boxes and BPV cost are listed on the SSD.

(R205.3) HEAVY CRUISER (CA):

This ship formed the mainstay of the Kakrean battle line. With the two magnetic torpedoes, four magnetic cannons, and a hoard of phaser-2 and phaser-3 systems, it needed to get close to an opponent in order to be effective. It is a puzzle why the Kakrea ships have the strange phaser firing arcs. This ship is no exception, with the central phaser-3s being able to fire straight backwards. It is not very maneuverable, which is typical of Kakrea ship designs.

(R205.4) CRUISER (C): This was the first Kakrea ship seen in known space. First spotted in YP 99 by the Olthenians, it disengaged before it could be destroyed. It was apparently an early design, and no refit of the ship was ever reported. There is one variant of the ship, designated as the Assault Cruiser (AC). This was a simple replacement of the magnetic torpedo with another magnetic cannon. This ship was frequently found in the company of one or more Swarmers.

(R205.5) LIGHT CRUISER (CL): This ship is entirely different from the heavy cruiser in appearance, with one warp engine in front, and the second one in back. With two magnetic torpedoes and only two magnetic cannons, it is a ship that is capable of engaging in long range combat if necessary.

(R205.6) DESTROYER (DD): With bizarre divided arcs for its shoulder phaser-2 systems, this ship shares the toughness of its larger brethren. With one magnetic torpedo and two magnetic cannons, it does its best fighting up close. This ship was present during the first incursion, at YP 100.

(R205.8) FRIGATE (FF): This ship completely lacks a magnetic torpedo. Therefore, with only phasers and two magnetic cannons, it has no choice but to close and try to engage at close range.

(R205.9) SWARMER (SW): This ship is the most commonly encountered ship during the 'bug hunts'. It is so named because fleets have had to deal with dozens of these ships coming in groups of one to four before they can get to attack an infested planet. With a single magnetic cannon, two phaser-2 and three phaser-3 systems, it sorely lacks in offensive capabilities.

(R205.0.2.2) DAMAGE CONTROL: Kakrean ships have abnormally high damage control ratings due to their large number of crew units. Additionally, they may have two systems partially repaired at a time, unlike other ships. If they go to emergency life support, their damage control rating is cut in half. This will affect the total number of boxes that can be repaired. If, as a result of this change, the total number of repaired boxes meets or exceeds the adjusted damage control rating, no more boxes may be repaired by continuous damage control.

(R205.0.2.3) REFITS: The Kakrean ships received shield refits between the little incursion of YP 107 and the second incursion of YP 129. The additional boxes and BPV cost are listed on the SSD.

(R205.10) DREADNOUGHT (DN): This monstrosity was first seen in known space in YP 102, at the end of the first incursion. It was destroyed in an assault on the Velron homeworld. Afterwards, one or more of these ships were present in all subsequent incursions. This ship was fearsome in close combat, capable of eviscerating a cruiser each turn. The presence of phaser-1s on this ship made it yet more dangerous. In spite of this feature, it is also a ship with phaser systems restricted to 60 degree arcs of firing.

(R205.11) HEAVY BATTLECRUISER (BCH): This ship, with four magnetic torpedoes, was better at ranged combat than the larger DN. Like the dreadnought, this ship had four phaser-1s, unlike most other Kakrean ships. Typical of other Kakrean warships, the firing arcs of the phasers were poor and chaotic. One ship of this type was seen by the Velrons in the little incursion of YP-107, with more arriving during the second incursion.

(R205.1) BATTLECRUISER (BC): This large ship was not seen at all during the first incursion. It made its first appearance in YP-125, during the start of the second incursion.

(R205.2) COMMAND CRUISER (CC): This is the smallest Kakrean ship that mounted any of the more accurate phaser-1 systems. It first appeared in YP 102, right before the end of the first Kakrea incursion. For heavy weapons, it had two magnetic torpedoes and four magnetic cannons. With the presence of the shield regenerators and armor, its biggest asset was its durability.

