# STAR FLEET BATTLES LOST ENPIRES RULEBOOK



CAPTAIN'S MODULE C6





## CAPTAIN'S MODULE ☆ C6 ☆ LOST EMPIRES

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## (Z48.0) NOTES ON *MODULE* C6 LOST EMPIRES

#### (Z48.1) ORGANIZATION AND COMPONENTS

**STAR FLEET BATTLES MODULE C6** is a modular expansion of the *SFB* game system. You will need the *SFB* **Basic Set** to use this material. This material will also require **Advanced Missions** and other products (e.g., **Module J**, **Module J2**, **Module K**, and **Module M**) to use it to the fullest extent. **Module C6** includes this 122-page rulebook, 138 page SSD book, and a sheet of counters.

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Include a stamped self-addressed envelope with all rules questions, submissions, or other inquiries. Most of the information which players seek (e.g., product schedules) is available free on our website.

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### (Z48.4) DESIGNER'S NOTES

This product was born out of a desire by our customers to see what would have happened if these two empires, destroyed during the Early Years, had survived into the "modern era" of *Star Fleet Battles* history. Introduced in *Module Y1*, both empires had basic backgrounds and technology. The challenge was to develop their technology into the General War era, taking into account the advancements of their enemies' technologies, and creating a historical background in which their survival was possible. In the latter case we came up with several concepts.

The Paravians had been done once before in *Captain's Log #28*, but that was in keeping with their previous history which left their ships as pseudo pirates in many respects. In this product they are presented as true warships, that is to say that the ships are designed for specific missions rather than being generalists. This meant dropping the cargo boxes and option boxes. Also as part of this, the concept of engine damage affecting their maneuverability was dropped, as they would surely have overcome this given enough time to evolve their ship designs.

The Carnivons presented a different challenge. They needed to be consistent with the area of space they were in, and as such remained a mixed phaser-1 and phaser-2 empire like the Lyrans (and arguably the Kzintis who, while lacking phaser-2s tend to have fewer phaser-1s than comparable Federation ships). Further, we did not want them to simply be another "disruptor and drone" empire like the Klingons and Kzintis. So the death bolt was retained, albeit with considerable improvements, and some explanation of why something the size of a type-I drone is so much more powerful. The answer to that was an unstable warhead that required special handling, still requiring dedicated crews (a reason no other empire adopted death bolts), but offering warhead options. While the rate of launch is slower than for drone racks because of this special handling, the dedicated crews can modify the warheads based on the situation, allowing a different tactical flare.

#### DEDICATION

This product is dedicated to the "lost battalions" of all nations.

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## (E23.0) DISRUPTOR CANNON

The disruptor cannon is a version of the disruptor used by the Carnivons. Unlike the disruptor bolts used by the Lyrans, Klingons, Kzintis, and others, the disruptor cannon is a two-turn-arming weapon. It is, for game purposes, literally a disruptor that uses twice as much power, fires half as often, and does twice as much damage.

All rules for the disruptor cannon are the same as those for the disruptor bolt, e.g., they cause leaks in Andromedan power absorber panels (D10.332), except as noted herein.

#### (E23.1) DESIGNATION

(E23.11) SSD: Each box on the SSD labeled "DC" represents one disruptor cannon. Each is recorded and fired separately.

(E23.12) DESTRUCTION: Disruptor cannons are destroyed by "torpedo" damage points.

(E23.121) DAMAGE PRIORITY: Disruptor cannons are destroyed before the equivalent ranged disruptor, e.g., a disruptor cannon-40 is destroyed before a disruptor-40 under (D4.3222).

(E23.13) REPAIR: Each disruptor cannon requires a variable amount of repair points under (D9.7) or (G17.0) depending on the maximum range:

- Range 4010 pointsRange 308 pointsRange 227 pointsDame 155 points
- Range 15 5 points
- Range 10 4 points

These are the same repair costs as disruptor bolts. Hasty repairs (G17.5) can be used but produce weapons of shorter range, e.g., a Range-40 disruptor cannon can be repaired as any lower range disruptor cannon for the repair cost of the lower range disruptor cannon. A disruptor cannon repaired as a lower range version cannot subsequently be upgraded to a longer-range version or the original version by continuing repairs (G17.54), but if the hastily repaired disruptor cannon is again destroyed during the scenario it can be repaired either fully or again hastily (G17.55).

(E23.131) Disruptor cannons cannot be repaired as disruptor bolts, and disruptor bolts cannot be repaired as disruptor cannons.

**(E23.132)** A hastily repaired disruptor cannon can be fully restored by tactical repairs (G17.132) between scenarios of a campaign, if the campaign rules allow tactical repairs between scenarios.

(E23.14) TECHNOLOGY RESTRICTIONS: Disruptor cannons were unique Carnivon technology in the Early Years, and historically the technology was lost with the destruction of the Carnivons. In *Module C6* it is assumed that the Carnivons would have continued developing the weapon, and the Orion pirates would have acquired examples and provided them to the WYN Star Cluster (for a price) if the WYN Star Cluster formed as it historically did.

(E23.141) A disruptor cannon takes one option mount per weapon. Range-30 and Range-40 disruptor cannons cannot installed on ships smaller than size class 3. Only gunboats can install Range-10 disruptor cannons in their option mounts, but other ships might hastily repair a longer-ranged disruptor cannon as a Range-10 disruptor cannon under (E23.13).

**(E23.142)** A Range-40 disruptor cannon costs four points. A Range-30 disruptor cannon costs three points. A Range-22 disruptor cannon costs two points. A Range-15 disruptor

cannon costs one point. A Range-10 disruptor cannon costs Zero points and can only be installed on gunboats. See Annex #8B.

Disruptor cannons can be installed in the weapon options of heavy war destroyers counting as a heavy weapon. A Range-22 disruptor cannon costs six points, and a Range-15 disruptor cannon costs four points. See Annex #8H.

**(E23.143)** Disruptor cannons are available to the Orion cartels (R8.0) beginning in Y135, and to the WYN Star Cluster (R12.0) beginning in Y140. Disruptor cannons would appear on Barbarian simulation ships (R55.0) around Y168, but might be used in the simulators of any other Alpha Octant empire from about Y128. Prior to Y128 such simulations would use the Early Years disruptor cannon (YE23.0). Jumokians (MR6.0) might have acquired such weapons after Operation Unity arrived in the Magellanic Cloud.

(E23.15) SIZE CLASS RESTRICTIONS: Disruptor cannons of Range 40 or Range 30 cannot be mounted on ships of size class 4 or less. Disruptor cannons of Range 10 cannot be mounted on ships larger than size class 6. Disruptor cannons used by fighters and bombers cannot have a range greater than 10 hexes. Disruptor cannons on defense satellites or captor mines have a maximum range within the normal rules for such units, e.g., a captor mine is limited to a range of six hexes (M4.424) unless command-controlled or chain-linked to a sensor mine (M4.432) in which case they have a maximum range of 15 hexes. Disruptor cannons on ground bases have a maximum range of 40 hexes unless the rules for that base define a shorter range. If a small ground base's positional stabilizers are not locked (G29.282), its disruptor cannon will be limited to Range 10. Disruptor cannons on fighters and bombers are armed and loaded using the same procedures as photon torpedoes (J4.85) except that energy from any source can be used to arm the weapon, and no proximity fuze option (J4.853) is available. They are fired as any other fighter or bomber heavy weapon (J4.45).

(E23.16) CREW QUALITY, SUPER-INTELLIGENT COMPUTERS, AND LEGENDARY OFFICERS: Disruptor cannons are treated as any other dire- fire weapon for purposes of crew quality (G21.0), super-intelligent computers (G11.0), and legendary officers (G22.0).

(E23.17) TACTICAL INTELLIGENCE: Disruptor cannons are detected as heavy weapons at intelligence level F. The number of heavy weapons is known at intelligence level G, but disruptor cannons cannot be distinguished from disruptor bolts (and vice versa) until tactical intelligence level I. Whether a given disruptor cannon is armed, arming, or unarmed is detected at intelligence level I. Whether or not a disruptor cannon is overloaded is detected at intelligence level M. The range of a given disruptor cannon cannot be detected by tactical intelligence.

#### (E23.2) ARMING PROCEDURE

(E23.21) ENERGY: Disruptor cannons are armed by allocating two points of power to the weapon on each of two consecutive turns. The weapon may be fired on the second turn. If the weapon is armed with less than four points of energy at the end of the second turn's Energy Allocation Phase, it is immediately discharged (E1.24). Contingent energy allocation (H7.6) cannot be used to complete the second turn's arming. The weapon can fire once every other turn (provided it is armed).

(E23.211) Power to arm a non-overloaded disruptor cannon may be provided by any power source on the unit.

## DIRECT-FIRE WEAPONS - E

## E — DIRECT-FIRE WEAPONS

(E23.212) Disruptor cannons can be fired at a maximum rate of once every two turns, but obviously cannot be fired on consecutive turns.

(E23.22) HOLDING: Disruptor cannons cannot be held; instead they use a form of rolling delay as hellbores do (E10.22). If not fired on the second turn of arming, the weapon loses the first turn of arming, and the second turn of arming becomes the first turn of arming in the arming cycle. If additional arming energy is not provided at the start of the third turn, then the arming energy for the second turn of arming is also lost at that point. Lost arming energy is "discharged" (E1.24), and must be announced along with the amount of energy discharged by each weapon, when it occurs. A disruptor cannon that discharges its energy during Energy Allocation can begin arming in mid-turn with reserve energy (E23.23).

(E23.23) RESERVE POWER: A disruptor cannon can begin arming in mid-turn by applying two points of reserve energy.

(E23.231) A disruptor cannon that begins arming with reserve energy must either be completed in the subsequent Energy Allocation Phase, or discharged (E1.24). If the weapon is completed with allocated energy during the subsequent Energy Allocation Phase, it cannot be fired within a quarter turn (eight impulses) of when the reserve energy was allocated to begin arming on the previous turn.

(E26.232) Disruptor cannons can begin their first turn of arming with contingent energy (H7.6), i.e., allocating only a part of the first turn's arming energy planning to apply the rest from reserve energy in mid-turn. If the additional arming energy is not provided, the contingent energy is discharged (E1.24) at the end of the turn. If reserve energy is applied to the contingent energy, and the weapon is completed during the subsequent Energy Allocation Phase, the weapon cannot be fired unless a quarter turn (eight impulses) has elapsed from the point where the reserve energy was applied to complete the first turn's arming.

(E23.24) WEAPON STATUS: At Weapons Status 0 or Weapons Status I disruptor cannons will have no energy in them.

At Weapons Status II or Weapons Status III the unit can be assumed to have completed the first turn's arming (or to be cycling its disruptor cannons on rolling delay).

The player controlling the unit may, at Weapons Status II or Weapons Status III, at his option, define the weapons as not currently armed unless a special scenario rule requires that the weapons have been armed. Note the obverse is also true, i.e., a special scenario rule may define that the unit's disruptor cannons are not armed despite the unit being at a high weapons status.

(E23.25) BLINDING SENSOR CHANNELS: Disruptor cannons blind sensor channels (G24.13).

(E23.26) FIRE CONTROL: Disruptor cannons are very similar to disruptors (E3.0), but not the same.

(E23.261) Disruptor cannons cannot use Ubitron Interface Modules (E3.61). The Ubitron Interface Module crystals burned out from the power loads of the disruptor cannons.

(E23.262) Disruptor cannons can benefit from the Disruptor Extended Range Fire Attenuation System (E3.62) and this computer program was refitted to all Carnivon units with disruptor cannons able to fire beyond 22 hexes range in Y169.

#### (E23.3) FIRING PROCEDURE

(E23.31) **PROCEDURE:** Disruptor cannons are fired in the Direct-Fire Weapons Fire Stage (6D2). Roll a single die and cross-reference the die roll result with the range from the firing unit to the target. Modify the die roll result as required by electronic warfare or other conditions affecting direct-fire and consult the Disruptor Cannon Table to determine if a hit or miss has been scored.

(E23.32) DAMAGE PROCEDURE: If a hit has been scored, apply the damage points for that range indicated by the Disruptor Cannon Table to the target in step (6D4) Direct-Fire Weapons Damage Resolution Stage. All damage caused by disruptor cannons is applied as a single volley combined with other weapons damage not otherwise scored separately [such as plasmatic pulsar devices (E11.332) and hellbores (E10.43)].

(E23.33) DISRUPTOR CANNON TABLE

RANGE	0	1	2	3-4	5-8	9-	16-	23-	31-	
HIT (STD)	NA	1-5	1-5	1-4	1-4	1-4	1-3	1-2	1-2	
HIT (DERFACS)	NA	1-5	1-5	1-4	1-4	1-4	1-3	1-3	1-2	
HIT (OVLD)	1-6	1-5	1-5	1-4	1-4	NA	NA	NA	NA	
DMG, STD	0	10	8	8	6	6	4	4	2	
DMG, OVLD	15	15	12	12	9	0	0	0	0	

(E23.34) MAXIMUM RANGE: Disruptor cannons have a maximum range of 40 hexes on large units such as battleships and dreadnoughts, but the range of disruptor cannons on smaller units is often limited, e.g., the disruptor cannon of a gunboat has a maximum range of only 10 hexes. (E23.341) In a case where the true range and the effective range differ, use the effective range to determine the range bracket on the chart for hit probability and use the true range for the damage scored if a hit is achieved.

(E28.35) MINIMUM RANGE: Non-overloaded disruptor cannons cannot be fired at targets at a true range of Zero.

(E23.36) FEEDBACK DAMAGE: If an overloaded disruptor cannon is fired at a true range of Zero and a hit is scored on the target, apply three points of feedback damage to the facing shield of the firing ship.

(E23.37) OVERLOADS: Disruptor cannons can be overloaded; see (E23.4).

#### (E23.4) OVERLOADS

(E23.41) COST: Disruptor cannons can be overloaded by allocating two points of warp power to the given disruptor cannon in addition to any other arming energy on its second turn of arming.

(E23.411) The overload warp power can be provided during the second turn of arming either by allocation or in mid-turn by reserve warp power (H7.54).

(É23.412) Once overload energy is applied, the given disruptor cannon is irrevocably committed to be fired (or discharged) as an overload. It must be fired or discharged at the end of the turn in which overload energy is applied. Even if the weapon is only contingently overloaded (i.e., only a fraction of a point of warp power above the normal two points of power is applied during energy allocation), the weapon is considered overloaded.

(E23.413) Only warp energy can create an overload. If a given disruptor cannon has more than two points of energy

allocated to it on a given turn and the energy in excess of the two points needed to arm it is not warp energy, the arming process is aborted. The weapon cannot be completed and must be discharged (E1.24). The disruptor cannon can begin arming normally on the following turn.

(E23.414) Note that in most cases some warp power will be applied to arm a disruptor cannon as the ship will have more non-warp power than warp power available. A disruptor cannon is only considered to be overloaded if more than two points of power is provided during the second turn of arming and the weapon has at least two points of warp power applied during the second turn of arming.

(E23.415) Overload energy cannot be applied to a disruptor cannon on its first turn of arming.

(E23.416) Players will need to note warp power allocated on the second turn of arming by noting a "w" after such energy, thus a disruptor cannon on its second turn prepared as an overload might be "1+3w." This notes in this case that one point of non-warp energy was used to arm the weapon, but that three points of the energy were warp power so the weapon (with its two points of power allocated on the first turn of arming) is a valid overload.

(E23.417) If a disruptor cannon is to be overloaded in midturn from reserve energy, the overload energy *must* be reserve *warp* power, even if the disruptor cannon completed its second turn of arming with warp power during Energy Allocation. Non-warp reserve power cannot be used to overload a disruptor cannon.

(E23.42) MAXIMUM RANGE: An overloaded disruptor cannon has a maximum range of eight hexes.

(E23.421) In a case where the true range and the effective range differ, use the effective range to determine the range bracket on the chart for hit probability and use the true range for the damage scored if a hit is achieved.

(E23.422) Overloaded disruptor cannons can be fired at a true range of Zero even though non-overloaded disruptor cannons cannot be.

(E23.43) SIDE EFFECTS OF AN OVERLOADED WEAPON: There are no side effects from overloading a disruptor cannon. An overloaded disruptor cannon fired on a given turn does not impact starting to re-arm the weapon during energy allocation of the following turn, even if the overloaded disruptor cannon was fired on Impulse #32.

(E23.44) EFFECT: Overloading a disruptor cannon increases the damage the weapon will score by approximately 50%.

#### (E23.5) SPECIAL CASES

(E23.51) TERRAIN: Disruptor cannons cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], black hole (P4.23), pulsar (P5.32) or star (P12.1). They can be fired into such a hex. They can be fired through ring (P2.223) and asteroid (P3.33) hexes with the standard electronic warfare penalties.

(E23.52) ATMOSPHERES: If a disruptor cannon is fired at a target in an atmosphere (including a target in the same hex as the firing ship), the damage it scores is reduced by one point per atmosphere hex the line of fire passes through/into. Note; Atmosphere has no effect on the disruptor cannons of ground bases that begin the scenario on the planet's surface (R1.14D) unless special scenario rules define otherwise.

#### **DIRECT-FIRE WEAPONS - I**

#### (E23.53) SIZE-CLASS-7 TARGETS:

(E23.531) Disruptor cannons are subject to the (FD1.52) penalty when firing at drones.

**(E23.532)** Disruptor cannons do not damage plasma torpedoes or other plasma-like seeking weapons, i.e., any weapon rule number that includes FP. Disruptor cannons also do not damage quantum wave torpedoes.

(E23.533) Disruptor cannons are penalized by (M8.52) if used to sweep mines.

(E23.54) WEBS: Disruptor cannons cannot fire through webs (G10.61), and cannot damage them. They can be fired out of webs, and can damage targets in a web hex to which they have a clear line of fire.

(E23.55) NON-VIOLENT COMBAT: Disruptor cannons cannot use Non-Violent Combat (D6.4).

(E23.56) ESGs: Disruptor cannons do not interact with ESGs in any way, i.e., they do not damage ESG fields and ESG fields do not block the fire of disruptor cannons.

## (E24.0) HEEL NIPPER

The "Heel Nipper" (more properly the "Warp Field Interruption Device," although this term is rarely used) was used by the Carnivons as part of their system of engaging enemy starships in combat. The weapon, which was veryshort ranged, would disrupt the warp field of an enemy starship or other warp powered unit, causing it to momentarily drop out of warp and, in some cases, involuntarily turn. Originally employed by the Carnivons during the Early Years, the weapon was improved somewhat between Y106 and Y122, increasing the range slightly and, against small targets, its rate of fire. This latter improvement was as result of smaller targets being more fragile and thus more easily affected, but only came into play due to the faster speeds they attained placing more stresses on their frames as a result of being hit.

#### (E24.1) DESIGNATION

(E24.11) SSD: Each "HN" box on the SSD represents one heel nipper weapon. Each weapon is recorded and fired separately.

(E24.12) DESTRUCTION: Heel nippers are destroyed on "drone" damage points.

(E24.121) DAMAGE PRIORITY: Heel nippers are destroyed before starbase anti-drone ammo tracks, but after type-F drone racks under (D4.3223).

**(E24.13) REPAIR:** Heel nippers cost three points to repair. There is no hasty repair function for the heel nipper.

(E24.14) TECHNOLOGY RESTRICTIONS: Heel nippers were unique Carnivon technology in the Early Years, and historically the technology was lost with the destruction of the Carnivons. In *Module C6* it is assumed that the Carnivons would have continued developing the weapon, but that no other empire, to include the Orion pirate cartels, was able to duplicate the technology even with captured examples. Heel nippers can only be used by non-Carnivon empires in the simulators.

(E24.141) In the simulators a heel nipper takes one option mount per weapon and can be used in "wing" option mounts of simulated Orion ships.

## E — DIRECT-FIRE WEAPONS

**STAR FLEET BATTLES** 

(**E24.142**) A heel nipper in the simulators costs three points. See Annex #8B.

Heel nippers can be installed in the weapon options of heavy war destroyers in the simulators counting as a heavy weapon. A heel nipper in the simulators costs four points. See Annex #8H.

**(E24.143)** In the simulators heel nippers are available to the Orion cartels (R8.0) beginning in Y135, and to the WYN Star Cluster (R12.0) beginning in Y140. Heel nippers would appear on Barbarian simulation ships (R55.0) around Y168, but might be used in the simulators of any other Alpha Octant empire from about Y128. Prior to Y128 such simulations would use the Early Years version of the heel nipper (YE24.0). Jumokians (MR6.0) might have acquired such weapons in their simulators after Operation Unity arrived in the Magellanic Cloud.

(E24.15) SIZE CLASS RESTRICTIONS: No fighter or bomber was ever equipped with a heel nipper. No defense satellite was ever equipped with a heel nipper, and only limited numbers of captor mines were armed with heel nippers.

(E24.16) CREW QUALITY, SUPER-INTELLIGENT COMPUTERS, AND LEGENDARY OFFICERS: Heel nippers are treated as any other direct-fire weapon for purposes of crew quality (G21.0), super-intelligent computers (G11.0), and legendary officers (G22.0).

(E24.17) TACTICAL INTELLIGENCE: Heel nippers are distinguished from other weapons at tactical intelligence level F. Whether a given heel nipper is armed or unarmed is known at tactical intelligence level L.

#### (E24.2) ARMING PROCEDURE

(E24.21) ENERGY: One unit of warp energy is allocated to the heel nipper to arm the weapon normally. Each point of warp energy fires the weapon one time.

(**E24.211**) EXTENDED RANGE: A second point of warp energy can be allocated to a heel nipper or provided by reserve power. This second point of warp energy extends the range at which the heel nipper can be fired.