(R205.7) BOMBARDMENT DESTROYER (DB): This was a variant of the destroyer that had improved long range combat abilities. The ship has two magnetic torpedoes, and can contribute heavily to the long range firepower of a fleet. In spite of this, it was often ordered to engage the enemy at close range, in spite of the lack of close range heavy weapons.

(R205.12) SCOUT (SC): This is a destroyer variant, with a single sensor channel replacing the magnetic torpedo of the destroyer. It was fully combat capable, and was often sent into combat rather than being protected and held in reserve.





CREW UNITS ADMINISTRATIVE SHUTTL		CLASS B FREIGHTER
	3 10-14 4 15-20 5 21-27 BD 6 28+	SHIELD #I
TYPE II PHASER TABLE DIE RANGE 4- 9- 16- 3I- ROLL 0 1 2 3 8 15 30 50 I 6 5 5 4 3 2 1 1 2 6 5 4 3 2 1 1 2 6 5 4 3 0 0 0 3 6 4 4 1 1 0 0 3 6 4 4 1 0 0 0 0 0 0 4 5 4 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>SHIP DATA TABLE TYPE = FT-B POINT VALUE = 60/25 BREAKDOWN = 2-6 SHIELD COST = 1/2+1/2 LIFE SUPPORT = 1/2 SIZE CLASS = 4 REFERENCE = R200.2</td> <td>SHIELD *6 FRAN HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL H H H H H H H H H H H H H</td>	SHIP DATA TABLE TYPE = FT-B POINT VALUE = 60/25 BREAKDOWN = 2-6 SHIELD COST = 1/2+1/2 LIFE SUPPORT = 1/2 SIZE CLASS = 4 REFERENCE = R200.2	SHIELD *6 FRAN HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL HULL H H H H H H H H H H H H H
I 4 4 4 3 I I 2 4 4 4 2 I 0 3 4 4 4 1 0 0 4 4 4 3 0 0 0 5 4 3 2 0 0 0 6 3 3 I 0 0 0 COPYRIGHT I-28-1996 by Timothy E Janota with R All Rights Reserved	R A Mulder.	SHIELD #4 SENSOR SCANNER DAM CON EX DAM 630 039 220
, i i i i i i i i i i i i i i i i i i i		THIS SHIP CANNOT DISENGAGE BY ACCELERATION
		THIS SHIP CAN ACCELERATE BY NO MORE THAN 3 MOVEMEN POINTS PER TURN
		THIS SHIP DOES NOT CARRY T-BOMBS
WARP ENERGY MOVEMENT COST - 1/2 ENER	GY POINT PER HEX 5 - HET CO	ST (6) • ERRATIC MANEUVER WARP COST
SPEED I 2 3 4 5 6 7 8 Standard I I 2 2 3 3 4 4	9 10 II 12 I3 I4 I5 I6 5 5 6 6 7 7 8 8	

CREW UNITS ADMINISTRATIVE SHUTTLES	CLASS P FREIGHTER
3 10-14 4 15-20 BD 5 21-27 6 28+	
SHIP DATA TABLE TYPE II PHASER TABLE DIE RANGE 4- 9- 16- 3I- ROLL 0 1 2 3 8 15 30 50 I 6 5 4 3 2 1 1 2 6 SHIP DATA TABLE I 0 5 4 3 2 1 1 0 0 1 2 3 6 4 4 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <th>BRDG PH-2 EMER I I CGO BTTY CGO BTTY CGO BTTY CGO BTTY PH-3 I PH-3 I I I PH-3 I SHIELD #5 I</th>	BRDG PH-2 EMER I I CGO BTTY CGO BTTY CGO BTTY CGO BTTY PH-3 I PH-3 I I I PH-3 I SHIELD #5 I
5 5 4 3 3 0 0 0 0 6 5 3 3 3 0 0 0 0 0 TYPE III DEFENSE PHASER DIE RANGE 4-9- ROLL 0 1 2 3 8 15 1 4 4 4 3 1 1 2 4 4 4 2 1 0 REFERENCE = R200.5	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SENSOR SCANNER DAM CON EX DAM 60 09 20
COPYRIGHT 4-24-1996 by Timothy E Janota with R A Mulder. All Rights Reserved	
	THIS SHIP CAN DISENGAGE BY ACCELERATION THIS SHIP CAN ACCELERATE BY NO MORE THAN 3 MOVEMENT POINTS PER TURN
	THIS SHIP DOES NOT CARRY T-BOMBS
SPEED I 2 3 4 5 6 7 8 9 10 II 12 13 14 Standard I I 2 2 2 3 3 4 4 4 5 5	
Fract $\frac{1}{3}$ $\frac{2}{3}$ 1 $\frac{1}{3}$ $\frac{1}{2}$ 2 $\frac{2}{3}$ $\frac{22}{3}$ 3 $\frac{3}{3}$ $\frac{3}{3}$ 4 $\frac{4}{3}$ $\frac{42}{3}$	5 5 1/3 5 2/3 6 6 1/3 6 2/3 7 7 1/3 7 2/3 8 8 1/3 8 2/3 9 9 1/3 9 2/3 10