(E24.212) A heel nipper can normally fire once in a given turn at a ship of size class 4 or larger. A heel nipper can be fired a maximum of four times in a given turn at units of size class 6 or smaller; each such shot requires 0.25 energy points. A given heel nipper cannot fire more than four shots in a given turn, nor can it fire more than four shots in a given quarterturn period.

**(E24.213)** If fired at a unit of size class 5 or larger the normal quarter-turn delay between turns applies, e.g., if fired at a ship on Impulse #32 of a given turn, a heel nipper cannot fire at a ship or other unit until Impulse #8 of the following turn. If fired at a target smaller than size class 5 during the previous turn, the heel nipper cannot fire at a target larger than size class 6 until the quarter-turn delay has passed. For example, if a heel nipper fired a single shot at a fighter on Impulse #31 of a turn, it could not be fired at a frigate any earlier than Impulse #7 of the following turn. It might be able to engage units of size class 6 or smaller depending on when it fired other such shots during the previous turn. For example, if it had fired at a drone on Impulse #24, it would be able to fire at least one shot on Impulse #1 of the current turn.

(E24.22) HOLDING: Armed heel nippers cannot be held and fired on a later turn. If a heel nipper is not fired on the turn it is armed, it is automatically discharged (E1.24) at the end of the turn and the energy applied to it is lost and cannot be

regained. Discharge does not constitute firing the weapon and does not delay firing the weapon (with different energy) on the next turn.

**(E24.23) RESERVE POWER:** If not armed during Energy Allocation, the weapon can be fired using reserve energy under the provisions of (H7.5), provided it is not fired any sooner than eight impulses after being fired on a previous turn; see (E24.31). The weapon can be armed with contingent energy (H7.6), i.e., have part of its arming cost paid during Energy Allocation with the remaining warp energy needed to fire the weapon being supplied by reserve energy during the turn. If the weapon is not fired by the end of the turn, any energy in the weapon is lost (discharged) (E1.24).

(E24.24) WEAPON STATUS: Heel nippers are not multi-turn arming weapons and cannot hold energy from previous turns; in this they operate as disruptors do (E3.0). Unless otherwise noted by special scenario rules, a given heel nipper can have energy allocated to it during any Energy Allocation Phase or through reserve energy and be fired on the same turn regardless of the Weapons Status of the ship.

(E24.25) BLINDING SENSOR CHANNELS: Heel nippers do blind sensor channels (G24.13) if they fire at normal strength (at a target of size class 4 or larger). Heel nippers fired at targets of size class 6 or smaller only blind special sensors if they fire more than one shot in a given impulse (or fire at full strength, i.e., as if the size-class-6 target were size class 5 or larger), and will blind one special sensor each time a given heel nipper does so. If two heel nippers in a given impulse each fire a shot at a size-class-6 or smaller target no special sensor will be blinded, but if one heel nipper fired twice or more in that impulse it would blind a special sensor.

#### (E24.3) FIRING PROCEDURE

(E24.30) PROCEDURE: Heel nippers are fired in the Direct-Fire Weapons Fire Stage (6D2). The heel nipper is a "hit or miss" weapon. To determine if it has hit, determine the range to the target, designate which warp engine on the target ship is the target of the heel nipper, and roll one die. [If the target has no warp engines, the heel nipper cannot affect it. Heel nippers do not affect AWRs.] If the resulting die roll is within the designated range on the "hit" line of the Heel Nipper Table for that range, the weapon has hit the target. If a hit has been scored, apply the damage (E24.31-1) to the target in step (6D4) Direct-Fire Weapons Damage Resolution Stage. The movement effect of a hit is resolved as per (E24.31).

(E24.31) EFFECT OF A HIT: In the event that the heel nipper strikes the target, the following effects are resolved:

1. One point of damage is scored on the targeted warp engine. Souldra dark warp engines (OR13.033) are treated as warp engines. This damage is scored on the warp engine regardless of any shields (D3.0), power absorber panels (D10.0), or armor (D4.12) the targeted ship has, and regardless of any reinforcement energy [(D3.34) or (D10.2)]. The ignoring of shields includes Magellanic Shields (MD2.0), Flame Shields (OG1.2), Sigvirion Secondary Shields (OG2.0), Soul Shields (OG9.0), and Subspace Energy Fields (OG14.0). Armor includes Ceramic-Composite Armor (OD1.0). Note that as a direct-fire weapon a heel nipper nominally triggers an energy backlash from a flame shield (OG1.132), but the energy level is so low that it will not cause even a single point of shield damage or internal damage and is ignored.

2. The target loses its next scheduled impulse of movement or its next warp tactical maneuver. Orbital

movement and movement caused by terrain or a tractor beam is not affected.

3. The target is involuntarily forced to turn (E24.32) but not move on the next impulse, and its turn mode and sideslip mode are reset to zero. Any directed turn mode (C3.8) accumulation is lost.

If the unit is size class 5 or larger, there are no other effects. A hit by a heel nipper cannot affect or stop erratic maneuvers or an allocated high energy turn, nor would it prevent docking or shuttle recovery, nor would it stop a tumbling ship from tumbling or cause a ship to tumble.

If several heel nippers strike a given unit of size class 6 or smaller in the same impulse, the unit only loses one hex of movement (if it survives) but *is* damaged by each heel nipper which hit it.

(E24.311) If the target is not moving by warp power, including warp tactical maneuvers, the only effect of the heel nipper is to damage a warp engine box (if the target has a warp engine box that was a target of the heel nipper) and lock the use of a plotted warp tactical maneuver between the heel nipper's use and the availability of the next warp tactical maneuver. Note that a heel nipper has no effect at all on any RYN unit (OR19.0) regardless of its size class.

(E24.312) Heel nippers do not affect reserve power, so reserve warp power could be used by a target to execute a high energy turn or a warp tactical maneuver on the impulse following a heel nipper hit.

**(E24.313)** Heel nipper damage will not block a sublight tactical maneuver, nor will it affect the movement of a unit moving solely by impulse power (E24.30), although it will damage a warp engine box on such a unit if the targeted warp engine has such a box. A heel nipper will not damage a unit moving solely by quantum transporters (OG15.0).

(E24.314) The mechanics of heel nippers are such that if multiple heel nippers strike a target of size class 5 or larger on the same impulse, only one has any effect; the others have no effect as a result of interference.

**(E24.315)** A hit by a heel nipper does not block high energy turns. A unit struck by a heel nipper being forced to turn or not turn normally can use an allocated or reserve high energy turn to overcome this on a subsequent impulse.

(E24.316) A hit by a heel nipper does not modify the unit's practical or effective speeds, nor does it reduce the unit's maneuver rate.

(E24.317) Heel nippers will not cause engine damage if the engine they are firing at has already been destroyed, but the unit would still be forced to turn (or not turn in the case of a center warp engine) in the appropriate direction, or lose its next tactical maneuver if it is using warp power for movement or tactical maneuvers.

(E24.318) Heel nipper damage to a unit's warp engines will still be caused even if the unit is not otherwise using power from its warp engines for movement, i.e., is moving solely under impulse power or as a result of a tractor link to another unit. If a unit is moving solely on impulse power (not using its warp engines to generate movement), it will be forced to turn in the direction required as a result of the last heel nipper in a given turn to hit it on Impulse #31.

(E24.319) If a ship has no warp engines, either because it never had them or because they have been destroyed or dropped, it is unaffected by heel nipper damage, and will not be forced to turn.

#### DIRECT-FIRE WEAPONS — E

(E24.32) INVOLUNTARY TURN: Which engine was hit determines the direction of an involuntary turn:

Left warp engine: ship turns left.

Center warp engine: ship does not turn.

Right warp engine: ship turns to right.

(E24.321) Note that in the case of a Gorn ship (R6.0), both engines are actually "center" even though one is designated "right" and the other is designated "left" for purposes of the Damage Allocation Chart.

This does not modify the unit's practical or effective speeds, nor does it reduce the unit's maneuver rate.

(E24.33) MAXIMUM RANGE: The maximum range of the heel nipper is four hexes normally. If an additional point of warp power is applied to the heel nipper, its range is extended to eight hexes. Heel nippers have no minimum range and can be fired at targets at a true range of Zero.

(E24.331) In cases in which the true range and the effective range are different, use the true range to determine the chance of a hit. If the true range is four or less and the effective range is five or more, treat the range as "two hexes" for both purposes. If the heel nipper is armed for extended range (E24.211), and if the true range is eight or less and the effective range is nine or more, treat the range as "eight hexes" for both purposes. If a hit is scored, the full effect of the weapon is applied to the target, e.g., a heel nipper fired at a cloaked catfish drone (FD51.0) at Range 1 with a lock-on would fire at the drone at an effective range of six. A hit would still cause the drone to take one damage point, plus additional damage points for any speed above 12, and lose its next impulse of movement.

#### (E24.34) OTHER TARGETS:

(E24.341) If fired at a shuttle, and a hit is scored, count effect #1 as one point of damage to the shuttle, but add an additional point of damage for every three points of speed or fraction thereof the shuttle is moving faster than Speed 8. Resolve effect #2 normally, and count effect #3 as if the shuttle had "center warp."

Damage Example: A fighter is moving at Speed 15 and is hit by a heel nipper: the fighter takes one point of damage, plus an additional three points of damage as a result of its speed. Note that if the fighter had active warp booster packs, this damage would be doubled (J5.31).

(E24.342) If fired at a drone or missile, and a hit is scored, count effect #1 as one point of damage to the drone or missile, but add an additional point of damage for every three points of speed the drone or missile is moving faster than Speed 12. Resolve effect #2 normally, and count effect #3 as if the drone had "center warp". The heel nipper is an unpenalized weapon under (FD1.51).

Damage Example: A drone is moving at Speed 20 and is hit by a heel nipper: the drone takes one point of damage, plus an additional three points of damage as a result of its speed. If the drone is an unarmored type-I or a type-VI, it will be destroyed.

Note: A hit on a hyperdrone (E55.332) or mass driver missile (ME2.61) will destroy them immediately due to their high speed.

(E24.343) Heel nippers cause no damage to and have no effect on terrain, units without warp engines, quantum wave torpedoes, plasma torpedoes or similar weapons unaffected by disruptors, or mines.

(E24.344) If a target that would otherwise be affected is docked to a base or has landed on a planet, moon, or large asteroid, ignore effects #2 and #3. If the target is trapped in a web, ignore effect #3 but note that effect #2 may delay escape from the web.

## E — DIRECT-FIRE WEAPONS

(E24.345) If a monster is hit by a heel nipper, it suffers all of the effects that a ship would suffer. These are, in the case of some monsters, all but irrelevant.

#### (E24.35) HEEL NIPPER TABLE

POWEŔ	RANGE	0	1	2	3	4	5	6	7	8	
1	HIT	1-5	1-4	1-3	1-2	1	_	_	_	_	
2	HIT	1-5	1-4	1-4	1-3	1-3	1-2	1-2	1	1	

(E24.36) FEEDBACK DAMAGE: Heel nippers do not cause feedback damage, not even if fired inside the Qixavalor Cloud (OP1.22).

(E24.37) OVERLOADS: There is no overload function.

(E24.38) AEGIS: Aegis allows the player some flexibility in allocating the fire of heel nippers when engaging units of size class 6 or smaller.

(E24.381) A ship with a heel nipper not equipped with aegis wishing to fire that heel nipper at multiple size-class-6 or smaller targets must record each target it will attempt to hit along with all other fire in that impulse in the Fire Decision Step of the Fire Allocation Phase (6D1). The player could choose to fire one or more pulses in a given impulse, and fire one or more pulses in later impulses.

(E24.382) A ship with limited aegis (D13.4) could choose to fire some or all of the pulses of a given heel nipper in the first aegis step along with all other non-aegis fire, or reserving some or all of pulses for the second aegis step. Any pulses fired in the first aegis step would have to be recorded along with any other weapons fire. After observing the effects of the fire, any remaining pulses can be plotted against targets in the second aegis step. Note that other weapons on a ship with limited aegis may also be able to fire in the second aegis step.

(E24.383) A ship with aegis (D13.0) could choose to fire some or all of the pulses of a given heel nipper in the first aegis step along with all other non-aegis fire, or reserve some or all of the pulses for the subsequent aegis steps. Any pulses fired in the first aegis step would have to be recorded along with any other weapons fire. After observing the effects of the fire, any or all remaining pulses can be plotted against targets in the second aegis step, and after observing their effects, any remaining pulses could then be fired in the third or fourth aegis steps. Note that other weapons on a ship with aegis may also be able to fire in the subsequent aegis steps.

(E24.39) OTHER: As with all other weapons, heel nippers cannot affect dimensionally phased units (OG13.0).

#### (E24.4) SPECIAL CASES

**(E24.41) TERRAIN:** Heel nippers cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], black hole (P4.23), pulsar (P5.32) or star (P12.1). They can be fired into such a hex. They can be fired through ring (P2.223) and asteroid (P3.33) hexes with the standard electronic warfare penalties.

(E24.42) ATMOSPHERES: Heel nippers fired at units inside atmospheres only damage their engines under (E24.31-1). Such units are not forced to turn, nor do they lose their next scheduled impulse of movement through the atmosphere. In short, a shot from a heel nipper cannot cause a unit in atmosphere to crash into a planet (except through destruction of the last power box enabling powered flight), or force it to exit the atmosphere. Heel nippers are not otherwise affected by atmospheres.

## (E24.43) SIZE-CLASS-7 TARGETS:

(E24.431) Heel nippers are not subject to the (FD1.52) penalties when firing at drones.

(E24.432) Heel nippers cause no damage to and have no effect on plasma torpedoes or similar weapons [any weapon whose rule number is (FP0.0), or (OFP0.0), or (MFP0.0)], to include quantum wave torpedoes.

(E24.533) Heel nippers are not penalized by (M8.52), but have no effect on mines or defense satellites.

(E23.54) WEBS: Heel nippers cannot fire through webs (G10.61), and cannot damage them. They can be fired out of webs, and can damage targets in a web hex to which they have a clear line of fire.

(E23.55) NON-VIOLENT COMBAT: Heel nippers cannot use Non-Violent Combat (D6.4).

(E23.56) ESGs: Heel nippers do not interact with ESGs in any way, i.e., they do not damage ESG fields and ESG fields do not block the fire of heel nippers.

#### END OF SECTION (E0.0) MODULE C6

## DRONES - FD

## (FD20.0) DEATH BOLTS

Death bolts are a type of drone used by the Carnivons. Death bolts used material in their warheads that was highly sensitive and unstable requiring dedicated personnel to oversee and perform every aspect of their operations while aboard a ship. The payoff for this was that the warheads were far more effective when they struck their targets, doing more damage than a type-IV drone on a frame the size of a type-I drone. The special handling needed to use a death bolt resulted in a very slow launch rate.

The rules for death bolts are the same as for drones [(F0.0) and (FD0.0)] except for some special changes. Death bolts were historically last seen in combat in Y106. The rules here assume that the Carnivons survived and continued developing the system.

#### (FD20.1) DESIGNATION

(FD20.11) SSD: Each "DB" box on the SSD represents one death bolt rack. Each rack is recorded and launches its death bolts separately. In the Early Years these boxes were always adjacent to a shuttle bay box and were part of the shuttle bay. They are now separate from and independent of the shuttle bays.

(FD20.12) DESTRUCTION: Death bolt racks are destroyed by "drone" damage points.

(**FD20.121**) DAMAGE PRIORITY: Death bolt racks are destroyed before type-C drone racks, but after type-B drone racks under (D4.3223).

(FD20.122) SPECIAL DAMAGE PRIORITY: In the Early Years death bolt racks would be destroyed by chain reaction explosions (D12.0), but this does not apply to the Middle Years and later death bolt racks.

(FD20.123) DESTRUCTION EFFECT: The destruction of a death bolt rack destroys the rack and any death bolt loaded on it or in the process of being loaded on it, even if the death bolt being loaded only commenced loading that specific impulse (FD2.4441). Any other death bolts are not damaged, and could be loaded onto the rack if it is repaired, and if deck crews are available to operate the rack (FD20.20).

(FD20.13) REPAIR: To repair a death bolt rack under (D9.7) or (G17.0) requires five repair points. Death bolt racks may be hastily repaired under (G17.5) for three repair points, but the resulting rack cannot do any modifications (FD20.5) to death bolts.

(FD20.14) TECHNOLOGY RESTRICTIONS: Death bolt racks are unique Carnivon technology; no other empire can use them outside of the simulators. While there is no doubt the technology could have been duplicated [although the type-H drone (FD21.0) is a rough approximation], no empire chose to do so because of the difficulties in operating the weapon aboard ships.

(FD20.141) In the simulators a death bolt rack takes a single option mount space. It cannot be placed in the wing option mounts of Orion ships.

(**FD20.142**) A death bolt rack costs two BPV in the option mounts of an Orion (R8.0), WYN (R12.0), Barbarian (R55.0), or Jumokian (MR6.0) ship or base; see Annex #8B.

A death bolt rack costs five BPV if placed in the option mounts of a heavy war destroyer and counts as a heavy weapo;, see Annex #8H. Carnivons can place death bolt racks in the option mounts of their heavy war destroyers outside of the simulators if playing them as a normal empire. **(E24.143)** In the simulators death bolt racks are available to the Orion cartels (R8.0) beginning in Y135, and to the WYN Star Cluster (R12.0) beginning in Y140. Death bolt racks would appear on Barbarian simulation ships (R55.0) around Y168, but might be used in the simulators of any other Alpha Octant empire from about Y128, prior to Y128 such simulations would use the Early Years version of death bolt racks (YFD20.0). Jumokians (MR6.0) might have acquired such weapons in their simulators after Operation Unity arrived in the Magellanic Cloud.

(FD20.15) SIZE CLASS RESTRICTIONS: Death bolt racks cannot be used by any unit smaller than size class 4 except that a ground base might be equipped with them. Death bolts themselves cannot be carried by any unit not able to be fitted with a death bolt rack except for bombers (R19.F12)-(R19.F15). This is because death bolts are high maintenance weapons requiring constant servicing. Bombers are the smallest units able to carry a death bolt, and their operational time before returning to base is equivalent to the amount of time a given death bolt will remain ready to launch. For this reason, no fast patrol ship variant carrying death bolts ever entered service as the crews were too small to keep the death bolts operational during the period the gunboat was on patrol, and having gunboats sitting around waiting to be attacked was uneconomical.

(FD20.16) CREW QUALITY, SUPER-INTELLIGENT COMPUTERS, AND LEGENDARY OFFICERS: Death bolts benefit from the ECCM provided by outstanding crews (G21.212), super-intelligent battle computers (G11.21), and legendary officers [(G22.71) and (G22.23)]. Poor crews do not harm the death bolt, but cannot fully support it with electronic warfare (G21.112). Ships armed with death bolts are not "carriers" and do not benefit from (G21.243), i.e., gain extra deck crews for their death bolt racks. A carrier that happened to also be armed with death bolt racks would gain the deck crews for its fighters, but would not gain additional deck crews for its death bolt racks.

(FD20.17) TACTICAL INTELLIGENCE: Because death bolt racks in the Early Years were inside the shuttle bay they could not be detected until a death bolt was launched (YFD20.18). Subsequent Carnivon ships were built to have separate hatches and compartments for the individual death bolt launchers, and these can be detected as drone racks can. The presence of hatches for the launching of drone-like seeking weapons is detected at Level F. The fact that the hatches are for death bolt racks is detected at Level I. Whether or not a given death bolt launcher is actually armed with death bolts can only be determined under tactical intelligence when a death bolt is actually launched.

(FD20.18) RACKS: Death bolts are not launched from traditional drone racks, although the effect is largely the same. A ship armed with death bolts has four of them for each rack on special mounts ready to be loaded on the rack (FD20.21). In addition there are four more death bolts (for each rack) in storage (FD2.442).

(**FD20.181**) Death bolts cannot be loaded on scatter-packs, drone racks, or fighters; they can be loaded on bombers designed to use them.

(FD20.182) Death bolt racks cannot be loaded with drones. (FD20.183) In Y175 Carnivon ships were given additional death bolt storage. Beginning in that year each death bolt rack will have six death bolts available for launching and 12 death bolts in storage.

## FD — DRONES

(**FD20.184**) Reloading of the death bolt rack (FD20.20) is not planned in the Initial Activity Phase (5) as with drones (FD2.42), but can begin and conclude in mid-turn.

#### (FD20.2) PREPARING DEATH BOLTS

(FD20.20) **REQUIREMENT:** Each death bolt must be "prepared" prior to being launched. Preparation requires one "deck crew action" (J4.817) to move a death bolt from ready use to the launch rack. This deck crew action can begin at any time in a given turn, but must be recorded (J4.8175).

(FD20.201) Two deck crews can work on one death bolt and combine their activities. It does not require energy to prepare a death bolt.

(**FD20.202**) The deck crew, or deck crews, must be in the death bolt box to prepare a death bolt and are killed if the death bolt box they are in is destroyed (J4.811).

(**FD20.203**) Additional deck crew actions can be expended on a given death bolt being prepared for launch to modify its properties (FD20.5).

(FD20.21) LIMIT: A given death bolt rack may have no more than one death bolt prepared for launch (or in any stage of preparation) at any given time.

(FD20.22) SEQUENCE: The deck crew or deck crews of a given death bolt rack may not start work on preparing a death bolt for launch until eight or more impulses after that death bolt rack has launched a death bolt. If work is interrupted, it must be restarted from zero; it cannot be resumed at the point of the interruption.