	ADMINISTRATIVE SHUTTLES IDENT HIT POINTS NOTES	TURN MODE SPEED C I 2-4 2 5-9 3 IO-14	CLASS C FREIGHTER
		4 15-20 BD 5 21-27 BD 6 28+	SHIELD #I
TYPE III DEFENSE PHASER DIE RANGE 4-9-		SHIP DATA TABLE TYPE = FT-C POINT VALUE = 26/13 BREAKDOWN = 2-6 SHIELD COST = 1/2+1/2 LIFE SUPPORT= 1/2 SIZE CLASS = 4 REFERENCE = R200.3 LF RF L RF	SHIELD *6 BRDG EMER CGO BTTY CGO TRAN HULL PH-3 SHIELD *5 SHIELD *5 MP WARP MP MP SHIELD *3 SHIELD *3 SHIELD *3 SHIELD *3
ROLL 0 1 2 3 8 15 1 4 4 3 1 1 2 4 4 2 1 0 3 4 4 1 0 0		LRYRR LS - LF + L + LR RS - RF + R + RR	SHIELD #4
3 4 4 3 0 0 0 5 4 3 2 0 0 0 6 3 3 1 0 0 0			SENSOR SCANNER DAM CON EX DAM
COPYRIGHT 1-28-1996 by All Ri	Timothy E Janota with R A ghts Reserved	Mulder.	
			THIS SHIP CANNOT DISENGAGE BY ACCELERATION
			THIS SHIP CAN ACCELERATE BY NO MORE THAN 3 MOVEMENT POINTS PER TURN
			THIS SHIP DOES NOT CARRY T-BOMBS
			THE WARP DRIVE MAY BE HIT ON LEFT. CENTER. AND RIGHT WARP HITS
			•
WARD ENERGY MO	VEMENT COST - 1/3 ENERGY	POINT PER HEX 5. HET	COST (6) - ERRATIC MANEUVER WARP COST
	VEMENT COST - 1/3 ENERGY 3 4 5 6 7 8 9	POINT PER HEX 5 - HET 0 9 10 11 12 13 14 15 10	

































SHADED BOXES ARE PRESENT ON THE K-18 REFIT



















CREW UNITS ADMINISTRATIVE SHUTTLES TURN MODE SPEED	VELRON FRIGATE
BOARDING PARTIES HET 3 17-24 BD 4 25+ BD 4 25+ BD 4 25+ HET SHIP IS NOT NIMBLE	SHIELD #1
TRANSPORTER BOMBSPROBESDID5TYPE I OFFENSIVE PHASER TABLE5DIE $6 - 9 - 16 - 26 - 51 - 75$ ROLL 01234582343765198728765543287375443443443544445544310046444310055444310055443100001511617171517161717181719181010101010101110121113101415161717181919101010111213141516<	SHIELD *6 PRB PH-1 PH-1 TRAN 2 LS*RF RS+LF TRAC LAB HULL EMER F AUX SHIELD *2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SHIELD #5 PH-3 PH-3 FIELD #3
WARP LANCE TABLE RANGE 0 1 2 3 4 5-6 7-8 9-10 11-20 21-30 HIT (STD) 1-6 1-5 1-5 1-5 1-4 1-3 1-2 1 1 DAMAGE. STD 16 15 14 13 12 10 8 6 4 2 DAMAGE. OVLD 24 22 20 18 16 14 12 - - - COPYRIGHT 1-28-1996 by Timothy E Janota with R A Mulder. All Rights Reserved	SENSOR SCANNER DAM CON EX DAM
	6530 0139 2220 THE ARC OF THE WARP LANCE IS DEPENDENT UPON THE DIRECTION OF MOVEMENT
	-
WARP ENERGY MOVEMENT COST - 1/3 ENERGY POINT PER HEX 5 - HET COS SPEED 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Standard 1 1 2 2 2 3 3 4 4 5 5 6 Fract $\frac{1}{3}$ $\frac{2}{3}$ 1 $\frac{1}{3}$ $\frac{2}{3}$ 2 $\frac{2}{3}$ 3 $\frac{3}{3}$ 4 $\frac{4}{3}$ $\frac{4}{3}$ $\frac{5}{5}$ 5 6	17 18 19 20 21 22 23 24 25 26 27 28 29 30 6 6 7 7 7 8 8 9 9 9 10 10 10
















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CREW UNITS ADMINISTRATIVE SHUTTLES	SHIP DATA TABLE TYPE = DD
BOARDING PARTIES THIS SHIP HAS TWO SHUTTLE BAYS BOARDING PARTIES TRANSPORTER BOMBS PROBES DD	POINT VALUE = 90 BREAKDOWN = 5-6 SHIELD COST = 1/2 1/2 LIFE SUPPORT = 1/2 SIZE CLASS = 4 REFERENCE = R204.6 PLUS REFIT = + 5 SHIELD *6 SHIELD *1 SHIELD *2 PL-Y FH A PH-1 FH TRAC 12 TRAN
TYPE I OFFENSIVE PHASER TABLE TYPE I DIE RANGE 6- 9- 16- 26- 51- DIE ROLL 0 1 2 3 4 5 8 15 25 50 75 I 9 8 7 6 5 5 4 3 2 1 1 2 2 8 7 6 5 5 4 3 2 1 1 2 3 7 5 5 4 4 3 1 0 0 0 3 7 5 5 4 4 3 2 0 0 0 3 4 4 6 4 4 4 3 1 0 0 0 0 0 5 5 5 4 4 3 3 1 0 0 0 0 <td>III DEFENSE PHASER SHITL PROBE SHITL RANGE 4-9- 0 1 2 3 8 15 4 4 3 1 1 1 1 4 4 2 1 0 4 4 1 0 0 4 4 3 0 0 0 4 8 8 8 8 8 8 9 4 4 2 1 0 4 4 1 0 0 4 4 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9</td>	III DEFENSE PHASER SHITL PROBE SHITL RANGE 4-9- 0 1 2 3 8 15 4 4 3 1 1 1 1 4 4 2 1 0 4 4 1 0 0 4 4 3 0 0 0 4 8 8 8 8 8 8 9 4 4 2 1 0 4 4 1 0 0 4 4 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
TURN(ENERGY) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> <th1< th=""> <th1< th=""> <th1< t<="" td=""><td>URN MODE SPEED B 1 2-5 2 6-10 HET 4 16-21 BD 6 29+ SENSOR SCANNER DAM CON EX DAM 6 0 2</td></th1<></th1<></th1<></th1<></th1<></th1<>	URN MODE SPEED B 1 2-5 2 6-10 HET 4 16-21 BD 6 29+ SENSOR SCANNER DAM CON EX DAM 6 0 2
	Image: Free Free Free Free Free Free Free Fr
WARP ENERGY MOVEMENT COST - I/2 ENERGY P SPEED 1 2 3 4 5 6 7 8 9 Standard 1 1 2 2 3 3 4 4 5 Fract 1/2 1 1/2 2 2 1/2 3 3 2 4 4 1/2	IO II I2 I3 I4 I5 I6 I7 I8 I9 20 21 22 23 24 25 26 27 28 29 30