(FD20.23) DECK CREW LIMIT: No more than two deck crews may work on preparing a given death bolt on any given death bolt rack at any one time. The deck crews that work on death bolts are dedicated deck crews and not those (J4.814). [In the Early Years the death bolts were serviced by the normal deck crews as provided in (J4.814), but dedicated weapons crews are provided in the Middle Years and after.]

(FD20.231) Deck crews can be moved between the different death bolt racks of a given ship, or between the ship's shuttle bay or bays and the death bolt racks, in the same manner as deck crews on carriers (J4.813).

(FD20.232) On non-carriers, the two deck crews provided by (J4.814) can be assigned to assist in loading the death bolts (in addition to the dedicated death bolt deck crews), or used to replace death bolt deck crews lost when their death bolt rack was destroyed but which has been repaired. Note that if the deck crews provided by (J4.814) are used in this way, they will be unavailable to perform deck crew actions in the shuttle bay unless reassigned there.

(**FD20.233**) Note that only carriers can purchase additional deck crews under Commander's Options (J4.816), non-carriers, including those with death bolts, cannot purchase extra deck crews.

(**FD20.234**) Deck crews that are transferred from their ship or base to another ship or base during a scenario cease to function as deck crews (J4.814).

(**FD20.235**) Regular crew units and boarding parties cannot be converted into deck crews (G9.431). If a ship has lost all of its deck crews it cannot reload any death bolt racks it may have available. Deck crews cannot be directly attacked by hitand-run raids (D7.826). (FD20.24) STORAGE: It requires two deck crew actions to move a death bolt from storage (FD2.442) and place it in the death bolt compartment. This cannot be done during any time that a deck crew, or deck crews, are working on the preparation of a death bolt in that same compartment. If work is interrupted, it must be restarted from zero; it cannot be resumed at the point of the interruption.

(FD20.25) BOMBER READY RACKS: Death bolts can only be loaded onto a bomber from ready racks designed for that specific bomber, i.e., a Bear-3 (R19.F15) cannot have death bolts loaded on it from a ready rack (J4.89) designed for a Bear-1 (R19.F12). Even with a ready rack, it takes three deck crew actions (J4.817) to load a single death bolt onto a bomber; two deck crews (maximum) can combine to load one death bolt. Note that up to six deck crews could be working on a medium bomber (J14.234) and eight deck crews could work on a heavy bomber (J14.235). Moving death bolts from storage (FD4.443) to the ready racks of a given bomber still requires two deck crew actions per death bolt moved (FD20.24), and additional deck crew actions may be expended to modify the death bolt's properties (FD20.5) once it has been loaded onto the bomber.

(FD20.26) DROGUES: A Carnivon version of the seeking weapons drogue (G34.31) with three death bolts is available.

(FD20.261) This drogue's death bolts must be made ready by the deck crews of the ship before it can be deployed (FD20.20).

(FD20.262) Death bolts are loaded on drogues in the same manner as on a death bolt rack (FD20.20).

(**FD20.263**) Death bolts loaded onto a drogue cannot be modified under (FD20.5), but are simply standard death bolts (FD20.31) available for the year, i.e., either Speed 20 or Speed 32.

(FD20.264) The Carnivon seeking weapons drogue can launch its death bolts at a maximum rate of one every four impulses.

(FD20.27) WEAPON STATUS: At Weapons Status 0 or Weapons Status I death bolt racks will not have a death bolt loaded.

(FD20.271) At Weapons Status II death bolt deck crews can have completed two turns of actions (the same as for deck crews on carriers). Note that if the deck crews provided by (J4.814) are used to assist the death bolt deck crews the ship will not have any shuttles prepared for "special missions." A carrier might have some of its fighter deck crews assist the death bolt deck crews at the expense of not having some fighters armed. There is no time lost for transferring deck crews before a scenario begins, the deck crews are assumed to have been sent to rehearsed battle stations as directed by the ship's commander.

(FD20.272) At Weapons Status III the ship's initial loading of death bolts can be assumed to be fully completed including any (FD20.5) modifications. Deck crews can be assigned at the start as the ship commander chooses, i.e., there is assumed to have been enough time for all deck crew actions to be completed except that no death bolts can have been moved from storage (FD2.442) to the death bolt room.

(FD20.273) The player controlling the unit may, at Weapons Status II or Weapons Status III, at his option, define the weapons as not fully ready unless a special scenario rule requires that the weapons have been armed. Note the obverse is also true, i.e., a special scenario rule may define that the unit's death bolts are not ready despite the unit being at a high weapons status.

## DRONES - FD

#### (FD20.3) DEATH BOLT OPERATIONS

(FD20.30) GENERAL: Except for special death bolt targeting (FD20.4) and modifying their properties (FD20.5), death bolts operate exactly as drones do, e.g., they are launched at the same point in the Sequence of Play as drone (6B6). This includes targeting limits (anything but a plasma torpedo), firing at drones, ESG interactions, etc. Damage caused by death bolts is applied and combined with all other damage resolved during the Resolve Damage From Seeking Weapons Not Resolved Above Step of the Damage During Movement Stage (6A3), see the Annex #2: Sequence of Play.

(FD20.31) PARAMETERS: Death bolts have a speed of 12, a warhead of 30 points [unless modified under (FD20.5)], an endurance of three turns, and require 10 damage points [unless modified by (FD20.54)] to destroy. Death bolts are the same size as type-I drones, but cannot be substituted for type-I drones and require careful handling due to the complex and sensitive nature of their warheads requiring deck crews to make them operational (FD20.20).

(FD20.311) In Y168 all death bolts were improved to a speed of 20. This increases the cost of the unit by a half a BPV point per death bolt in the initial loading, e.g., by two points per death bolt rack before Y175, and by three points per death bolt rack after Y174. Note that this increase in BPV also applies to a bomber, e.g., a half point per death bolt loaded on the bomber or in its ready rack at the start of the scenario.

(**FD20.312**) In Y180 all death bolts were improved to a speed of 32. This increases the cost of the unit by one BPV per death bolt in the initial loading, e.g., by six points per death bolt rack (this cost includes the death bolts added by the Y175 refit). Note that this increase in BPV also applies to a bomber, e.g., one point per death bolt loaded on the bomber or in its ready rack at the start of the scenario. This cost already includes the cost for the upgrade to Speed 20 in (FD20.311), i.e., the cost is one point, not 1.5 points for Speed 32.

(FD20.32) IMPACT: The impact of a standard, type-VI, or other drone will destroy a death bolt, and vice versa. Impacts by hyperdrones (E55.0), and mass driver missiles (ME2.0) damage death bolts normally and may not do sufficient damage to destroy the death bolt. Anti-drones treat Early Years death bolts (YFD20.32) as drones, i.e., a hit will destroy the death bolt. Anti-drones treat Middle Years and later death bolts as shuttles (E5.31), except that any damage is doubled; an anti-drone which hits a death bolt will do from two to 12 points of damage. Other weapons treat death bolts normally, i.e., do the indicated amount of damage to the death bolt which may or may not destroy it.

(FD20.33) DOGFIGHT: Death bolts cannot be launched in a dogfight (J7.531).

#### (FD20.4) SPECIAL DEATH BOLT TARGETING

(FD20.40) BASIC CONCEPT: Death bolts were not as accurate in pursuing their targets as standard drones. They made up for this, however, with a directional warhead. While the warhead "range" is vastly less than a single hex, it is somewhat more than the proximity blast detonation system used by drones.

(FD20.41) DESIGNATION: At the time a given death bolt is launched, the launching player designates if the weapon is to "lead," "normal," or "follow" the target. This designation has no effect on normal drone movement; it comes into play only upon impact. This designation is made secretly and in writing.

(FD20.42) EFFECT: At the time a death bolt enters the hex of its target, the controlling player reveals the designation above. The shield that the death bolt strikes is then determined by the chart below:

Nominal		Shield Actually Struck	
Shield Facing	Lead	Normal	Follow
1	1	1	2 or 6
2	1	2	3
3	2	3	4
4	3 or 5	4	4
5	6	5	4
6	1	6	5

As you can see, if the designation is to "lead" the target, then the death bolt's damage is scored on the shield that is one "shield facing" toward the front of the ship. For example, a "leading" death bolt which (by normal drone movement) would strike the #3 shield will in fact strike the #2 shield.

(FD20.421) There is one complicated situation, that being in the event of a leading death bolt approaching the rear shield or a following death bolt approaching the front shield. In either case, roll one die, with odd numbers indicating that the death bolt has struck the starboard (right side) shields (#2 or #3) and even numbers indicating it has struck the port (left side) shields (#5 or #6).

(FD20.422) In the event that the ship is traveling in reverse, treat a leading death bolt as a following death bolt (and vice versa) for the chart above. Treat a ship which is not moving as one that is moving forward.

(FD20.423) If the target is a base, the designation is "left" or "center" or "right" (from the viewpoint of the launching ship), not "lead," "normal," or "follow." The shield that is struck is judged accordingly.

#### (FD20.5) DEATH BOLT MODIFICATION

(FD20.50) BASIC CONCEPT: The warheads of death bolts were extremely complicated, allowing the weapon to be tailored to the environment in which it would operate. This explains its extreme maintenance demands. The explosive material was literally an energy source for various systems built into the death bolt, and deck crews preparing a death bolt for launch could add various capabilities at the expense of reducing the warhead's yield.

(FD20.501) Each adjustment requires one deck crew action and can only be done on a death bolt already loaded onto the rack (FD20.20) and otherwise ready to be launched. Death bolts in storage, to include those in the death bolt room and themselves not yet loaded on the death bolt rack cannot be modified. This is a safety factor as once the modifications begin the warhead becomes unstable.

(**FD20.502**) Except for ECM, all of these modifications can only be detected by the actions of the given death bolt or by the death bolt being identified (F1.4).

(FD20.51) ANTI-TRACTOR: A given death bolt can generate anti-tractor energy.

(FD20.511) A single deck crew action can reduce the warhead of the death bolt by up to six points. Every two points of warhead reduction provides one point of anti-tractor energy.

### FD — DRONES

### STAR FLEET BATTLES

(FD20.52) FOCUSED BURST: A given death bolt can be programmed to expend all of its energy in a directed burst.

(FD20.521) Programming the focused burst requires one deck crew action and reduces the warhead by six points.

(FD20.522) The player must record in writing the range from the target at which the burst will be fired which cannot be more than three hexes or less than one hex.

(FD20.523) The death bolt will fire whatever amount of its warhead remains (FD20.56), and half that amount will be scored as damage on the target if a hit is achieved. It will commit to fire during the Damage During Movement Stage (6A3) at the same time as a Swordfish drone, but will resolve its fire during the Direct Fire Weapons Fire Stage (6D2) of the Sequence of Play.

(**FD20.524**) Roll a single die to determine the result of the focused burst and apply any adjustments due to electronic warfare:

The weapon will hit on a 1-4 at Range 1.

The weapon will hit on a 1-3 at Range 2.

The weapon will hit on a 1-2 at Range 3.

If the weapon hits, the damage is scored on the shield of the target facing the death bolt (D3.4), it is not affected by (FD20.4).

(FD20.525) If the weapon is to move closer than its specified range on a given impulse, i.e., the target is moving on the same impulse that the death bolt is moving, the death bolt will not move and will fire its burst.

(FD20.526) If, for any reason, such as displacement, involuntary movement by a black hole, etc., the death bolt winds up closer to its target than it was programmed to fire, the weapon will go inert.

(**FD20.527**) The focused burst is affected by electronic warfare normally, and will benefit from any ECCM of its controlling unit as a swordfish drone would (FD11.223).

(FD20.53) ELECTRONIC COUNTER-MEASURES: A given death bolt can reduce its warhead by up to six points to have a maximum of up to six points of ECM.

(FD20.531) Programming ECM requires one deck crew action and reduces the warhead by one to six points, depending on how many points of ECM the owning player desires versus the reduction in warhead.

(FD20.532) The ECM applies only to the given death bolt, it cannot be lent to the launching ship, other death bolts, or any other unit.

(FD20.54) ARMOR: A given death bolt can reduce its warhead by up to six points to have a maximum of up to three points of armor making it more difficult to destroy.

(FD20.541) Programming armor requires one deck crew action and reduces the warhead by two, four, or six points, depending on how many points of armor, i.e., one, two, or three, the owning player desires versus the reduction in warhead.

(FD20.55) SPITFIRE: A given death bolt can be programmed to fire up to six "anti-drone" shots at any legal target of an anti-drone [(E5.2) and (E5.3)] which comes within three hexes of it and within its FA arc. Exception, spitfire cannot engage mines (E5.33).

(FD20.551) Programming spitfire requires one deck crew action and reduces the warhead by one to six points, depending on how many "anti-drone" shots the owning player desires versus the reduction in warhead.

(FD20.552) The death bolt will only engage targets in its FA arc and not in its own hex. The death bolt cannot differentiate between friendly and enemy targets and will engage one eligible target per impulse until there are no shots remaining, or all targets have been destroyed or passed out of the death

bolt's FA arc. Note, the death bolt can engage a target on one impulse and if it is destroyed, move several impulses before another target is in its FA arc and begin engaging that target with any remaining shots.

(FD20.553) Anti-drone fire by the death bolt is resolved using the Anti-Drone Chart (E5.61).

(FD20.554) If there is more than one eligible target in the death bolt's FA arc, the death bolt will engage the closest target first. If more than one target is closest, the target to be engaged is determined randomly, e.g., odd this one, even that one, or one or two the first one, three or four the second one, and five or six the last one, etc. Note again that the death bolt treats "friendly" units in its engagement zone as hostile, it cannot differentiate between friend and foe.

(FD20.555) If more than one death bolt is eligible to fire at targets, use the procedure in (FD2.554) for each death bolt. It is possible that both (or all) will fire at the same target, or at different targets.

EXAMPLE: A spitfire death bolt is in hex 3511 and another is in hex 3711, both heading A. The spitfire death bolt in hex 3511 has eligible targets in hexes 3309 and 3509. The spitfire death bolt in hex 3711 overlaps the target in hex 3509 but also has an eligible target in hex 3909. Under (FD20.554) it is possible that both death bolts will engage the target in hex 3509, or that neither will.

(FD20.556) If the spitfire death bolt impacts its target with any "anti-drone" shots remaining, these are simply lost and are not added back into the warhead.

(FD20.56) COMBINATION: The Carnivon player can combine any of the listed properties subject only to the time for the deck crews to prepare the death bolt, and the available reductions in warhead. A player could use the maximum capabilities for all five modifications, but if he did so, he would use up all of the death bolt's warhead and the burst option would result in an automatic zero damage.

(FD20.6) SPECIAL CASES

(FD20.61) TERRAIN: Death bolts interact with terrain in the same manner as drones.

(FD20.611) Death bolts which enter the hex of a small planet or moon in pursuit of their targets may collide with such objects (P2.231) and be destroyed. If the object of the scenario is general destruction of the planet or moon, such a collision would count as damage to the planet or moon.

(FD20.612) Each hex of gravity wave traversed by a death bolt damages it by the strength of the gravity wave (P9.312).

(FD20.613) Death bolts are affected by black holes as per (P4.11) and (P4.22).

**(FD20.614)** Death bolts are damaged and may be destroyed by rings (P2.223), asteroids (P3.24), nebulaes (P6.73), pulsars (P5.33), dust (P13.3), or comets (P16.31).

(**FD20.615**) A nova (P12.0) uses the appropriate damage effects (nebula, pulsar, asteroids) for the hex of the death bolt and any death bolt which is overtaken by the nova wave front (P12.3) is immediately removed from play.

(FD20.616) If other terrain is added that affects death bolts, the effect will be defined in the rules of that terrain.

(FD20.62) ATMOSPHERES: Each hex of atmosphere (P2.85) traversed by a death bolt counts against the distance it has traveled as if it were a drone (P2.851).

(FD20.63) WEBS: Death bolts cannot pass through webs, but can be launched into web hexes and will impact a target in a web hex before being caught in the web (G10.521). Death bolts launched by a unit caught in a web hex will themselves be caught until they generate enough movement points to leave the web hex (G10.55). Death bolts do not damage webs. Death bolts are damaged by webs as drones are [(G10.551) and (G10593)].

(FD20.64) NVC: Death bolts cannot use Non-violent Combat (D6.4).

(FD20.65) ESGs: Death bolts interact with ESGs as drones do (G23.51).

(FD20.66) TRACTORS, TRANSPORTERS, SFGs, DISDEVs: Some systems can affect death bolts, while others cannot.

(**FD20.661**) Death bolts can be placed in stasis (G16.0). Death bolts can be displaced, and might lose lock-on as a result (G18.71). They operate against or within temporal elevators as is the case with other seeking weapons (G31.22).

**(FD20.662)** Death bolts can be tractored (G7.0), but cannot be transported by transporters while moving in space (G8.0). They can be moved by transporters as cargo [(G25.2) and (G25.3)].

**(FD20.663)** Death bolts are affected by cloaking devices as any other non-self-guiding seeking weapon (G13.334) and (G13.35).

(FD20.664) For purposes of identifications, including by probe or aegis, the death bolts are treated as any other seeking weapon (F1.4).

(FD20.665) Death bolts can be attracted (G24.23) or have their lock-ons broken (G24.22) by special sensors. The launching of a death bolt will not blind an operating special sensor on a ship equipped with both systems (G24.13).

(**FD20.666**) Chaff (D11.0) will distract death bolts, as will wild weasels (J3.20), wild space warning and control shuttles (J9.24), and wild scout fast patrol ships (K1.756).

END OF SECTION (FD0.0) MODULE C6

## WE'RE HERE TO HELP YOU

Our company is dedicated to keeping our customers happy, informed, and entertained. Here's just some of what we do to make that happen.

#### www.StarFleetGames.com

That is, of course, our main website, and it is full of things that most players do not even know are there, but would be thrilled to find if they only knew. You should, sometime, go to the Site Master Index

http://www.starfleetgames.com/masterindex.shtml and just read down the list of links.

Some of the things included in the site are an art gallery (includes artist portfolios, demotivational posters, wallpaper, countersheet graphics, and much more), binder spine cards, the cadet game, downloadable convention ads, lists of starship names, the Middle Years, a text version of the catalog, the free demo version of *Federation Commander*, all of the Input Guide articles from *Captain's Log*, the Omega Octant, play aids, sub-pages for each product line (and many individual products), historical maps, and the Wall of Honor.

The Master Index has links to everything mentioned on these two pages.

#### **CUSTOMER REQUEST LINE**

Customers often ask us for things, and we provide them when we can. (Steve Cole devotes an hour every Wednesday afternoon to dealing with these, often creating custom avatars, converting specific new ship cards for the next *Communique*, sending countersheet graphics to *FCOL*, finding lost documents, and so forth.) The rest of the staff usually provides even faster responses to requests they handle. No reasonable request is ignored (although some take hours to do and get done over weeks or even months as time allows). We triage these. The easy ones get done quickly, while one of the harder ones gets a little progress each week.

#### **ELECTRONIC SALES GROW**

Sales of PDFs via the e23 website continue to grow. (We sell more than anyone there other than SJG itself.) The number and variety of products expand every month. We have *Federation Commander* ship card packs, *SFB* rulebooks (and now, SSD books!), *F&E* (some rulebooks and other things), *Starmada* ship cards and rules, and all four of our *GURPS* books. We are adding many out-of-print products there such as *Star Fleet Times*.

Our own website has a page listing the available books: http://www.starfleetgames.com/E23%20Adobe%20info.shtml

This links directly to e23 at: http://e23.sjgames.com/

We have also placed our *PD20M* books on DriveThru RPG:

http://www.starfleetgames.com/Drive%20Thru%20RPG.shtml

We have added a lot of non-Star Fleet items to Drive Thru and Wargames Vault, such as the ancient copies of JagdPanther magazine that Steve Cole carved in clay tablets.

#### STAR FLEET RANGERS

As of June 2013, Jean Sexton has taken command of the Rangers demonstration program, which involves gamers doing demonstrations (teaching sessions) of our games at conventions and game stores. (You can also conduct demos at game-club meetings under some special requirements.) Anyone can become a Ranger. Being a Ranger earns you honors and awards but also is the best way to recruit new players. You can sign up as a Ranger on the website at http://www.starfleetgames.com/rangers/index.shtml. The website has a wealth of information on how to be an effective Ranger.

Every demo you do gets you a battle star on your Combat Action Honor Bar (and a \$5 credit on buying games from ADB, Inc.). You can do demos of *Star Fleet Battles, Federation Commander, Federation & Empire, Star Fleet Battle Force, Prime Directive* (each published *PD* game system counts as a different game), or the *SFU* version of *Starmada*. Mongoose publishing handles demos of *ACTASF*.

Anyone who signs up is designated a Ranger Recruit. Anyone who has done at least one demo is a Ranger. Anyone who does five demos (in at least two venues) receives the designation of Veteran Ranger. Anyone who does 10 demos (in at least three venues, including at least three of our games) is designated as a Senior Ranger and earns a Star Fleet Commendation medal. Doing 25 demos (in at least four venues, and including at least four games) gets you the coveted title of Master Ranger and a Star Fleet Bronze Star medal.

#### VIDEOS

Customer Support Director Mike Sparks has continued releasing on YouTube a series of videos about our products. These provide information to anyone who wants to know what's in a product, or what products came out in a given month. You can find them at:

http://www.youtube.com/user/starfleetgames

The most interesting video uploaded recently shows Steve Cole (well, his fingers) actually playing a battle in *Star Fleet Marines* and explaining the rules as he goes along.

You are also welcome to create your own videos about our products and your experiences playing them. We will recognize the better ones of those with combat awards and gift certificates for the best of them. If you upload a video about our games, please be sure to email us and tell us where to find it.

#### AMBASSADOR PROGRAM

We need three or four effective and energetic people to help Jean Sexton in spreading the word. Each will be assigned a major gaming website, and is expected to pass along to that website any news or information we release. They should also bring back to us any questions, reviews, or comments about our company or products posted there. Successful ambassadors who serve for a year can earn some free products and the coveted First Contact medal on the Wall of Honor.

#### STARLIST

You can obtain a list of the players near you by going to the website:

http://www.starfleetgames.com/starlist.shtml

Enter your own contact information, click your favorite games, and even add a note about anything you want new friends to know.

Starlist has been operating since 1991 and, sadly, people move without telling us, so a lot of the names on the list are obsolete. Recently, we did something about it, moving any listing that was more that a decade or so old to a separate list (which you can also have on request).

Jean Sexton has made it a point to publicize Starlist so there are many new names added to the list every week. The "quality" of the listings continues to improve. One improvement is the new form that webmistress Simone Pike created.

## QUANTUM WAVE TORPEDOES - FQ

## (FQ1.0) QUANTUM WAVE TORPEDO

Quantum wave torpedoes (QWTs) are continually expanding waves of energy which seek their target. Due to the large size of the waves, the damage from a quantum wave torpedo tends to partially envelop the target; despite this, quantum wave torpedoes are treated as size-class-7 targets like plasma torpedoes (R0.6).

Originally employed by the Paravians during the Early Years, the technology was lost when the Paravians were wiped out by a sun snake in Y94. Had the Paravians survived it is likely that the weapon would have been improved.

#### (FQ1.1) DESIGNATION

(FQ1.11) SSD: Each "QWT" box on the SSD represents one quantum wave torpedo tube and can arm and launch one quantum wave torpedo at a time.

(FQ1.12) DESTRUCTION: Quantum wave torpedo tubes are destroyed by "torpedo" damage points on the Damage Allocation Chart.

(**FQ1.121**) DAMAGE PRIORITY: Quantum wave torpedoes are destroyed before plasma-G torpedoes, but after photon torpedoes (D4.3222).

(FQ1.13) REPAIR: Quantum wave torpedo tubes take 10 repair points to fully repair. They can be hastily repaired (G17.5) for six repair points, but the repaired weapon cannot hold a quantum wave torpedo (FQ1.22); the weapon must either be launched or discharged (E1.24) at the end of the turn it has any energy allocated, or provided by reserve power, to it.

**(FQ1.131)** In the Early Years there was a direct-fire version of this weapon known as the Quantum Cannon (YE22.0); quantum wave torpedoes *cannot* be hastily repaired as quantum cannons (YE22.13).

(FQ1.14) TECHNOLOGY RESTRICTIONS: Quantum wave torpedoes were unique Paravian technology in the Early Years, and historically the technology was lost with the destruction of the Paravians in Y95. In *Module C6* it is assumed that the Paravians would have continued developing the weapon, and the Orion pirates would have acquired examples and provided them to the WYN Star Cluster.

(FQ1.141) A quantum wave torpedo launcher takes one option mount per weapon. It can be used in Orion "wing" option mounts.

(**FQ1.142**) Orion (R8.0) and Barbarian (R55.0) Option Mount cost 0. See Annex #8B.

Quantum wave torpedo launchers can be installed in the weapon options of heavy war destroyers counting as a heavy weapon at a cost of four points. See Annex #8H.

(FQ1.143) Quantum wave torpedoes are available to the Orion cartels (R8.0) beginning in Y135, and to the WYN Star Cluster (R12.0) beginning in Y140. Quantum wave torpedoes would appear on Barbarian simulation ships (R55.0) around Y168, but might be used in the simulators of any other Alpha Octant empire from about Y128; prior to Y128 such simulations would use the Early Years Quantum wave torpedoes (YFQ1.0). Jumokians (MR6.0) might have acquired such weapons after Operation Unity arrived in the Magellanic Cloud. (FQ1.15) SIZE CLASS RESTRICTIONS: Quantum wave torpedo launchers can be fitted to units of any size class. Quantum wave torpedo launchers fitted to units smaller than size class 4 cannot use the overload function (FQ1.4), but the torpedoes are otherwise identical to those launched by larger units, except that fighters and bombers cannot reload their own quantum wave torpedo launchers.

(FQ1.151) Quantum wave torpedoes are loaded onto fighters and bombers in the same manner as a disruptor (J4.84). The ship must provide the energy to arm the quantum wave torpedo freezer. A given ready rack's (J4.89) freezers will hold two quantum wave torpedo charges for each quantum wave torpedo launcher on the given fighter or bomber. Note that a Thunderfinch (R18.F1) can only carry one charge for its quantum wave torpedo launcher but most other Paravian fighters and bombers can carry two charges per launcher. The cost of adding a mega pack to a size-1 or size-2 fighter includes adding an additional freezer space to the fighter's ready rack (J16.111). Bombers do not gain additional weapons with mega packs (J16.249), so no additional freezer spaces are added to their ready racks. Quantum wave torpedoes carried by fighters and bombers are identical to those carried by ships except that the fighters and bombers cannot rearm the launchers themselves and cannot carry overloaded (FQ1.4) quantum wave torpedoes.

(FQ1.16) CREW QUALITY, LEGENDARY OFFICERS: Quantum wave torpedoes are affected by crew quality [(G21.112), (G21.114), (G21.212), and (G21.214)] and legendary officers (G22.711) in the same manner as a plasma torpedo. Quantum wave torpedoes on ships equipped with super intelligent battle computers gain the electronic warfare benefit but do not gain the range benefit of outstanding crews (G11.21).

(FQ1.17) TACTICAL INTELLIGENCE: Quantum wave torpedo launchers are identified at tactical intelligence level F. Whether a given quantum wave torpedo launcher is armed or arming can be detected at tactical intelligence level L. The arming level [whether the launcher has a standard, overloaded, or partially loaded (H7.6) quantum wave torpedo] can be determined at tactical intelligence level M.

#### (FQ1.2) ARMING PROCEDURE

(FQ1.21) ENERGY: Two points of power from any source are allocated to arm each quantum wave torpedo which is to be launched on a given turn.

(FQ1.211) A quantum wave torpedo launcher may launch a torpedo once every turn, but a single launcher may not launch two torpedoes within a quarter turn (eight impulses) on consecutive turns.

(FQ1.22) HOLDING: A quantum wave torpedo can be held for one point of power per turn. Note, quantum wave torpedoes are not multi-turn arming weapons and cannot begin a scenario in a held status regardless of weapons status unless a special scenario rule says that they can.

## FQ — QUANTUM WAVE TORPEDOES

(FQ1.23) RESERVE POWER: Quantum wave torpedoes can be armed with reserve power and launched immediately, or at any later point in the turn after the reserve power has been applied (H7.52). It is legal to contingently allocate one point of power to a given quantum torpedo launcher, and then finish it later in the turn with reserve power (H7.6). If the reserve power is not applied, the allocated point of power will have to be discharged at the end of the turn, and be reported as such. The discharge is treated under (E1.243), i.e., it does not count as firing the weapon for purposes of when the weapon can be fired on the following turn.

(FQ1.24) WEAPON STATUS: Quantum wave torpedoes are not multi-turn arming weapons (S4.13) and cannot begin a scenario in a held status regardless of weapons status unless a special scenario rule says that they can.

#### (FQ1.3) LAUNCHING PROCEDURE

(FQ1.31) PROCEDURE: Quantum wave torpedoes are launched in the Launch Plasma Torpedoes Step in the Seeking Weapons Stage (6B6) of the Sequence of Play Annex #2. The launch is at the same time as plasma torpedo launch, i.e., a unit cannot launch a quantum wave torpedo in response to a plasma torpedo being launched on that same impulse, or vice versa.

(FQ1.311) Quantum wave torpedoes use the same rules (F3.0) as other seeking weapons; they are self-guiding in the same manner as plasma torpedoes (FP4.0).

(FQ1.312) To launch a quantum wave torpedo, the launching unit must have active fire control. Quantum wave torpedoes cannot be launched by ships with low-power (D6.7) or passive (D19.0) fire control. A ship with disrupted fire control (D6.68) cannot launch quantum wave torpedoes. An uncontrolled ship's ability to launch quantum wave torpedoes is restricted (G2.234).

(FQ1.313) Whether a given quantum wave torpedo is a standard load or an overload is known on launch to any unit with active fire control within 35 hexes of the launching unit, or which comes within 35 hexes of the torpedo during its existence on the map. The strength of a given quantum wave torpedo is always known to any unit with active fire control within 35 hexes, whether low-powered or disrupted (D6.68).

(FQ1.314) A unit performing erratic maneuvers [or tumbling as a result of a breakdown (C6.552)] cannot launch a quantum wave torpedo (C10.511) or guide (C10.52) quantum wave torpedoes.

(**FQ1.315**) A quantum wave torpedo can be launched at any target that a plasma torpedo could be legally launched at, i.e., a quantum wave torpedo *cannot* be launched at a plasma torpedo (FP1.313) or at another quantum wave torpedo.

(FQ1.316) ELECTRONIC WARFARE: Electronic warfare cannot stop a quantum wave torpedo from being launched, but can reduce its effect when it reaches the target; see Table (D6.361).

(FQ1.3161) If the chart indicates that the shift has allowed only 50% damage, then all splash elements are lost.

(FQ1.3162) If the chart indicates that the shift has allowed only 25% damage, then the main element is reduced by 50% (round fractions up), in addition to all splash elements being lost.

(**FQ1.3163**) The quantum wave torpedo benefits from the ECCM status of its guiding unit as per (F3.33).

(FQ1.32) MOVEMENT: Quantum wave torpedoes are seeking weapons and move under all the procedures of (F2.0) except as provided here.

**(FQ1.321)** Quantum wave torpedoes are self-guiding seeking weapons (F3.42), and operate under those rules. While they could be launched on a ballistic trajectory (F4.0) into empty space, the only targets they could hit by that method are planets or moons for general destruction purposes (P2.311). As with all other seeking weapons, they cannot be ballistically targeted on ground bases except under (P2.713).

(FQ1.322) Quantum wave torpedoes have an endurance of 30 impulses and are removed thereafter; they might be removed sooner if they have hit their targets or have been reduced to a strength of Zero as a result of damage (FQ1.37). (FQ1.323) Quantum wave torpedoes move at a speed of 32 only.

(FQ1.33) STRENGTH CALCULATION: The warhead strength of a quantum wave torpedo is determined at the instant of impact, based on two factors: the distance the torpedo has moved and the damage done to it by phasers and/or terrain. See the table in (FQ1.35).

(FQ1.331) Damage is applied and combined with all other damage resolved during the Resolve Damage From Seeking Weapons Not Resolved Above Step of the Damage During Movement Stage (6A3), see the Annex #2: Sequence of Play. Splash elements are resolved last (left, then right) but as part of the same volley. Note that if two or more quantum wave torpedoes strike a given target on the same shield, all of their splash elements will be resolved together as part of the volley.

ÉXAMPLE: If two quantum wave torpedoes hit a target at 21 hexes range, six points of damage would be scored on the facing shield. Then two splash points of damage would be scored on the shield facing to the left, and finally two splash points of damage would be resolved against the shield facing to the right.

EXAMPLE: Two quantum wave torpedoes strike the #1 shield of an enemy ship at Range 21, and on the same impulse a third quantum wave torpedo strikes the #2 shield of the same ship at Range 14. The volleys would be resolved first under (D4.34), i.e., the two quantum wave torpedoes which struck the target's #1 shield scored the most damage and would be resolved first. The first two quantum wave torpedoes score six points of damage against the target's #1 shield, two points of damage to the target's #6 shield. The third quantum wave torpedo would then score four points of damage against the target's #3 shield, one point of damage against the target's #3 shield, and one point of damage against the target's #1 shield.

(FQ1.34) SPLASH EFFECT: The impact of the weapon is spread over three shields. This is not an optional use of the weapon; it is the way that the weapon always operates. Players cannot voluntarily operate the weapon "without splash" under any circumstances.

(FQ1.341) The main (center damage element) is scored against the facing shield of the target struck by the quantum wave torpedo, while the splash elements damage the two adjacent shields. This system is used for targets of size class 5 or larger that have more than two shields, to include units which do not have shields such as Ryn ships protected by ceramic-composite armor (OD1.0) and Branthodon dragon ships (OG19.12).

(FQ1.342) In the case of size-class-6 and size-class-7 units (and monsters, planets, small or medium ground bases, or other small targets which do not have or never had shields) apply the full damage directly to the unit.

(FQ1.343) Note that because of the splash effect, it is possible that phasers that do not directly face the quantum wave torpedo may be damaged (D4.321). Phasers facing a shield through which splash damage penetrated may be destroyed. If one or both splash elements penetrate shields, with or without the main element, the internal damage from the splash elements are determined last, but as part of the same volley, with the left splash element(s) resolved before the right splash element(s).

(**FQ1.344**) In the case of Andromedan ships with two groups of power absorber panels [and interceptors (K3.43) and skiffs (R1.52) with two groups of shields, or the inner hemispheric shields of Magellanic ships (MD2.0)]:

If the quantum wave torpedo strikes the position of the #1 shield, all damage is scored on the forward panels (or shield).

If the quantum wave torpedo strikes the position of the #4 shield, all damage is scored on the rear panels (or shield).

If the quantum wave torpedo strikes the position of the #2 or #6 shield, one splash element is scored against the rear panels (or shield), while the main element and the other splash element are scored against the forward panels.

If the quantum wave torpedo strikes the position of the #3 or #5 shield, one splash element is scored against the forward panels, while the main element and the other splash element are scored against the rear panels.

In the case of units with six groups of panels (e.g., Andromedan starbase, Andromedan battle station), these are treated as shields would be.

(FQ1.345) See (C13.733) and (C13.943) if the target is docked to another unit.

(FQ1.346) The splash elements are resolved as part of the volley of weapons striking the shield facing which the main element of the quantum wave torpedo hit, and are not combined as part of the volley of any other seeking weapons that hit the shield facing on the same impulse.

EXAMPLE: Two quantum wave torpedoes hit the #1 shield facing of a target at Range 15 and on the same impulse a type-I drone hits the #2 shield facing of the same target. Under (D4.34) the drone will be resolved first as 12 damage points is more than the 10 damage points the torpedoes scored. The quantum wave torpedoes are then resolved, and the two splash points that hit the #2 shield facing are part of their volley and not combined with the drone's damage.

#### (FQ1.35) WEAPON FIRING TABLE

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RANGE	0-7	8-14	15-21	22-26	27-29	30	
DAMAGE	7	6	5	4	3	1	
SPLASH	1-5-1	1-4-1	1-3-1	1-2-1	1-1-1	0-1-0	
OVLD DMG	12	9	NA	NA	NA	NA	
OVLD SPSH	1-10-1	1-7-1	NA	NA	NA	NA	

(FQ1.36) FEEDBACK DAMAGE: If a quantum wave torpedo is launched and impacts in the same hex as the launching ship, the launching ship will receive one point of feedback damage to each of its three facing shields, for a total of three points of damage; use (FP1.86). This damage is in addition to the damage to the target unit and does not reduce the warhead of the quantum wave torpedo in any way.

(FQ1.361) The loss of splash elements (FQ1.381) does not change the character of the feedback.

(FQ1.362) If the quantum wave torpedo is overloaded (FQ1.4), the feedback damage is doubled, i.e., the launching ship takes two points of damage to each of its facing shields.

## QUANTUM WAVE TORPEDOES - FQ

(FQ1.37) MAXIMUM RANGE: Quantum wave torpedoes normally have a maximum range of 30 hexes, but this might be reduced by a poor crew (G21.114). If an outstanding crew launches a quantum wave torpedo it would still have a strength of three at Range 30, but would dissipate at the end of that impulse of movement as any other quantum wave torpedo.

(FQ1.38) DAMAGING QUANTUM WAVE TORPEDOES: Quantum wave torpedoes may be weakened by phaser fire, asteroid damage, nebulae damage, pulsar damage, or dust damage. Asteroid (P3.24), nebulae (P6.73), pulsar (P5.33), and dust (P13.3) damage is computed exactly as for plasma torpedoes except that it takes half again as much damage, i.e., three points instead of two.

(FQ1.381) Six points of phaser, asteroid, or dust damage will remove the "splash" elements from the torpedo. If the quantum wave torpedo has moved 30 hexes, and the splash element has dissipated to zero, then the main element is reduced to zero.

(FQ1.382) An additional 11 points of phaser, asteroid, or dust damage [for a total of 17 when combined with (FQ1.381) above] will completely reduce the main element to zero damage.

(FQ1.383) All damage versus a given quantum wave torpedo is cumulative, e.g., one point of dust damage combined with five points of asteroid damage and eight points of phaser damage would leave a quantum wave torpedo with no splash elements and full warhead strength (but only three more damage points will totally eliminate the warhead).

(FQ1.384) Note that unlike plasma torpedoes, quantum wave torpedoes only have two levels of reduced damage. Any damage less than the required levels does no damage to the torpedo, but the torpedo will be totally destroyed by 17 points of damage regardless of its warhead strength. In this sense, the quantum wave torpedo acts very much like a drone.

(FQ1.385) Warp augmented rail guns [(E18.432) and (E18.54)] affect quantum wave torpedoes. Convert the damage to "phaser" damage and apply that within the quantum wave torpedoes rules.

(FQ1.386) A power absorber mine (M10.0) transported into a quantum wave torpedo scores the equivalent of 25 points of phaser damage, which eliminates it entirely. Type-D phaser-captor mines (M4.41) can be set to trigger on quantum wave torpedoes or, if controlled (M5.2), commanded to fire on them. Trans-captor mines (M11.0) can be commanded to place power absorber mines into quantum wave torpedoes. Other mines cannot accept quantum wave torpedoes as targets or damage them.

(FQ1.387) A displacement device (G18.0), while it will not damage a quantum wave torpedo, can relocate it as if it were a plasma torpedo. This may cause the quantum wave torpedo to lose tracking and be removed from play in the same manner as a plasma torpedo (G18.71).

(FQ1.388) Weapons that have similar properties to phasers and are also able to damage plasma torpedoes also damage quantum wave torpedoes using the phaser rules. In short, any weapon, system, or terrain feature that damages plasma torpedoes applies the same damage to quantum wave torpedoes, counting the damage points as phaser damage (FQ1.381). These include but are not limited to Omega Octant phasers (OE1.0), pulse emitters (OE2.0), and other systems able to damage plasma torpedoes. This also includes Magellanic warp-tuned lasers (ME1.0) and the warptargeted lasers of the Early Years (YE21.0) as well as any system defined for a monster that damages plasma torpedoes, such as a space dragon's tail (SM7.4653). The Monster Close-In Defense System (E6.0) treats quantum

## FQ — QUANTUM WAVE TORPEDOES

## STAR FLEET BATTLES

wave torpedoes as plasma-torpedoes with the damage points scored under (E6.51) counted as phaser damage.

(FQ1.389) No other weapon in the game system that cannot affect plasma torpedoes can affect a quantum wave torpedo at the current time. If a new weapon is added to the game able to damage quantum wave torpedoes, but not plasma torpedoes, it will be noted as such in its rules.

#### (FQ1.39) DIFFERENCES FROM PLASMA TORPEDOES:

(FQ1.391) There is no pseudo torpedo version of a quantum wave torpedo.

(FQ1.392) Quantum wave torpedoes have three (3) points of built-in ECM, note ECM; not ECCM.

(**FQ1.393**) Quantum wave torpedoes cannot be enveloped, shotgunned, or quick-loaded as a smaller type of torpedo, but can be overloaded (FQ1.4).

(FQ1.394) Quantum wave torpedoes cannot be launched from a destroyed launcher. If the launcher is destroyed before the quantum wave torpedo is launched, the warhead is lost.

(FQ1.395) Quantum wave torpedoes cannot be fired in a direct-fire mode.

(FQ1.396) Quantum wave torpedoes have no "ECM drone" equivalent.

(FQ1.397) Quantum wave torpedoes cannot be fired inside of a dogfight (J7.543).

#### (FQ1.4) OVERLOAD

(FQ1.41) OVERLOADING: Quantum wave torpedoes can be overloaded, but overloaded torpedoes have a reduced range.

(FQ1.411) Quantum wave torpedoes can be overloaded by allocating two additional points of power. The additional power can be provided in mid-turn from reserve power, or applied during Energy Allocation. The overload energy must be provided by a warp power system, either a warp engine (H2.0) or a warp reactor (H2.3), and can be provided by reserve warp power (H7.4) on the impulse of launch.

(**FQ1.412**) Overloaded quantum wave torpedoes can be held for two points of power rather than the single point needed to hold a standard quantum wave torpedo (FQ1.22).

(FQ1.413) A held torpedo can be overloaded by allocating the two points of overload warp power to the held quantum wave torpedo in addition to the holding energy, i.e., three points of power.

**(FQ1.414)** An overloaded quantum wave torpedo's warhead does more damage, but is unstable and has a maximum range of only 14 hexes. The "splash elements" of an overloaded quantum wave torpedo are not increased; see the table in (FQ1.34).

(FQ1.415) The splash elements of an overloaded quantum wave torpedo are destroyed normally as provided in (FQ1.371). The warhead is destroyed by 15 points of damage, i.e., a total of 21 points is required to completely destroy the quantum wave torpedo.