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CREW UNITS 10 X 20 30 30	ADMINISTRATIVE SHUTTLES	
BOARDING PARTIES I IO TRANSPORTER BOMBS I IO TYPE III DEFENSE PHASE DIE RANGE I 4 2 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 4 4 5 4 6 3 1 2 3 1 0 0 0 0 0 0 0 0 0 0 1 9 8 7 10 1 2 3 1 9 8 7 1 9 1 </td <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td> <td></td>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
COPYRIGHT I-28-19	96 by Timothy E Janota with R A Mulder. All Rights Reserved FA - LF + RF RA - LF + RF RA - LR + RR LS - LF + L + LR RS - RF + R + RR	

OLTHENIAN COMMAND CRUISER



CREW UNITS	ADMINISTRATIVE	SHUTTLES ITS NOTES	OLTHEN
BOARDING PARTIES BOARDING PARTIES Image: Constraint of the second secon	R - 5	SHIP DATA TABLE TYPE = BC POINT VALUE = 175 BREAKDOWN = 5-6 SHIELD COST = 1+1 LIFE SUPPORT= 1 SIZE CLASS = 3 REFERENCE = R201.2 PLUS REFIT = + 4 THIS SHIP IS EQUIPPED WITH A PHASE DEVICE.	SHIELD *5
TYPE I OFFENSIVE PHAS DIE RANGE ROLL 0 I 2 3 4 5 1 9 8 7 6 5 5 2 8 7 6 5 5 4 3 7 5 5 4 4 3 3 5 5 4 4 4 3 3 2 2 PLASMA TORPEDO TABLE TABLE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <	ER TABLE 6- 9- 16- 26- 8 15 25 50 4 3 2 1 3 2 1 1 3 1 0 0 2 0 0 0 1 0 0 0 0 0 0 0	SI- B I 2-5 75 2 6-10 I 3 II-15 0 4 16-21 0 5 22-28 0 6 29+ 0 0 -	SHIELD #4
RANGE 0-5 6-I0 II-12 I. TYPE F 20 I5 I0 BOLT I-4 I-3 I-3	3-14 15 5 -3	PSEUDO-PLASMA TORPEDOES AFBFCFDF EFFFGFHF Janota with R A Mulder. ved	SENSOR SCANNER 6 6 5 1 2 3 1 0 9 THE

NIAN BATTLECRUISER



























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SHIELD #2

SHIELD #2

15





KAKREA SWARMER



2 1 1 0 2 4 4 2 1 0 1 1 0 0 3 4 4 4 1 0 0 1 0 0 0 4 4 4 3 0 0 0 1 0 0 0 4 4 4 3 0 0 0 0 0 0 0 5 4 3 2 0 0 0 0 0 0 0 5 4 3 2 0 0 0
1 1 0 0 3 4 4 1 0 0 1 0 0 0 4 4 4 3 0 0 0 0 0 0 0 5 4 3 2 0 0 0 0 0 0 5 4 3 2 0 0 0
1 0 0 0 4 4 4 3 0 0 0 0 0 0 0 5 4 3 2 0 0 0
0 0 0 0 5 4 3 2 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

WARP	ENER	RGY	MOVE	MENT	COS	т - т	1/4 E	NER	GY P	OINT	PER	HEX	5 - HET COST 6 - ERRATIC MANEUVER WARP COST																	
SPEED	1	2	3	4	5	6	7	8	9	10		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standar	d I	1	1	1	2	2	2	2	3	3	3	-			4		-	-	-	-	~	~	6	6	7	7	7	7	8	8
Fract	1/4	1/2	3/4	1	1 1/4	11/2	13/4	2	21/4	21/2	23/4	3	31/4	31/2	33/4	4	41/4	41/2	43/4	5	51/4	51/2	53/4	6	61/4	61/2	63/4	7	71/4	7 1/2