(FQ1.416) An overloaded quantum wave torpedo must be announced as such when it is launched/placed on the board

#### (FQ1.5) SPECIAL CASES

(FQ1.51) TERRAIN: Quantum wave torpedoes which enter the hex of a small planet or moon in pursuit of their targets may collide with such objects (P2.231) and be destroyed. If the object of the scenario is general destruction of the planet or moon, such a collision would count as damage to the planet or moon. Each hex of gravity wave traversed by a quantum wave torpedo reduces its strength by the strength of the gravity wave as if it were a plasma torpedo (P9.312). Quantum wave torpedoes are affected by black holes as per (P4.11) and (P4.22). Quantum wave torpedoes may transfer their lock-ons to planets under some conditions, see (P2.33). Quantum wave torpedoes may be weakened by ring damage (P2.223), asteroid damage (P3.24), nebulae damage (P6.73), pulsar damage (P5.33), dust damage (P13.3), or comets (P16.31). This damage is computed exactly as for plasma torpedoes except that it takes half again as much damage, i.e., three points instead of two. A nova (P12.0) uses the appropriate damage effects (nebula, pulsar, asteroids) for the location of the quantum wave torpedo and any quantum wave torpedo which is overtaken by the nova wave front (P12.3) is immediately removed from play. If other terrain is added that affects quantum wave torpedoes, the effect will be defined in the rules of that terrain.

(FQ1.52) ATMOSPHERES: Each hex of atmosphere (P2.85) traversed by a quantum wave torpedo reduces its strength as if it were a plasma torpedo (P2.852), i.e., counts as five hexes to the distance the weapon has traveled.

(FQ1.53) WEBS: Quantum wave torpedoes cannot pass through webs, but can be launched into web hexes and will impact a target in a web hex before being caught in the web (G10.521). Quantum wave torpedoes launched by a unit caught in a web hex will themselves be caught until they generate enough movement points to leave the web hex (G10.55). Quantum wave torpedoes do not damage webs.

(FQ1.54) NVC: Quantum wave torpedoes cannot use Non-Violent Combat (D6.4).

(FQ1.55) ESGs: Quantum wave torpedoes are unaffected by ESGs (G23.0).

(FQ1.56) TRACTORS, TRANSPORTERS, SFGs, DISDEVs: Some systems can affect quantum wave torpedoes, others cannot.

(FQ1.561) Quantum wave torpedoes can be placed in stasis (G16.0). Quantum wave torpedoes can be displaced, and might lose lock-on as a result (G18.71). They operate against or within temporal elevators as other seeking weapons (G31.22).

(FQ1.562) Quantum wave torpedoes cannot be tractored or (G7.0), transported by transporters (G8.0).

**(FQ1.563)** Quantum wave torpedoes are affected by cloaking devices as any other self-guiding seeking weapon (G13.334) and (G13.35). Any reduction in warhead under (G13.37) is applied first to the splash elements (lose the left side first), which can be reduced to zero as a result, and then to the main element.

(FQ1.564) For purposes of identifications, including by probe or aegis, the quantum wave torpedo is treated as any other seeking weapon (F1.4), but as their warheads are always known [(FQ1.33) and (FQ1.416)] this will usually be limited to determining its target as with plasma torpedoes (G4.232).

(FQ1.565) Quantum wave torpedoes cannot be attracted (G24.23) or have their lock-ons broken (G24.22) by special sensors. The launching of a quantum wave torpedo will blind an operating special sensor on a ship equipped with both systems (G24.13).

(FQ1.566) Chaff (D11.0) has no effect on quantum wave torpedoes, but they are distracted by wild weasels (J3.20), and by wild space warning and control shuttles (J9.24) or wild scout fast patrol ships (K1.756).

END OF SECTION (FQ0.0) MODULE C6

### PARAVIAN MARAUDERS - R18

## (R18.0) PARAVIAN MARAUDERS

The Paravians are a birdlike species from a planet located between the Gorn homeworlds and the Galactic Core. Their ships fought a savage war with the Gorns during the Early Years period, and they are now thought to be extinct.

Paravians are bipedal. While they have wings, their ability to fly is limited. Most individuals can at least glide from a height or running start; some athletic individuals can actually fly for several dozen meters. Some non-athletic individuals cannot fly at all. The feet have three forward and one reverse toes and while they can grasp things, they have almost no dexterity. Their hands have a thumb and two grasping fingers while other fingers form the structure of the wing itself.

The Gorns and Paravians first met in Y24, at the very start of the space exploration period for both empires. It was, for both of them, their first contact with a new species. Their first contacts were peaceful, not least because the early exploration ships were anything but the heavily armed warships seen in later times.

Early discussions quickly exposed that both shared a great mystery: they were NOT native to their home worlds. The fossil record, not to mention an evaluation of existing fauna, indicated that both the Gorns and Paravians had been transplanted to their planets by forces or beings unknown about 13,400 years earlier.

Further explorations provided an even greater surprise: the Paravians were descended from a species virtually identical to the Gorns which had become extinct after an asteroid impact on their homeworld 12,600 years earlier.

The news swept through both cultures like an electrical shock. For the Grey Scale Gorns of Ghdar-I and the Brown Stripe Gorns of Geydar-II, the fact was an interesting footnote of ancient history and nothing more. For the Green Scale Gorns of Gihdahr–III, the reaction was unfortunately racist, and the local media somehow managed to blame the Paravians for the extinction of "the fourth Gorn species." After a few weeks of media attention, this reaction also passed and the more reasonable view took hold.

For the Paravians, however, the extremist Gihdahr view was only one factor in fueling a racial hatred that would have caught fire without any help. The Paravian reaction to the paleontological evidence was a fanatical hatred for the Gorns, as the fossil Gorns of their own world had for centuries held the position of demons and devils. The Paravians declared war and launched a campaign of hatred such as the known galaxy had never seen before and has only rarely seen since.

At the time, however, both empires had relatively few ships, and those that existed were not designed for warfare. The Gorns, unaware of the Paravian reaction until the first attacks began, were slow to react and their Confederation Congress took weeks to fund weapons and warship development. The Paravians, however, were all of a single hate-filled mind and immediately began production of weapons and warships.

The conflict lasted for decades at a relatively low level due to the distances involved. In effect, the Paravians of this period were little more than pirates and raiders, and the Gorns were involved in a major war with the second empire they had met, the Romulans.

In some regards, the lack of actual fighting was due to the lack of targets. The Gorns were slow to plant colonies due to their inability to provide ships to protect them, while the Paravians had little interest in colonies beyond what materials they could loot from the worlds they could find. This was based in part on the mentality of the Paravians, who had descended from hunting birds that flew over wide territories taking what they wanted, but concentrated their civilization in relatively small areas (i.e., their home planet).

The conflict rapidly escalated when warp-capable ships of the Early Years replaced the sublight ships starting in Y66. Paravian raiders were now able to reach far into Gorn space, and the Gorns were now able to seed more and more colonies around their homeworld. The Paravian War lasted for nearly 10 years until, in Y85, the Gorns succeeded in blockading the Paravian homeworld and, over the next few years, hunting down all of the surviving raiders and forcing them home (or destroying them).

The Gorns then decided on a radical solution that was to bring their empire a deep and abiding shame. Rather than wipe out the Paravians (who refused to hold any negotiations), the Gorns eliminated all of the Paraivan orbital facilities and any ground facilities related to space travel or starship construction. A small garrison of warships could then keep the Paravians neatly trapped on their homeworld without excessive effort. Eventually, it was hoped, the Paravians would "grow up" and negotiate.

This plan worked for a dozen years, until Y94 when a sun snake dove into the Paravian star and it went nova. The Gorn garrison ships were unable to even attempt a rescue, and the Paravians would not have accepted their help (and did not believe that their star would actually explode).

When the Gorns found themselves in a position to force the Romulans back to their own homeworld (during the long period when the Gorns had tactical warp technology and the Romulans did not), the bitter memory of what they had done to the Paravians stayed their hand.

There were occasional reports of Paravians surviving for decades after the nova incident, the descendants of raiders who had escaped the Gorn hunters, even into the General War era. None were ever confirmed.

There are two related historical incidents on which a hypothetical Paravian Empire might have existed during the General War.

The first is a Paravian leader named Marengo Firecloud Wildfeather. He became the leader of the second largest of the five Paravian continents in Y55, and advocated the radical idea of actually building colonies on other planets and forging what would have been a traditional empire. His faction actually created some very small outposts on five planets, but the Paravian Wingword (their central government) refused to provide resources to expand them. He put all of his effort into the remote colony world of Wingatha. When warp drive became available he spoke passionately against an immediate war with the hated Gorns, calling instead for a steady wave of colonial construction to establish a broad territorial holding, but he was denounced as a coward and Gorn apologist and eventually forced out of power. Had he succeeded in convincing the Paravians to build a traditional empire, the universe might well be a very different place.

More than a century later, a colony of Paravian survivors was found in the Omega Octant. Their history indicated that they actually spent more than a decade living on the remote planet of Wingatha (Moaengo's original colony world) in the Alpha Sector (near the void) but these Paravians eventually decided that the Gorns were just too dangerous. The entire colony decamped, moved around the coreward end of the void, and found a world in the Omega Octant that they could call their new home.

A third alternate history, without any historical basis, is also included. It causes major changes to the history of the entire eastern part of the Alpha Octant.

Paravians and their technology were created for Star Fleet Battles by Gregg Dieckhaus. His proposal was selected to fill the requirement for a species that had once lived coreward of the Gorns but which had become extinct due to a sun snake in the Early Years.



#### PARAVIAN MARAUDERS — R18

## (R18.0) PARAVIAN ALTERNATE HISTORY #1: The Paravian Empire

#### by Stephen V. Cole

**Y55:** Marengo Firecloud Wildfeather becomes the leader of the northwestern continent, the second most powerful position on Paravia. He advocates a policy of planting colonies on suitable worlds in order to build a network of occupied worlds, each producing wealth for the homeworld. He moves to create several such worlds on his own, demonstrating the potential to bring not just looted wealth, but hard-to-reach resources back to the home planet. Through skillful diplomacy, he seeks support from the leaders of the other continents. He declares his colonies open ports, where any Paravian ship can ask for fuel, supplies, and repairs. His colonies welcome colonists from the other continents. This does much to turn the five different Paravian tribes into a unified empire with a unified fleet.

**Y66:** The Gorns develop tactical warp power, but their ships are still armed with sublight weapons (atomic missiles and lasers). Conflicts with the Paravians have died down considerably, except for sharp battles at places where one empire or the other has built a colony.

**Y67:** The Paravians perfect tactical warp technology, and move to refit their older ships. Over the next few years, the Paravians use their new warp-powered ships to build even more colonies and expand those that already exist. Under Marengo's influence, conflicts with the Gorns are minimized. The Gorns, engaged in a war with the sublight Romulans, have no interest in starting a further conflict with the Paravians. Gorn Vanguard teams conduct lightning raids on numerous vital Romulan research facilities, stopping the development of tactical warp technology. Romulan research has been hampered by the system of Great Houses.

Y68: Gorns win the Second Gorn-Romulan War.

Gorns turn to deal with the Paravian raids. Most Gorn ships have already been upgraded with tactical warp and begin receiving plasma bolt refits at forward bases. Paravian ships also refit at forward bases (three years earlier than they did historically) with their new quantum wave torpedoes. Neither side has an advantage, and a stand-off ensues that begins to define what will become a formal Gorn-Paravian border. With no threat from the Romulans and little threat from the Paravians, the Gorns develop as they did historically, with a civilian government that distrusts its military and starves the military budget to keep the military from becoming aggressive.

**Y79:** Tholians arrive in our galaxy, accidentally preventing a Klingon conquest of the Romulan Empire.

**Y85:** The Gorns and Paravians have established a formal border (more by where bases were built than by treaty). Paravians begin moving to outflank the Gorns toward the edge of the galaxy.

**Y88:** Romulans develop seeking plasmas and the masking device (an early version of the cloaking device), installing them in their ships.

**Y90:** Just as happened historically, the Third Gorn-Romulan War begins with a Romulan attack. By this date, several Orion cartels had established bases and colonies (the "pirate kingdoms") inside Romulan space without the knowledge or consent of the Romulans.

**Y94:** A sun snake approaching the Paravian home star is destroyed by a squadron of ships that had been there for training and refitting. The Paravians realize the need to protect their homeworld and divert several years of production into those defenses. This delays a planned offensive against the Gorns, who were busy fighting the Romulans.

**Y96:** Third Gorn-Romulan War ends as it did historically. The Gorn military wants to launch an attack on the Paravians

but the Gorn legislature has had enough of war for the time being, and sees no reason to start a war with the Paravians, who have been relatively quiet.

**Y102:** The Federation Council declares the border of the Federation to be 4,750 parsecs from the center of the Federation, more or less along the Federation-Romulan ceasefire line.

**Y105:** Romulans (as they did in history) discover the Orion "pirate kingdoms" and consider this a clandestine invasion by the Federation. This begins a long campaign to wipe them out, which takes three decades.

**Y110:** A Paravian ship encounters an Inter-Stellar Concordium ship and (seeing Pronhoulites on board) attacks and destroys the ship. Before the ship is destroyed, it manages to send a message to its base. The Paravians continue to push into what would have been ISC space, but are at the end of overextended supply lines, waiting for the next chain of bases and colonies to be built. Efforts by the Inter-Stellar Concordium to negotiate with the Paravians are rebuffed. A shocked ISC populace is mobilized to wage a defensive war. The concept that "warp-powered species don't have to fight" disappears from the ISC consciousness, never to return. Over the next decade, the ISC moves to build a chain of defensive bases to stop the Paravians.

The Romulan Senate (as they did in history) votes to launch a new war against the Federation, but after the sudden death of Emperor Ramillius, the Senate reverses its decision and recalls the ships.

**Y119:** Romulans (as they did in history) replace the masking device with the improved veiling device and develop mauler technology.

**Y120:** Fourth Gorn-Romulan War begins and continues for five years (as it did in history).

**Y125:** Fourth Gorn-Romulan War ends in a Gorn victory (as it did in history). Gorns occupy some Romulan territory to establish a clearly defined border, and destroy Romulan bases used to launch aggression.

**Y128:** In a change from history, the Gorn legislature (noting the presence of two enemies on the Confederation's borders) agrees to an expanded program of exploration aimed at finding the extent of Paravian and Romulan holdings.

**Y136:** Moving west, a Gorn exploration ship (tracking the signals of Romulan border stations) detects unknown signals of a new foreign power. The ship withdraws and sends a report. The Gorn legislature debates what to do, and (fearing it might encounter a third enemy) limits exploration in that direction but increases patrols and begins to build the first of a series of bases on that border.

**Y154:** Second Federation-Romulan War begins (as it historically did).

**Y155:** Treaty of Pelione re-establishes the Neutral Zone and ends the second Fed-Romulan War (as it historically did).

**Y157:** A group of Federation colonists in a convoy of freighters moves into Gorn space. Detected by Gorn bases, a Gorn cruiser intercepts the convoy, thinking them to be an invasion force. At the last second, the cruiser realizes that the "invaders" are unarmed cargo ships. The Gorn cruiser orders the convoy to stop, but has no idea what to do with them. The Legislature debates options for over a week. The colonists have already sent a desperate call for help, and the Federation cruiser *Enterprise* arrives to force their release. A tense stand-off develops until a young Federation captain, looking at his monitor, exclaims: "You're not a Romulan; you're a dinosaur!" The Gorn captain asks: "What's a dinosaur?" and is amused by the photographs he gets in return. Acting on his own, the Gorn captain to a meeting. The

two captains realize that they have met someone who is not an enemy, and both agree "We have enemies enough."

Y159 Klingon-Romulan Treaty of Smarba is signed.

#### (R18.0) PARAVIAN ALTERNATE HISTORY #2: The Paravian Raiders

#### by Stephen V. Cole

**Y55:** Marengo Firecloud Wildfeather becomes the leader of the northwestern continent, the second most powerful position on Paravia. He advocates a policy of planting colonies on suitable worlds in order to build a network of colony worlds, each producing wealth for the homeworld. He moves to create several such worlds on his own, demonstrating the potential to bring not just looted wealth, but hard-to-reach resources back to the home planet. His efforts fall on deaf ears. Without resources from the other continental tribes, Marengo is able to build only one substantial colony, that being Wingatha. This planet is far from the Paravian homeworld. It is a rich world with abundant resources, and far from the prying eyes of the other continental leaders.

**Y58:** The Paravian Wingword (their central government) orders Marengo to shut down his colonies and bring the workers there back to the homeworld. Marengo complies, but slowly, keeping Wingatha as a secret.

**Y66:** The Gorns develop tactical warp power, but their ships are still armed with sublight weapons (atomic missiles and lasers). Conflicts with the Paravians continue.

**Y67:** The Paravians achieve tactical warp technology, and Marengo again presses his case to "temporarily" stop attacking the Gorns and focus on building up colony planets. The other four continental leaders oppose him at the Wingword, denouncing him as a coward.

Marengo uses his ships to explore the region in the opposite direction from the Gorns, bringing home "loot" that is actually industrial production from Wingatha. He builds up Wingatha into a true industrial world, allowing the workers there to breed at will. Each female produces six or eight offspring every year. Other Paravian leaders continue to battle the Gorns and to raid Gorn colonies.

**Y67:** Gorn Vanguard teams conduct raids that stop the Romulans from developing warp technology.

**Y68:** Gorns win the Second Gorn-Romulan War and turn to deal with Paravian raids. Gorn ships receive refits at forward bases, while the Paravian ships must return to their home planet to get them. Using this decisive advantage, the Gorns press their attack.

**Y79:** Tholians arrive in our galaxy, accidentally saving the sublight Romulans from a Klingon invasion.

**Y85:** The Gorns succeed in blockading the Paravian homeworld (in the process destroying all orbital and space-related facilities) and begin hunting down the surviving Paravian ships. Unknown to the Gorns, some Paravians escape to Wingatha. Marengo is forced out of power.

**Y90:** Third Gorn-Romulan War begins. Several Orion cartels had established bases and colonies (the "pirate kingdoms") inside Romulan space without the knowledge or consent of the Romulans.

**Y92:** Last known battle between Gorn ships and Paravian raiders outside of the blockade.

**Y94:** A sun snake plunges into the Paravian home star, causing it to go nova and effectively destroying the Paravian species in the Alpha Octant. The Gorns are overcome with shock, shame, and guilt.

**Y95:** Learning of the destruction of their homeworld, the Wingatha-based Paravian survivors debate what to do. For the time being, they end all raids against the Gorns, knowing that Wingatha is too weak to resist any attack.

**Y111:** The great debate ends with a final decision to stay on Wingatha and develop it into a major industrial planet. The Paravians decide that they will eventually return to raiding the Gorn worlds, and begin to design the special "raid motherships" needed to cover such distances.

Y145: The first Paravian raids in 50 years strike Gorn planets.

#### (R18.0) PARAVIAN ALTERNATE HISTORY #3: The Paravian Raiders

by Steven P. Petrick

Historically, the Paravians were genetically predisposed not to "leave the nest" resulting in their population being largely restricted to their home planet. They had a need to explore, but had almost no colonies, and those they did have were intended only for temporary occupation to extract resources to support a single campaign. Population pressures were kept in check by birth control, but the home planet supported a population larger than that of almost any other species, which allowed the Paravians to eventually wage war on a near equal basis with the Gorn Confederation.

In this alternate reality, the Paravians did not have the genetic disposition and moved into space when they were able to. This resulted in a *very* different history of our galaxy.

**Y17:** First Contact between the expanding Gorn Confederation and the Paravians happens seven years early because the Paravians had been building colonies just as the Gorns had, meaning more Paravian ships were in space more often and farther from home.

**Y22:** War between the Gorns and Paravians breaks out. The Gorn fleet and economy are smaller than they were in our timeline because the Paravians were contacted seven years earlier and the Paravians have more ships because they have their own empire. The Gorns are pushed back from Paravian space, losing several important colonies, but the Paravians are unaware of the location of the Gorn homeworlds. The war will rage on for years, significantly reshaping Gorn society. Conflict with the Paravians gives the military more political power; Paravian savagery causes the Gorns to become just as vicious.

**Y38:** First Gorn contact with the Romulans. This happens five years later than it did historically because Gorn resources are directed to fighting the Paravians and there are not as many resources available for pure exploration. The Gorns are barely hanging on against the Paravians, but the initially larger Gorn economy is slowly turning things in their favor.

**Y41:** First Gorn-Romulan war breaks out as the Romulans attack. The Gorns are unable to fight both empires, but are able to use interior lines successfully, further benefiting from the fact that the Paravians and Romulans are unaware of each other and therefore not coordinating their actions, although some operations do coincide.

**Y44:** Recognizing the impossibility of defeating both enemies, or even sustaining both wars, the Gorns negotiate a peace with the Romulans far short of total surrender. The Romulans accept this peace in part because they have decided to invade the Federation. (The first Federation-Romulan War is delayed seven years to Y47, rather than starting in Y40, changing Federation history.)

**Y52:** The Federation-Orion treaty gets Orions to help fight Romulans.

**Y55:** First Federation-Romulan War ends.

**Y64:** Second Gorn-Romulan War begins. Major Gorn forces are still engaged with the Paravians although the front has been stable since Y44 with neither side able to advance. The diversion of Gorn ships to reinforce their Romulan frontier allows the Paravians to advance in several sectors.

## PARAVIAN MARAUDERS — R18

## STAR FLEET BATTLES

Y66: Gorns develop tactical warp.

**Y67:** The Gorns screen their Paravian front in an economy of force operation while massing most of their warpdriven ships against the Romulans. The Gorns launch a savage campaign in an effort to crush the Romulans. After more than 40 years of war, the brutality of the Gorns leaves even the Romulans stunned. The Gorns offer no quarter; every Romulan ship and colony is exterminated before a combination of logistics overreach and the need to reinforce their Paravian lines curtails the operation. The Gorns do not reach deeply enough into Romulan space to affect the Romulan warp drive experiments, and are indeed unaware of the locations where they are being conducted because too many of their resources (including intelligence efforts) are tied up against the Paravians. The Gorns know far less about the Romulans in this timeline than they did in ours.

**Y68:** The Romulans agree to a border with the Gorn Confederation roughly where the historic border is. The war between the Paravians and Gorns continues unabated. The Romulans take solace in that they have themselves just developed warp technology and will need time to retrofit their ships. Romulans build warp-powered Vultures, War Eagles, BattleHawks, Snipes, and Falcons. Inter-house fighting and sabotage prevents further advancement in warp power until the Treaty of Smarba. The Paravians also develop tactical warp.

**Y72:** Strategic exhaustion brings about a pause in the Gorn-Paravian War. While no peace is negotiated, and both sides have a "shoot on sight" attitude, both begin expanding their respective areas of operation, seeding colonies to gather resources and looking to contain the other. The Paravians have an edge in this because the Gorn fleets are divided between them and the Romulans. The fighting flares up several times, but the Paravians recognize that for reasons unknown to them, they are gaining an edge over the Gorns.

The Klingons contact the Romulans, but are not tempted to invade them as the Romulan Empire is fully warp capable and would hardly be an easy conquest.

**Y79:** The arrival of the Tholians has almost no effect on Romulan-Klingon relations and the Treaty of Smarba eventually happens when it historically did.

**Y90:** Warp-powered Romulan fleets attack the Gorns, but are smashed by the warp-powered Gorn ships in less than two years. The Gorn fleet is much larger than it was historically, and Gorn personnel are more experienced and brutal, the Gorn frontier much more heavily fortified, and the Gorn population much poorer and more regimented.

**Y94:** A sun snake approaching the Paravian home star is destroyed by a squadron of ships that had been there for training and refitting. The Paravians realize the need to protect their homeworld and divert several years of production into those defenses. This delays planned offensives against the Gorns, who were busy fighting the Romulans.

Y110: A Paravian ship encounters an Inter-Stellar Concordium ship and (seeing Pronhoulites on board) attacks and destroys it. Before the ship is destroyed, it manages to get a message to its base. Over the next two years other Paravian ships intrude into Inter-Stellar Concordium space, shooting first and not bothering to ask guestions because the markings on the hulls of the ships match those of the first ship destroyed. (When the Paravians eventually learn that Pronhoulites are only one of five ISC species, they hardly care.) Efforts by the Inter-Stellar Concordium to negotiate with the Paravians are rebuffed. A shocked ISC populace is mobilized to wage a defensive war. The concept that "warppowered species don't have to fight" disappears from the ISC consciousness, never to return. The easy pickings by Paravian squadrons against a new species of "demons" prompts sermons and the diversion of more ships to attack them. The Inter-Stellar Concordium's core worlds ramp up production of warships quickly, but losses will be heavy due to the lack of combat experience and poorly trained crews. Still, the Inter-Stellar Concordium's economy at this stage is far more robust than it historically was, and the Paravians are operating at the end of a much longer supply line.

The Romulans had wanted to start a war with the Federation over the Orion issue, but are busy fighting the Paravian menace.

**Y115:** Gorn ships encounter Inter-Stellar Concordium ships in combat with Paravian ships, and intervene on their side. While the Gorns are initially cautious in their contact with the Inter-Stellar Concordium, and the Inter-Stellar Concordium is put off by the extreme military bearing of the Gorns, the two empires ally against the Paravians. The Gorns warn the Inter-Stellar Concordium about the Romulans.

**Y120:** The frontiers of the Gorn, Paravian, and Inter-Stellar Concordium are established. The Romulans invade Gorn space. The Gorns are aided over the next three years by the Inter-Stellar Concordium and the Romulans are defeated, setting up the frontiers on that border.

**Y125:** The Gorns, having heard of the Federation from captured Romulans, send a diplomatic mission to contact them, seeking allies against the Romulans and Paravians. The Federation responds cautiously with offers of trade and a non-aggression pact, but is unwilling to be drawn into an "entangling alliance" with the Gorn Empire and its fairly constant wars with the Romulans and Paravians. (The Federation has fought wars with the Kzintis and Klingons and expects another war with the Kzintis at any time. The Federation has had no conflict with the Romulans in decades, and doesn't want to start one. The member planets of the Federation find the prospect of getting involved in someone else's war to be far from interesting.) Federation and Gorn relations warm slowly over many decades but the formal alliance happens when it historically did.

**Y130:** The first meeting between Federation and ISC diplomats happens on the Gorn homeworld. The two "federations" find much in common culturally, but the Federation is uncomfortable with the militarized ISC, even though their military is used only for defense. (The ISC and Gorn military forces are consuming far more of the economy of those empires than Star Fleet is consuming of the Federation's wealth.)

From this point, history proceeds with the Gorns allied to the now-militant ISC and the Romulans allied with the Paravians. Several minor wars are fought around the "crossroads" where the four empires meet. Each alliance wants to conquer border provinces of the other in order to drive them farther apart.

**Y159:** The Treaty of Smarba (between the Romulans and Klingons) has little impact on the eastern powers. The Romulans have had warp capability for decades and have a massive fleet of warp-powered Eagle-series ships, with more coming off the building ways every year. Because of this, the Romulans have little interest in purchasing old Klingon ships, so there is no Kestrel-series or Hawk-series. Those Kestrels remained in mothballs until the Klingons brought them into service just before the General War, allowing them to capture the Kzinti homeworld.

**Y168:** The General War begins on the Lyran-Kzinti border and steadily moves east.

**Y171:** The Klingons invade the Federation.

**Y173:** The Romulans invade the Federation, and the Paravians attack the Gorns, keeping them from helping the Federation. The Federation is under serious threat.

**Y174:** The ISC, knowing that the collapse of the distant Federation will ultimately condemn them to decades of war

with the Paravians and Romulans, joins the General War as a full ally of the Gorns and Federation.

#### PARAVIAN GENERAL UNITS

Paravian starbases, battle stations, other bases, auxiliaries, defense satellites, monitors, fleet repair docks, captor mines, and ground bases are the same as those used by the Klingons with one quantum wave torpedo launcher replacing each disruptor. For BPV purposes, consider a quantum wave torpedo equal in value to a disruptor of Range 30.

The Paravians use drogues (G34.0), having available the phaser, sensor, and decoy types, plus a drogue with three quantum wave torpedoes which uses the same basic rules as plasma-F drogue (G34.352).

#### (R18.0) PARAVIAN GENERAL UNITS

General units that can be used by the Paravians are listed here with needed changes. General units requiring no changes, e.g., small and large freighters, most augmentation modules, etc., are not listed and are simply used as is.

(R1.1-18) STARBASE (SB): Weapon #1 is quantum wave torpedoes, Weapon #2 is phaser-3s, and Weapon #3 is phaser-3s with 360° firing arcs. Delete Weapon #4.

Fighters if hangar bay modules (R1.4) are present:

YĚAR FIGHTÉRS

- Y165-Y169 6, 12, 18, or 24 Finch or Quail or a mix of both.
- Y170-Y172 6, 12, 18, or 24 Finch, Quail, or Raven or a mix of any two.
- Y173-Y174 6, 12, 18, or 24 Finch, Quail, Raven, or Crane or a mix any two.
- Y175-Y176 6, 12, 18, or 24 Quail, Raven, or Crane or a mix any two.
- Y177 6, 12, 18, or 24 Quail, Raven, Crane, or Duck or a mix any two.
- Y178 6, 12, 18, or 24 Raven, Crane, or Duck or a mix any two.
- Y179-Y182 6, 12, 18, or 24 Crane or Duck or a mix of both.
- Y183+ 6, 12, 18, or 24 Crane.

Fighters if heavy fighter hangar modules (R1.70) are present [note: a starbase can have two heavy fighter squadrons, if the starbase has PF docking modules (R1.16) it is a true PF tender and cannot operate heavy fighters at all]:

YEAR	FIGHTERS
Y177	6, 12, 18, or 24 Quail, Raven, Crane, or
	Duck or a mix any two, 6 or 12 Swan or
	Swan-I or a mix of the two.

Y178 6, 12, 18, or 24 Raven, Crane, or Duck or a mix any two, 6 or 12 Swan or Swan-I, or Swan-F or Swan-FI or a mix of any two.

Y179 6, 12, 18, or 24 Crane or Duck or a mix of both, 6 or 12 Swan or Swan-I, or Swan-F or Swan-FI or a mix of any two.

- Y180-Y182 6, 12, 18, or 24 Crane or Duck or a mix of both, 6 or 12 Swan-F or Swan-FI or a mix of the two.
- Y183+ 6, 12, 18, or 24 Crane, 6 or 12 Swan-F or Swan-FI or a mix of the two.

The starbase has six shuttle bays, each of which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the starbase, or between the starbase and the bays of any augmentation module, or between augmentation modules are not possible. A generic SSD and counter are in *Basic Set*.

( <b>R1.2-18) BAT</b> quantum wave	<b>TLE STATION (BATS):</b> Weapon #1 is torpedoes and Weapon #2 is phaser-3s.
Delete Weapon #	£3.
Fighters if ha	angar bay modules (R1.4) are present:
YEAR	FIGHTERS
Y165-Y169	6 or12 Finch or Quail.
Y170-Y172	6 or 12 Finch, Quail, or Raven.
Y173-Y174	6 or 12 Finch, Quail, Raven, or Crane.
Y175-Y176	6 or 12 Quail, Raven, or Crane.
Y177	6 or 12 Quail, Raven, Crane, or Duck.
Y178	6 or 12 Raven, Crane, or Duck.
Y179-Y182	6 or 12 Crane or Duck or a mix of both.
Y183+	6 or 12 Crane.

Fighters if heavy fighter hangar bay modules (R1.70) are present [note: if the base has PF docking modules (R1.16) it is a true PF tender and cannot operate heavy fighters]:

YEAR	FIGHTERS
Y177	6 or 12 Quail, Raven, Crane, or Duck, 6
	Swan or Swan-I.
Y178	6 or 12 Raven, Crane, or Duck, 6 Swan or
	Swan-I, or Swan-F or Swan-FI.
Y179	6 or 12 Crane or Duck or a mix of both, 6
	Swan or Swan-I, or Swan-F or Swan-FI.
V100 V100	6 or 10 Cropp or Duck or a mix of both 6

Y180-Y182 6 or 12 Crane or Duck or a mix of both, 6 Swan-F or Swan-FI.

Y183+ 6 or 12 Crane, 6 Swan-F or Swan-Fl.

The battle station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the battle station and the bays of any augmentation module or between augmentation modules are not possible.

Generic SSD is in *Basic Set;* use the generic Base Station counter in *Basic Set.* 

(R1.3-18) BASE STATION (BS): Weapon #1 is a quantum wave torpedo and Weapon #2 is phaser-3s. Delete Weapons #3 and #4.

Fighters if hangar bay modules (R1.4) are present:		
YÉAR	FIGHTERS	
Y165-Y169	6 or12 Finch or Quail.	
Y170-Y172	6 or 12 Finch, Quail, or Raven.	
Y173-Y174	6 or 12 Finch, Quail, Raven, or Crane.	
Y175-Y176	6 or 12 Quail, Raven, or Crane.	
Y177	6 or 12 Quail, Raven, Crane, or Duck.	
Y178	6 or 12 Raven, Crane, or Duck.	
Y179-Y182	6 or 12 Crane or Duck or a mix of both.	
Y183+	6 or 12 Crane.	
Fighters if h	eavy fighter hangar bay modules (R1.70) a	

Fighters if heavy fighter hangar bay modules (R1.70) are present [note: if the base has PF docking modules (R1.16) it is a true PF tender and cannot operate heavy fighters]:

YEAR	FIGHTERS
Y177	6 or 12 Quail, Raven, Crane, or Duck, 6
	Swan or Swan-I.
Y178	6 or 12 Raven, Crane, or Duck, 6 Swan or
	Swan-I, or Swan-F or Swan-FI.
Y179	6 or 12 Crane or Duck or a mix of both, 6
	Swan or Swan-I, or Swan-F or Swan-FI.
Y180-Y182	6 or 12 Crane or Duck or a mix of both, 6
	Swan-F or Swan-FI.

Y183+ 6 or 12 Crane, 6 Swan-F or Swan-FI.

The base station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4)

and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the base station and the bays of any augmentation module, or between augmentation modules are not possible.

A generic SSD and counter are in *Basic Set;* a Klingon specific SSD is in *Module R1*.

#### (R1.4-18) HANGAR BAY MODULE (HBM):

Fighters per hangar bay modules if hangar bay modules are present. The information is per hangar bay module. Hangar bay modules are class A augmentation modules and must be docked to a class A docking station to be operational. See the ship description for the base for the number of class-A docking positions the base has.

YEAR	FIGHTERS
Y165-Y169	6 Finch or Quail.
Y170-Y172	6 Finch, Quail, or Raven.
Y173-Y174	6 Finch, Quail, Raven, or Crane.
Y175-Y176	6 Quail, Raven, or Crane.
Y177	6 Quail, Raven, Crane, or Duck.
Y178	6 Raven, Crane, or Duck.
Y179-Y182	6 Crane or Duck or a mix of both.
Y183+	6 Crane.
This module	has one shuttle bay. Mines cann
امحمد مأجالا م	ula (MO 110) Transform hatu

This module has one shuttle bay. Mines cannot be laid from this module (M2.113). Transfers between this augmentation module and the bays of any other augmentation module or the bay or bays of the base to which it is attached are not possible.

SSD appears on base SSDs and in *Module R1;* there is no counter as the unit cannot function if it is not attached to a base. If in transit (being carried by a freighter or a tug) it is inactive.

(R1.7A-18) LARGE Q-SHIP (L-Q): Use a Klingon large Qship, but delete the security stations, delete the UIM refit, upgrade the phaser-2s to phaser-1s, and replace drone racks with additional phaser-1s with the same firing arcs as the phasers adjacent to the drone racks replaced. Replace the disruptors with quantum wave torpedoes with FA launching arcs. Replace the anti-drone with a phaser-3 with an RA firing arc.

Klingon L-Q SSD is in *Basic Set;* use a generic large freighter counter. A generic L-Q counter (labeled Q L) is in *Module R1*.

**(R1.7B-18) SMALL Q-SHIP (S-Q):** Use a Klingon small Q-ship, but delete the security stations, delete the UIM refit, replace the disruptor with a quantum wave torpedo with an FA launching arc, upgrade the phaser-2s to phaser-1s, and replace the drone rack with a phaser-1 with a 360° firing arc.

Klingon S-Q SSD is in *Basic Set;* use a generic small freighter counter. A generic S-Q counter (labeled Q S) is in *Module R1*.

(R1.9-18) FREE TRADER (FT): Free Traders in Paravian space will normally have a phaser-2 or a phaser-3 in the option mount.

A generic SSD and counter are in Advanced Missions.

(R1.10-18): FLEET REPAIR DOCK (FRD): Weapon #1 will be phaser-1s, Weapon #2 will be phaser-3s, Weapon #3 will be phaser-1s, one with an LS arc and one with an RS arc.

Fighters if hangar bay modules (R1.4) are present:		
YEAR	FIGHTERS	
Y165-Y169	6 or12 Quail.	
Y170-Y172	6 or 12 Quail or Raven.	
Y173-Y176	6 or 12 Quail, Raven, or Crane.	
Y177	6 or 12 Quail, Raven, Crane, or Duck.	
Y178	6 or 12 Raven, Crane, or Duck.	

## PARAVIAN MARAUDERS - R18

Y179-Y182 6 or 12 Crane or Duck or a mix of both. Y183+ 6 or 12 Crane.

Fighters if a heavy fighter hangar bay module (R1.70) is present [note: if the fleet repair dock has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

ÝEĂR	FIGHTERS
Y177	0 or 6 Quail, Raven, Crane, or Duck, 6
	Swan or Swan-I.
Y178	0 or 6 Raven, Crane, or Duck, 6 Swan or
	Swan-I, or Swan-F or Swan-FI.
Y179	0 or 6 Crane or Duck or a mix of both, 6

Swan or Swan-I, or Swan-F or Swan-FI. Y180-Y182 0 or 6 Crane or Duck or a mix of both, 6 Swan-F or Swan-FI.

Y183+ 0 or 6 Crane, 6 Swan-F or Swan-Fl.

The fleet repair dock has one shuttle bay. Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the fleet repair dock and the bay of any augmentation module, or between augmentation modules are not possible.

A generic SSD and counter are in Advanced Missions.

(R1.13A-18) SMALL AUXILIARY CARRIER (AxCVL): Weapon-A is 2xphaser-1-360°, weapon-B is 1xphaser-3-LS and 1xphaser-3-RS.

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

YEAR	FIGHTERS
Y165-Y169	12 Quail.
Y170-Y172	12 Quail or Raven.
Y173-Y176	12 Quail, Raven, or Crane.
Y177	12 Quail, Raven, Crane, or Duck.
Y178	12 Raven, Crane, or Duck.
Y179-Y182	12 Crane or Duck or a mix of both.
Y183+	12 Crane.

This ship has one shuttle bay. This ship cannot operate disruptor-armed fighters.

A generic AxCVL SSD is in *Basic Set*. Use a generic freighter counter from *Basic Set* or a generic AxCVL counter from *Module J*.

(R1.13B-18) LARGE AUXILIARY CARRIER (AxCVA): Weapon-A is 3xphaser-1-360°, Weapon-B is 1xphaser-3-LS and 1xphaser-3-RS, Weapon-C is a phaser-1-RA.

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

YEAR	FIGHTERS
Y165-Y169	24 Quail.
Y170-Y172	24 Quail or Raven or a mix of both.
Y173-Y176	24 Quail, Raven, or Crane or a mix of any
	two.
Y177	24 Quail, Raven, Crane, or Duck or a mix of
	any two.
Y178	24 Raven, Crane, or Duck or a mix of any
	two.
Y179-Y182	24 Crane or Duck or a mix of both.
Y183+	24 Crane.

This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor-armed fighters.

There is currently no generic carrier SSD, so use the Federation AxCVA SSD from *Module J* replacing the type-G drone racks with the Weapon-B phaser-3s as noted above. Use a generic freighter counter from *Basic Set* or a generic AxCVA counter from *Module J*.

(R1.14-18) GROUND-BASED DEFENSE STATIONS: The Paravians use GBDP, GBD1, and GBD2. For a quantum wave torpedo ground base, replace the disruptors of a GBDD with quantum wave torpedoes with FH launching arcs; no change in BPV.

Generic SSDs for these ground bases and generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.15-18) DEFENSE SATELLITES: The Paravians use the phaser variant (2xphaser-2s + 2xphaser-2s + 2xphaser-3s). For a quantum wave torpedo defense satellite, take a disruptor-armed version and replace the disruptors with quantum wave torpedoes (2xphaser-2s + 2xquantum wave torpedoes + 2xphaser-3s); the defense satellite cannot overload the quantum wave torpedoes.

Generic SSDs for these defense satellites and generic defense satellite counters are in *Advanced Missions*.

(R1.20-18) SMALL ARMED FREIGHTER (F-AS): The Paravians use the phaser-armed version unchanged. For a quantum wave torpedo armed version, use a disruptor-armed version but replace the disruptor with a quantum wave torpedo launcher with an FA launching arc.

SSDs for these small armed-freighters and generic F-AS counters are in *Advanced Missions*.

(R1.21-18) LARGE ARMED FREIGHTER (F-AL): The Paravians use the phaser-armed version unchanged. For a quantum wave torpedo armed version use a disruptor armed version but replace the disruptors with a quantum wave torpedo launchers with a FA launching arcs.

SSDs for these large armed-freighters and generic F-AL counters are in *Advanced Missions*.

(R1.22-18) MONITOR (MON): Weapon-A is quantum wave torpedoes-FA; Weapon-B is 4xphaser-1-360°s, Weapon-C is phaser-3-LS, weapon-D is phaser-3-RS.

Fighters if using a fighter pallet:

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YÉAR	FIGHTERS	
Y165-Y169	12 Quail.	
Y170-Y172	12 Quail or Raven.	
Y173-Y176	12 Quail, Raven, or Crane.	
Y177	12 Quail, Raven, Crane, or Duck, or 6	
	Swan or Swan-I.	
Y178	12 Raven, Crane, or Duck, or 6 Swan or	
	Swan-I, or Swan-F or Swan-FI.	
Y179	12 Crane or Duck or a mix of both, or 6	
	Swan or Swan-I, or Swan-F or Swan-FI.	
Y180-Y182	12 Crane or Duck or a mix of both, or 6	

Y180-Y182 12 Crane or Duck or a mix of both, or 6 Swan-F or Swan-FI.

Y183+ 12Crane, or 6 Swan-F or Swan-FI.

The monitor with the fighter pallet has two bays: the monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet (note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

#### YEAR FIGHTERS

Y182 12 Crane or Duck or a mix of both.

Y183+ 12 Crane.

The monitor with the space control pallet has two bays: the monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

## A generic SSD and counter are in *Advanced Missions*, a Klingon specific SSD is in *Module R1*.

(R1.24-18) MOBILE BASE (MB): The Paravian mobile base has phaser-1s.

Fighters if ha	angar bay modules (R1.4) are present:
Y165-Y169	6 or12 Finch or Quail.
Y170-Y172	6 or 12 Finch, Quail, or Raven.
Y173-Y174	6 or 12 Finch, Quail, Raven, or Crane.
Y175-Y176	6 or 12 Quail, Raven, or Crane.
Y177	6 or 12 Quail, Raven, Crane, or Duck.
Y178	6 or 12 Raven, Crane, or Duck.
Y179-Y182	6 or 12 Crane or Duck or a mix of both.
Y183+	6 or 12 Crane.
Fighters if he	eavy fighter hangar bay modules (R1.70) are
present [note: if t	he base has a PF docking module (R1.16) it

is a true PF tender and cannot operate heavy fighters]:

YEAR FIGHTERS

- Y177 0 or 6 Quail, Raven, Crane, or Duck, 6 Swan or Swan-I.
- Y178 0 or 6 Raven, Crane, or Duck, 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y179 0 or 6 Crane or Duck or a mix of both, 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y180-Y182 0 or 6 Crane or Duck or a mix of both, 6 Swan-F or Swan-FI.
- Y183+ 0 or 6 Crane, 6 Swan-F or Swan-FI.

The mobile base has two shuttle bays, which may have shuttle decks (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the mobile base, or between the mobile base's bays and the bays of any augmentation module, or between augmentation modules are not possible.

A mobile base SSD with phaser-1s and a generic MB counter are in *Module R1*.

(R1.27A-18) SMALL AUXILIARY PF TENDER (AxPFS): Weapon #1 is phaser-1-360°, Weapon #2 is 1xphaser-3-LS and 1xphaser-3-RS.

A generic AxPFS SSD and counter are in Module K.

(R1.27B-18) LARGE AUXILIARY PF TENDER (AxPFL): Weapon #1 is 3xphaser-1-360°s, Weapon #2 is 1xphaser-3-LS and 1xphaser-3-RS.

A generic AxPFL SSD and counter are in Module K.

(R1.28A-18) SMALL GROUND FIGHTER BASE (FGB-S): Cargo boxes are replaced by APRs.

Fighters (note: fighter ground bases cannot operate heavy fighters, only heavy fighter ground bases can):

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	YEAR	FIGHTERS
	Y165-Y169	6 Finch or Quail.
	Y170-Y172	6 Finch, Quail, or Raven.
	Y173-Y174	6 Finch, Quail, Raven, or Crane.
	Y175-Y176	6 Quail, Raven, or Crane.
	Y177	6 Quail, Raven, Crane, or Duck.
	Y178	6 Raven, Crane, or Duck.
	Y179-Y182	6 Crane or Duck.
	Y183+	6 Crane.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic FGB-S SSD is in *Module R1;* generic ground base counters are in *Advanced Missions* and *Module R1*.

#### (R1.28B-18) MEDIUM GROUND FIGHTER BASE (FGB-M): Cargo boxes are replaced by APRs.

Fighters (note: fighter ground bases cannot operate heavy fighters, only heavy fighter ground bases can):

, ,	, , , , , , , , , , , , , , , , , , , ,
YEAR	FIGHTERS
Y165-Y169	12 Finch or Quail.
Y170-Y172	12 Finch, Quail, or Raven.
Y173-Y174	12 Finch, Quail, Raven, or Crane.
Y175-Y176	12 Quail, Raven, or Crane.
Y177	12 Quail, Raven, Crane, or Duck.
Y178	12 Raven, Crane, or Duck.
Y179-Y182	12 Crane or Duck or a mix of both.
Y183+	12 Crane

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic FGB-M SSD is in *Module R1*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28G-18) SMALL MILITARY GARRISON (GMG): The Paravian version replaces the phaser-2 with a phaser-1.

A generic GMG SSD is in *Module R1*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28J-18) SMALL PF GROUND BASE (GPF): Cargo boxes hold spare warp booster packs.

A generic GPF SSD and generic GPF counter are in *Module K*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28K-18) PLANETARY CONTROL BASE (GPC): Cargo boxes hold spare warp booster packs.

Fighters:

YEAR FIGHTERS

Y181-Y182 12 Crane or Duck or a mix of both.

Y183+ 12 Crane.

This base is a true PF tender and cannot operate heavy fighters.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic GPC SSD is in *Module K*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.30-18) SYSTEM ACTIVITY MAINTENANCE STATION (SAMS): WPN is either 2xphaser-1-360°s or 2xquantum wave torpedo launchers with 360° launching arcs. Phaser-X is always phaser-1.

A generic SAMS SSD and counter are in Module R1.

(R1.31-18) AUXILIARY SPACE CONTROL SHIP (AxSCS): Weapon #1 is 3xphaser-1-360°s; Weapon #2 is 1xphaser-3-

LS and 1xphaser-3-RS. Fighters:

#### YEAR FIGHTERS

Y181-Y182 12 Crane or Duck or a mix of both.

Y183+ 12 Crane.

This ship is a true PF tender and cannot operate heavy fighters. This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor-armed fighters.

A generic AxSCS SSD and counter are in Module K.

## PARAVIAN MARAUDERS — R18

(R1.35-18) CIVILIAN BASE STATION (BSC): Weapon #1, Weapon #2, and the heavy phasers (PH-) are all phaser-1s, Weapon #3 and Weapon #4 are phaser-3-360°.

Fighters if hangar bay modules (R1.4) are present:		
YEAR	FIGHTERS	
Y165-Y169	6 or12 Finch or Quail.	
Y170-Y172	6 or 12 Finch, Quail, or Raven.	
Y173-Y174	6 or 12 Finch, Quail, Raven, or Crane.	
Y175-Y176	6 or 12 Quail, Raven, or Crane.	
Y177	6 or 12 Quail, Raven, Crane, or Duck.	
Y178	6 or 12 Raven, Crane, or Duck.	
Y179-Y182	6 or 12 Crane or Duck or a mix of both.	
Y183+	6 or 12 Crane.	
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Fighters if a heavy fighter hangar bay module (R1.70) is present [note: if the base has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

- YEAR FIGHTERS
- Y177 6 or 12 Quail, Raven, Crane, or Duck, 6 Swan or Swan-I.
- Y178 6 or 12 Raven, Crane, or Duck, 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y179 6 or 12 Crane or Duck or a mix of both, 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y180-Y182 6 or 12 Crane or Duck or a mix of both, 6 Swan-F or Swan-FI.

Y183+ 6 or 12 Crane, 6 Swan-F or Swan-Fl.

The civilian base station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the civilian base station and the bays of any augmentation module or between augmentation modules are not possible.

A generic civilian base station SSD is in *Module C3*, ship description is in *Module R1*; use the generic base station counter from *Basic Set*.

(R1.38-18) FREE PROSPECTOR (FTP): Free prospectors in Paravian space will normally have a phaser-2, or phaser-3, or prospecting cannon in the option mount.

Generic SSD is in *Module F1*, use a generic Free Trader counter from *Advanced Mission*.

(R1.41-18) FREE TROOPER (FTR): Free troopers in Paravian space will normally have a phaser-2 or phaser-3 in the option mount.

Generic SSD and FTR counter are in Module M.

(R1.46A-18) MEDIUM BOMBER BASE (BMB): Paravian medium bombers use this base.

Bombers:	
YEAR	BOMBERS
Y167-Y172	6 Goose-A.
Y173-Y175	6 Goose-A or Goose-B.
Y176	6 Goose-B.
Y177-Y178	6 Goose-B or Goose-C.
Y179+	6 Goose-C.
The bay is	"outdoors" and has no

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

Generic SSD is in *Module J2;* generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.46B-18) HEAVY BOMBER BASE (BHB): Paravian heavy bombers use this base.

Bombers:

#### YEAR BOMBERS

Y179+ 6 Gander.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lav T-bombs (R1.28A).

Generic SSD is in Module J2; generic ground base counters are in Advanced Missions and Module R1.

(R1.47-18) SECTOR BASE (STB): Weapon #1 is quantum wave torpedoes and Weapon #2 is phaser-3s. Delete Weapon #3.

Fighters if hangar bay modules (R1.4) are present: YĚAR **FIGHTERS** 

Y175-Y176 6 or 12 Quail, Raven, or Crane.

6 or 12 Quail, Raven, Crane, or Duck. Y177

6 or 12 Raven, Crane, or Duck. Y178

Y179-Y182 6 or 12 Crane or Duck or a mix of both.

Y183+ 6 or 12 Crane.

Fighters if heavy fighter hangar bay modules (R1.70) are present [note: if the base has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

#### YFAR FIGHTERS

ILAN	
Y177	6 or 12 Quail, Raven, Crane, or Duck, 6
	Swan or Swan-I.
Y178	6 or 12 Raven, Crane, or Duck, 6 Swan or

- Swan-I, or Swan-F or Swan-FI. 6 or 12 Crane or Duck or a mix of both, 6 Y179
- Swan or Swan-I, or Swan-F or Swan-FI.
- Y180-Y182 6 or 12 Crane or Duck or a mix of both, 6 Swan-F or Swan-FI.

Y183+ 6 or 12 Crane, 6 Swan-F or Swan-FI.

The sector base has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the sector base and the bays of any augmentation module or between augmentation modules are not possible.

Generic SSD and counter are in Module R8.

(R1.48A-18) SMALL HEAVY FIGHTER BASE (HFB-S): Paravian heavy fighters use these bases. Cargo boxes are converted to APRs.

Fic	htore.	
	inters.	

YEAR	FIGHTERS	
		-

Y178-Y179 3 Swan or Swan-I, or Swan-F or Swan-FI. Y180+ 3 Swan-F or Swan-FI.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in Module R8; generic ground base counters are in Advanced Missions and Module R1.

(R1.48B-18) HEAVY FIGHTER BASE (HFB): Paravian heavy fighters use these bases. Cargo boxes are converted to APRs.

#### Fighters: YEAR FIGHTERS

Y177 6 Swan or Swan-I.

Y178-Y179 6 Swan or Swan-I, or Swan-F or Swan-FI. Y180+ 6 Swan-F or Swan-FI.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in Module R8; generic ground base counters are in Advanced Missions and Module R1.

#### (R1.48C-18) HEAVY FIGHTER PLANETARY CONTROL BASE (HFC): Paravian heavy fighters use these bases.

Cargo boxes hold spare warp booster packs. Fighters:

•			
YEA	R	FIGHTE	RS

- Y177 12 Quail, Raven, Crane, or Duck; 6 Swan or Swan-I.
- Y178 12 Raven, Crane, or Duck; 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y179 12 Crane or Duck or a mix of both: 6 Swan or Swan-I, or Swan-F or Swan-FI.
- Y180-Y182 12 Crane or Duck or a mix of both; 6 Swan-F or Swan-FI.
- Y183+ 12 Crane, 6 Swan-F or Swan-FI.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in Module R8; generic ground base counters are in Advanced Missions and Module R1.

(R1.53-18) SECURITY SKIFF (SSK): Delete the drone rack and the skiff's BPV is reduced by two points.

A generic SSD and counter are in Module R8.

(R1.55-18) HEAVY AUXILIARY CARRIER (HAV): Weapon #1 is phaser-1s, Weapon #2 is phaser-1s, Weapon #3 is phaser-3, Weapon #4 is phaser-3s, and Weapon #5 is phaser-3s.

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

iono, only add	inary nearly nginer carnere carry.
YEAR	FIGHTERS
Y165-Y169	24 Quail.
Y170-Y172	24 Quail or Raven.
Y173-Y176	24 Quail, Raven, or Crane.
Y177	24 Quail, Raven, Crane, or Duck.
Y178	24 Raven, Crane, or Duck.
Y179-Y182	24 Crane or Duck or a mix of both.
Y183+	24 Crane.
<b>T</b> I · I · I	

This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptorarmed fighters.

A generic SSD and counter are in Module R8.

(R1.56-18) HEAVY AUXILIARY PF TENDER (HAP): Weapon #1 is phaser-1s, Weapon #2 is phaser-1s, Weapon #4 is phaser-3s, and Weapon #5 is phaser-3s.

A generic SSD and counter are in Module R8.

(R1.57-18) HEAVY SPACE CONTROL SHIP (HSC): Weapon #1 is phaser-1s, Weapon #2 is phaser-1s, Weapon #4 is phaser-3s, and Weapon #5 is phaser-3s.

Fighters:	

FIGHTERS YEAR

Y182 12 Crane or Duck or a mix of both.

12 Crane. Y183+

This ship is a true PF tender and cannot operate heavy fighters. This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptorarmed fighters.

A generic SSD and counter are in Module R8.

(R1.58-18) SMALL AUXILIARY GUARD SHIP (SAC): Weapon options are quantum wave torpedo launcher-FA, phaser-1-FA, phaser-2-FA.

A generic SSD and counter are in Module R8.

(R1.59-18) LARGE AUXILIARY GUARD SHIP (LAC): Weapon options are quantum wave torpedo launcher-FA, phaser-1-FA, phaser-2-FA.

A generic SSD and counter are in Module R8.

(R1.60-18) HEAVY AUXILIARY GUARD SHIP (HAC): Weapon options are quantum wave torpedo launcher-FA, phaser-1-FA, phaser-2-FA. Rear hull weapons are Weapon #1 is phaser-1s, Weapon #3 is phaser-3, Weapon #4 is phaser-3s, and Weapon #5 is phaser-3s.

A generic SSD and counter are in Module R8.

(R1.65-18) CIVILIAN LUXURY FAST TRANSPORT (FTT): Civilian luxury fast transports in Paravian space will normally have phaser-2s or phaser-3s in the option mount.

A generic SSD and counter are in Module R8.

(R1.67-18) PRIME TRADERS (PT): Prime traders in Paravian space will normally have phaser-1s or phaser-3s in the option mounts.

A generic SSD and counter are in Module R8.

(R1.68U-18) SELF-DEFENSE SKID TYPE-II: The Paravians only use the phaser-only versions of the self-defense skids.

A generic SSD is in *Module R8;* there is no separate counter.

(R1.68V-18) SELF-DEFENSE SKID TYPE-III: The Paravians only use the phaser-only versions of the self-defense skids.

A generic SSD is in *Module R8;* there is no separate counter.

**(R1.68W-18) FIGHTER SKID:** The fighters on this skid will, of course, be whatever is borrowed from the Paravian ground base the skid is supporting as per the rules for this skid type.

The skid has a single bay. Transfers between this skid and any shuttle bays on the freighter, on other skids carried by the freighter, or on any ducktails carried by the freighter are not possible.

A generic SSD is in *Module R8;* there is no separate counter.

## (R1.70-18) HEAVY FIGHTER HANGAR BAY MODULE (HFM):

Fighters are per heavy fighter hangar bay modules if hangar bay modules are present. The information is per hangar bay module. Hangar bay modules are class-A augmentation modules and must be docked to a class A docking station to be operational. See the ship description for the base for the number of class-A docking positions the base has. Only one HFM can be on a base, except a starbase or stellar fortress which can have two such augmentation modules. If a PF docking module (R1.16) is being used by the base, the base is a true PF tender and cannot operate heavy fighters and would have no use for this module:

#### YEAR FIGHTERS

Y177 6 Swan or Swan-I.

Y178-Y179 6 Swan or Swan-I, or Swan-F or Swan-FI. Y180+ 6 Swan-F or Swan-FI.

Transfers between this augmentation module and the bays of any other augmentation module or the bay or bays of the base to which it is attached are not possible.

## PARAVIAN MARAUDERS - R18

SSD is in *Module R8;* there is no counter as the unit cannot function if it is not attached to a base. If in transit (being carried by a freighter or a tug), it is inactive.

(R1.71-18) FAST MONITOR (MNF): Weapon-A is quantum wave torpedoes-FA, Weapon-B is 4xphaser-1-360°s, Weapon-C is phaser-3-LS, Weapon-D is phaser-3-RS.

Fighters if using a carrier pallet:	
YĔAR	FIGHTERS
Y165-Y169	12 Quail.
Y170-Y172	12 Quail or Raven.
Y173-Y176	12 Quail, Raven, or Crane.
Y177	12 Quail, Raven, Crane, or Duck; or 6
	Swan or Swan-I.
Y178	12 Raven, Crane, or Duck; or 6 Swan or
	Swan-I, or Swan-F or Swan-FI.
Y179	12 Crane or Duck or a mix of both; or 6
	Swan or Swan-I, or Swan-F or Swan-FI.
Y180-Y182	12 Crane or Duck or a mix of both; or 6
	Swan-F or Swan-FI.

Y183+ 12 Crane or 6 Swan-F or Swan-Fl.

The fast monitor with the fighter pallet has two bays: the fast monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet. (Note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

- YEAR FIGHTERS Y182 12 Crane or
  - 12 Crane or Duck or a mix of both.
- Y183+ 12 Crane.

The fast monitor with the space control pallet has two bays: the fast monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

A generic SSD and counter are in Module R9.

(R1.74-18) HEAVY AUXILIARY TROOP TRANSPORT (FTH): Weapon #1 is phaser-1s, Weapon #3 is a phaser-3, Weapon #4 is phaser-3s, and Weapon #5 is phaser-3s. A ceneric SSD and counter are in *Module B11* 

A generic SSD and counter are in Module R11.

(R1.75-18) LARGE AUXILIARY HEAVY FIGHTER CARRIER (LAH): Weapon-A is 3xphaser-1-360°s, Weapon-B is 1xphaser-3-LS and 1xphaser-3-RS, Weapon-C is a phaser-1-RA.

Fighters
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YĔAR	FIGHTERS		
Y177	12 Quail, Raven, Crane, or Duck; 6 Swan		
	or Swan-I.		
Y178	12 Raven, Crane, or Duck; 6 Swan or		
	Swan-I, or Swan-F or Swan-FI.		
Y179	12 Crane, or Duck or a mix of both; 6 Swan		
	or Swan-I, or Swan-F or Swan-FI.		
Y180-Y182	12 Crane, or Duck or a mix of both; 6		
	Swan-F or Swan-FI.		
Y183+	12 Crane, 6 Swan-F or Swan-FI.		
This ship has	This ship has been about the barries through the batters and the		

This ship has two shuttle bays; transfers between the bays are not possible.

A generic SSD and counter are in Module R11.

#### (R1.76-18) SMALL AUXILIARY HEAVY FIGHTER CARRIER

**(SAH):** Weapon-A is 2xphaser-1-360°s, Weapon-B is 1xphaser-3-LS and 1xphaser-3-RS.

Fighters:YEARFIGHTERSY1776 Swan or Swan-I.Y178-Y1796 Swan or Swan-I, or Swan-F or Swan-FI.Y180+6 Swan-F or Swan-FI.This ship has a single shuttle bay.A generic SSD and counter are in Module R11.

(R1.77-18) LARGE AUXILIARY SCOUT (LAS): Weapon #1 is phaser-1s, Weapon #2 is phaser-3s, and Weapon #3 is phaser-3.

A generic SSD and counter are in *Module R11*.

(R1.78-18) SMALL AUXILIARY SCOUT (SAS): Weapon #1 is phaser-1 and Weapon #2 is phaser-3s (one LS, one RS).

A generic SSD and counter are in *Module R11*.

(R1.79-18) COMMUNICATIONS RELAY STATION (CCS): WPN is either 2xphaser-1-360°s or 2xquantum wave torpedo launchers-360°. Phaser-X is always phaser-1.

A generic SSD and counter are in Module R11.

(R1.81-18) ADVANCED TECHNOLOGY FLEET REPAIR DOCK (FRX): Weapon #1 will be phaser-1s, Weapon #2 will be phaser-3s, Weapon#3 will be phaser-1s. All weapons are advanced technology versions. Advanced technology Paravian ships will appear in future products.

Fighters if hangar bay modules (R1.4) are present:

YĚAR FIGHTÉRS

Y182 12 Crane or Duck or a mix of both.

Y183+ 12 Crane. Fighters if a heavy fighter hangar bay module (R1.70) is present. [Note: if the advanced fleet repair dock has a PF

docking module (R1.16), it is a true PF tender and cannot operate heavy fighters.]

#### YEAR FIGHTERS

Y182 0 or 6 Crane or Duck, 6 Swan-F or Swan-Fl.

Y183+ 0 or 6 Crane, 6 Swan-F or Swan-Fl.

The advanced fleet repair dock has one shuttle bay. Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the advanced fleet repair dock and the bays of any augmentation module or between augmentation modules, are not possible.

A generic SSD and counter are in Module R11.

(R1.83-18) LIGHT MONITOR (LMN): Weapon-A is 4xquantrum wave torpedo launchers-FA, Weapon B is 4xphaser-1-360°s, Weapon-C is 1xphaser-3-LS, and Weapon-D is 1xphaser-3-RS.

Fighters if using a carrier pallet:

J · · · · ·	<b>J</b>
YEAR	FIGHTERS
Y165-Y169	12 Quail.
Y170-Y172	12 Quail or Raven.
Y173-Y176	12 Quail, Raven, or Crane.
Y177	12 Quail, Raven, Crane, or Duck; or 6
	Swan or Swan-I.
Y178	12 Raven, Crane, or Duck; or 6 Swan or
	Swan-I, or Swan-F or Swan-FI.
Y179	12 Crane or Duck or a mix of both; or 6
	Swan or Swan-I, or Swan-F or Swan-FI.
Y180-Y182	12 Crane or Duck or a mix of both; or 6
	Swan-F or Swan-FI.
Y183+	12Crane or 6 Swan-F or Swan-FI.

The light monitor with the fighter pallet has two bays: the light monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet. (Note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

#### YEAR FIGHTERS

Y182 12 Crane or Duck or a mix of both. Y183+ 12 Crane.

The light monitor with the space control pallet has two bays: the light monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

A generic SSD and counter are in *Module R11*.

(R1.84-18) FREE ESCORT CARRIER (FEV): Free escort carriers in Paravian space will normally have phaser-2s or phaser-3s in the option mounts.

Fig	hters:

YEAR FIGHTERS Y166+ 12 varies.

Y166+ 12 varies. This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptorarmed fighters or heavy fighters.

A generic SSD and counter are in Module R11.

(R1.85-18) PRIME CORVETTE (PTC): Torpedoes will be quantum wave torpedo launcher-FAs. Phaser options are phaser-2s if the prime corvette is operated by a civilian organization, and phaser-1s if operated by the government.

A generic SSD and counter are in *Module R11*.

(R1.86-18) ARMED CUTTER (CUT): Phaser-X is a phaser-1; drones are phaser-2s (one LS, one RS).

A generic SSD and counter are in *Module R11*.

(R1.88-18) FREE Q-SHIP (FTQ): Option mount can be phaser-1, phaser-2, or phaser-3.

A generic SSD and counter are in *Module R12*.

(R1.89-18) STELLAR FORTRESS (STF): Weapon #1 is quantum wave torpedoes, Weapon #2 is phaser-3s, and Weapon #3 is phaser-3s with 360° firing arcs. Delete Weapon #4.

Fighters if hangar bay modules (R1.4) are present:

YEAR FIGHTERS

Y179-Y182 6, 12, 18, or 24 Crane or Duck or a mix of both.

Y183+ 6, 12, 18, or 24 Crane.

Fighters if heavy fighter hangar modules (R1.70) in are present. [Note: a stellar fortress can have two heavy fighter squadrons, if the stellar fortress has PF docking modules (R1.16), it is a true PF tender and cannot operate heavy fighters at all.]

#### YEAR FIGHTERS

- Y179 6, 12, 18, or 24 Crane or Duck or a mix of both; 6 or 12 Swan or Swan-I, or Swan-F or Swan-FI or a mix of any two.
- Y180-Y182 6, 12, 18, or 24 Crane or Duck or a mix of both; 6 or 12 Swan-F or Swan-FI or a mix of the two.
- Y183+ 6, 12, 18, or 24 Crane, 6 or 12 Swan-F or Swan-Fl or a mix of the two.

The stellar fortress has six shuttle bays, each of which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module

[(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the stellar fortress, or between the stellar fortress and the bays of any augmentation module, or between augmentation modules are not possible.

A generic SSD and counter are in Module R12.

(R1.95-18) FAST NAVAL TRANSPORT (FNT): Phaser-X are phaser-1s.

A generic SSD is in *Module R12;* a generic counter is in *Module R11*.

#### (R18.N3) OTHER THINGS USED BY THE PARAVIANS

Some other units and rules need definition for use by the Paravians.

(G34.0) DROGUES: A Paravian version of the seeking weapons drogue with three quantum wave torpedo launchers is available. This drogue cannot arm its quantum wave torpedo launchers while it is deployed; the ship must arm the drogue's quantum wave torpedo launchers just as plasma-F torpedoes are armed (albeit, the arming energy be supplied in a single turn). The Paravians can use other drogues under the normal rules, e.g., they can use phaser and sensor drogues, but cannot use phaser-G or drone drogues.

Use any available generic drogue counters found in *Module J2*.

(J8.0) MULTI-ROLE SHUTTLES: Paravian multi-role shuttles are armed with two phaser-3-360°s and one quantum wave torpedo launcher (which must be armed in the same manner as a fighter quantum wave torpedo launcher).

Generic MRS shuttles are in *Module J*.

(M4.0) CAPTOR MINES: The Paravians can use type-D captor mines. The Paravians also have a variant of the type-B captor, the large one of which is armed with three quantum wave torpedoes while the smaller version has one quantum wave torpedo. Unlike the plasma-F armed versions of the type-B captor, the Paravian versions can launch one quantum wave torpedo per launcher per turn, but no launcher can launch a quantum wave torpedo within eight impulses of doing so on a previous turn. Paravian type-B captor mines cannot overload their quantum wave torpedoes.

(**R8.0**) **ORION PIRATES:** For purposes of (G15.44) and (G15.7) the Omega Cartel considers Paravian space to be its home territory; Gorn and Inter-Stellar Concordium space are considered to be its operating zone.

**CONFIRMING:** There is no ECM drone or ECP plasma system available to the Paravians.

#### (R18.R) REFITS

Paravian forces use the following refits:

**Y180 MECH-LINK REFIT (R1.R1):** This refit is applied normally under its rules to Paravian ships. As with most empires, this refit is not included on the SSDs and will have to be calculated by the players. See note under PFs below.

**Y165 EARLY BASE REFITS (R1.R2):** This refit does not apply to Paravian bases.

## PARAVIAN MARAUDERS — R18

**CASUAL READY RACKS (R1.R3):** This refit does not currently apply to any Paravian ship, but is mentioned here to confirm that it was not overlooked.

**Y170 BASE REFITS:** The shields of starbases are 50 boxes (each) prior to Y170, and increased to 70 boxes (each) in this year. Limited aegis is also installed; the starbase has a BPV of 650 in this year.

The shields of battle stations are 30 boxes (each) prior to Y170, and increased to 35 boxes (each) in this year. Limited aegis is also installed; the battle station has a BPV of 215 in this year.

The shields of base stations are 21 boxes (each) prior to Y170, and increased to 30 boxes (each) in this year. Limited aegis is also installed; the battle station has a BPV of 138 in this year.

**Y175 BASE REFITS:** The shields of starbases are 70 boxes (each) prior to Y175, and increased to 80 boxes (each) in this year. Full aegis is also installed; the starbase has a BPV of 675 in this year.

The shields of battle stations are 35 boxes (each) prior to Y175, and increased to 40 boxes (each) in this year. Full aegis is also installed; the battle station has a BPV of 230 in this year.

The shields of base stations are 30 boxes (each) prior to Y175, and increased to 35 boxes (each) in this year. Full aegis is also installed; the base station has a BPV of 148 in this year.

The shields of civilian base stations are 21 boxes (each) prior to Y175, and increased to 30 boxes (each) in this year. Limited aegis is also installed. The civilian base station has a BPV of 138/108 from this year.

**Y180 ADVANCED SHUTTLES (J17.0):** Paravian ships have advanced shuttles as of Y180 at no cost in BPV.

**Y182 PF SHIELD REFITS (R1.PFR1):** Paravian fast patrol ships receive shield refits just as non-Paravian fast patrol ships do in Y182.

**Y183 PARTIAL X-REFITS (XR0.0):** While no Paravian advanced technology (X-ship) units have been published, Paravian technology is straightforward and not esoteric and the Paravians can use (XR0.0) partial X-refits. Y183 has been arbitrarily chosen as a year when these refits would have been available to the Paravians at present.

(R18.R1) APR REFIT: Beginning in Y168 the Paravians began refitting their older classes of ships (heavy cruiser, light cruiser, destroyer, frigate, and variants thereof) with APRs in an effort to keep them viable as the new "war" classes entered service. Virtually all of these pre-General War designs had received this refit by Y172. Ships with this refit are designated with a small "a" after their identification, e.g., "CAa," "CLa," "DDa," etc.

#### PARAVIAN BATTLESHIP AND VARIANTS

(R18.2) BATTLESHIP (BB): When the Paravians learned of the Klingon attempt to build a battleship, they began a series of design studies to determine if a ship of such mass was possible. As with most empires that embarked on such studies the Paravians began by scaling up their existing dreadnought. The result, on paper, was a smaller, but far more maneuverable battleship than the designs of many other empires. The restrictive launching arcs of the quantum wave torpedoes would have been somewhat offset by the ship's maneuverability and better than average power curve.

The ship was clearly optimized for dealing with the Paravian's traditional foes, the plasma-armed Confederation of the Gorns and the Inter-Stellar Concordium. As with most empires, the design's reliance on a new larger engine would prove its ultimate downfall. The B10 design had circumvented this problem by adding a fourth standard engine (although even the Klingons had serious problems balancing the warp fields of the four engines, one of the causes of the delays in the B10 design entering service).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y175-Y176	None	8xCrane
Y177	None	8xCrane or 4xSwan or 4xSwan-I
Y178+	None	8xCrane or 4xSwan-F or 4xSwan-Fl

This is a base hull. Variants include the stellar domination ship (conjectural) (R18.3), battleship carrier (conjectural) (R18.4) and battleship raid mothership (conjectural) (R18.5).

Seeking Weapons: The battleship can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6*. This ship is conjectural.

Known names: Sky King, Sky Lord.

(R18.3) STELLAR DOMINATION SHIP (SDS): A late conjectural design assuming that the battleship had entered production. This ship would have been a powerful combatant as it retained virtually all of the power systems of the battleship design and only lost the rear launching quantum wave torpedoes. It gained four fighters (giving it a full squadron), a full flotilla of fast patrol ships, and systems to support their operations. The design included an increase in seeking weapon control channels both to allow the use of remote controlled fighters and to allow the ship to take control of the guidance of quantum wave torpedoes launched by its fighters in order to maximize their electronic warfare support in striking their targets.

The stellar domination ship is a variant of the battleship (R18.2).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

Year	Escorts	Fighters
Y182	CWA, 2xDWA or 2xCWA, 1xDWA	12xCrane or 12xDuck
Y183+	CWA, 2xDWA or 2xCWA, 1xDWA	12xCrane

Seeking Weapons: The stellar domination ship can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: None. SSD and counter are in *Module C6*. This ship is conjectural.

Known names: Sky Baron, Sky Duke.

(R18.4) BATTLESHIP CARRIER (BBV): As design studies for the battleship (R18.2) proceeded the Paravians considered converting the design into a heavy carrier. The ship would have had two bays in stacked decks: the upper deck with 12 fighters and two shuttles, the lower with 12 fighters and four shuttles. [If available, one shuttle in each bay would have been an MRS (J8.0).] Transfers between the bays would have been possible. Creating the bays required deleting the rear firing quantum wave torpedoes, reducing the ship's reserve power by 33%, and deleting 50% of its auxiliary power reactors and 30% of its transporters. The design included an increase in seeking weapon control channels both to allow the use of remote controlled fighters and to allow the ship to take control of the guidance of quantum wave torpedoes launched by its fighters in order to maximize their electronic warfare support in striking their targets.

The battleship carrier is a variant of the battleship (R18.2).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, one of which holds a dozen fighters and two admin shuttles, the other of which holds a dozen fighters and four admin shuttles. Transfers between these bays are possible under (J1.591).

Year	Escorts	Fighters		
Y175-Y176	CWA, DWA, FFA or	24xCrane or		
	CWA, 2xDWA	24xQuail or		
		24xRaven or		
		12 of any two		
Y177	CWA, DWA, FFA or	24xCrane or		
	CWA, 2xDWA	24xQuail or		
		24xRaven or		
		12 of any two or		
		12 of one and		
		12xDuck, or		
		6xSwan or		
		6xSwan-I		
Y178	CWA, DWA, FFA or	24xCrane or		
	CWA, 2xDWA	24xRaven or		
		12 of each or		
		12 of one and		
		12xDuck or		
		6xSwan or		
		6xSwan-I or		
		6xSwan-F or		
		6xSwan-Fl		
Y179	CWA, 2xDWA	24xCrane or		
		12xCrane and		
		12xDuck or		
		6xSwan or		
		6xSwan-I or		
		6xSwan-F or		
		6xSwan-FI		
Y180-Y182	CWA, 2xDWA	24xCrane or		
		12xCrane and		
		12XDUCK OF		
		oxowan-F or		
V(100)		oxSwan-FI		
Y183+	2xCWA, DWA	24xCrane or		
		12xCrane and		
		oxowan-F or		
1		oxowan-Fi		

Seeking Weapons: The battleship carrier can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6*. This ship is conjectural. Known names: *Sky Count, Sky Earl*.

(R18.5) BATTLESHIP RAID MOTHERSHIP (BMS): A conjectural design intended by the Paravians to support raiding operations deep into enemy space, the battleship raid mothership is a full-fledged starship with limited armament suitable to its mission.

The battleship raid mothership can carry one, two, three, or four pods; one or two pods can be "double-weight" pods. If there is a single double-weight pod, it must be on the ship's centerline and two single-weight pods or no additional pods can be carried. If two double-weight pods are carried, both must be under the wings and either a single single-weight pod or no pod can be carried under the centerline. The "pod weight" chart shows pod weights from zero (none are carried) to five (reflecting two double-weight and one single-weight pod).

The pods are attached to the battleship raid mothership in a side-by-side configuration. If one pod is carried, it must be on the battleship raid mothership's centerline. If two double-weight pods are carried, both must be mounted under the wings (in addition, a single-weight pod could be mounted under the centerline in this configuration). Single-weight pods must balance. Two single-weight pods can be mounted under the centerline (side by side) if no heavy pods are carried, or under the wings. Three single-weight pods could be mounted as one under each wing and one under the centerline (in this configuration the pod under the centerline could be a double weight pod). The ship cannot move at warp if the pods are unbalanced. If the battleship raid mothership has four pods, it cannot drop one pod from under a wing and drop a second pod from under its centerline and continue to move at warp; it must drop both the pods from its wings or both the pods from its centerline or all four. See (G14.3) if dropping pods while moving faster than Speed 1.

Pseudo pods (G14.6) might be carried, but for balance reasons pseudo pods have to be carried in opposition. The battleship raid mothership cannot carry a pseudo pod under a wing and real pod under the opposite wing, or one pseudo pod and a normal pod under its centerline. It could carry a pseudo pod under its centerline and real pods under its wings.

The ship cannot operate more than two battle pods, carrier pods, or fast patrol ship pods at one time, but was fully capable of operating two of each, e.g., two battle pods and two carrier pods, at the same time. (It could operate a single battle pod, a single carrier pod, and a single PF pod at the same time, or two of one type of pod and one each of the other two.) If the ship is operating a space control pod, it cannot carry any other type of pod.

No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the battleship raid mothership.

Unlike tugs based on cruisers and smaller ships, the movement cost and Turn Mode of the battleship raid mothership does not vary with the pods carried; see Annex #3A.

As the ship was not intended to function as the command element of a battle fleet, its command facilities were rather spartan for a ship of its size.

The battleship raid mothership is a variant of the battleship (R18.2).

Seeking Weapons: The battleship raid mothership can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in Module C6.

This ship is conjectural.

Known names: Sky Queen, Sky Countess.

## PARAVIAN MARAUDERS — R18

#### PARAVIAN DREADNOUGHT AND VARIANTS

(R18.6) DREADNOUGHT (DN): The Paravian dreadnought, as was typical of Paravian ships, is designed to attack. It will move its quantum wave torpedo launchers into position to fire and keep firing them until the target is destroyed. It is slightly smaller than dreadnoughts of other empires but, especially after the APR refit was installed, it is somewhat over powered and more maneuverable.

This is a base hull. Variants include the heavy dreadnought (R18.7), space control ship (R18.8), heavy carrier (R18.9), and raid mothership (R18.10). The light dreadnought (R18.11) is built on drastically modified dreadnought hull.

Seeking Weapons: The dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 but not always installed; it was universal by Y172. The mechlink refit would probably have been installed.

SSD and counter are in *Module C6*.

Known names: Cloud Warrior, Cloud King, Cloud Rage.

(R18.7) HEAVY DREADNOUGHT (DNH): As with most empires, the Paravians deployed an improved version of their dreadnought beginning in Y178. The ship expanded the impulse engines to provide more power and added additional quantum wave torpedoes [unusual in that most empires added additional secondary (phasers) or tertiary (drones, etc.) weapons]. The added quantum wave torpedoes came close to straining the hull, and likely would have without the additional reinforcement from the ship's size and all of the weapons being mounted on the ship's centerline.

The heavy dreadnought is a variant of the dreadnought (R18.6).

Seeking Weapons: The heavy dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* Known names: *Cloud King, Cloud Star.* 

(R18.8) SPACE CONTROL SHIP (SCS): A conversion of the dreadnought intended to take its place as the centerpiece of a major fleet task force. These ships were mostly conversions of existing ships during the waning days of the General War, whether dreadnoughts or heavy carriers (R18.9) as the Paravian economy was no longer capable of building new dreadnoughts. It is possible that some ships were built from scratch during the early days of the Andromedan War, but records are inconclusive. The ship was considered somewhat power deficient, but the strength of the full flotilla of fast patrol ships it brought to a battle was seen to be more than sufficient compensation for that. The design included an increase in seeking weapon control channels both to allow the use of remote controlled fighters and to allow the ship to take control of the guidance of guantum wave torpedoes launched by its attrition units to maximize their electronic warfare support in striking their targets.

The stellar domination ship is a variant of the dreadnought (R18.6).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

This ship has two shuttle bays, each of which holds six fighters and four admin shuttles. Transfers between these bays are possible under (J1.591).

Year	Escorts	Fighters
Y182	CWA, 2xDWA or 2xCWA, 1xDWA	12xCrane or 12xDuck
Y183+	CWA, 2xDWA or 2xCWA, 1xDWA	12xCrane

Seeking Weapons: The space control ship can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: None.

SSD and counter are in *Module C6.* Known names: *Cloud Ripper*, *Cloud Storm*.

(R18.9) HEAVY CARRIER (CVA): This ship required slightly stretching the hull of the basic dreadnought, which limited the number of them that could be built. Not because the design was improbable, but because the added construction time interfered with other construction timetables. The Paravians are believed to have built at least three ships of this class, but this cannot be confirmed. It was considered somewhat power deficient as the impulse engines had to be reduced to accommodate two full squadrons of fighters and the APR refit was also absorbed into the fighter support systems. Consequently, the ship, while intended to serve as a flagship of a battle fleet, rarely appeared in such a role except in less critical areas. Arguably, this defeated the purpose of the ship's design. The design included an increase in seeking weapon control channels both to allow the use of remote controlled fighters and to allow the ship to take control of the guidance of quantum wave torpedoes launched by its fighters in order to maximize their electronic warfare support in striking their targets.

The heavy carrier is a variant of the dreadnought (R18.6). Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds a dozen fighters and two admin shuttles. Transfers between these bays are possible under (J1.591).

Year	Escorts	Fighters
Y172-Y174	CWE, DWE, FFE or DWE, 2xFFE	24xCrane or 24xQuail or 24xRaven or
		12 of any two
Y175-Y176	CWA, DWA, FFA or	24xCrane or
	DVVA, ZXFFA	24xQuall of 24xRaven or
		12 of any two
Y177	CWA, DWA, FFA or	24xCrane or
	GWA, 2XDWA	24xQuall or
		24xRaven or
		12 of one and
		6xSwan or
		6xSwan-I
Y178	CWA, DWA, FFA or	24xCrane or
	CWA, 2xDWA	24xRaven or
	12 of each	
		12 of one and
		12xDuck or
		6xSwan or
		6xSwan-I or
		6xSwan-F UI
V170		24vCrane or
11/9	UVVA, ZADVVA	12xCrane and
		12xDuck or
		6xSwan or
		6xSwan-I or

## STAR FLEET BATTLES

		6xSwan-F or 6xSwan-FI
Y180-Y182	CWA, 2xDWA	24xCrane or 12xCrane and 12xDuck or 6xSwan-F or 6xSwan-Fl
Y183+	2xCWA, DWA	24xCrane or 12xCrane and 6xSwan-F or 6xSwan-FI

Seeking Weapons: The heavy carrier can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* Known names: *Cloud Fall, Cloud Killer.* 

(R18.10) RAID MOTHERSHIP (RMS): The raid mothership actually preceded the design of the Paravian dreadnought (R18.6), but is still regarded as a variant of that ship. The Paravians found the borders of their enemies (the Gorn Confederation and Inter-Stellar Concordium) increasingly well defended and softer targets harder to reach. At the time, the Paravians were having problems increasing the armaments of large ships similar to those of virtually all other empires (leading the "early" class of dreadnoughts, essentially a large command platform with armament little better than that found on heavy cruisers). The Paravians were more aggressive than most, and diverted their limited capability to construct large ships to this design. The object of the ship was to provide logistics (fuel, spare parts, repair capability) to conduct extended-duration raids into more vulnerable regions of their foes. The raid mothership would not be tied to a single location as a normal base would. Most empires would eventually copy this idea to some extent during the General War with mobile operations bases. Only the Paravians purpose-built a design for the mission. Some of these ships were caught by significant enemy forces and destroyed, sometimes leading to the loss of much of the raiding force which could not be resupplied.

Some of these ships were converted to normal dreadnoughts or dreadnought variants during the General War when it was found that there were so many ships operating in the raid zones that interception became all too common.

The raid mothership can carry one, two, or three pods; one or two of pods can be "double-weight" pods. If there is a single double-weight pod, it must be on the ship's centerline and either two single-weight pods or no additional pods can be carried. If two double-weight pods are carried, both must be under the wings and either a single single-weight pod or no pod can be carried under the centerline. The "pod weight" chart shows pod weights from zero (none are carried) to five (reflecting two double-weight and one single-weight pod).

The pods are attached to the raid mothership in a sideby-side configuration. If one pod is carried, it must be on the raid mothership's centerline. If two double-weight pods are carried, both must be mounted under the wings (in addition, a single-weight pod could be mounted under the centerline in this configuration). Single-weight pods must balance. Two single-weight pods can be mounted under the wings. Three single-weight pods could be mounted as one under each wing and one under the centerline (in this configuration the pod under the centerline could be a double weight pod). The ship cannot move at warp if the pods are unbalanced. If the raid mothership has three pods, it cannot drop one pod from under a wing and drop a second pod from under its centerline

and continue to move at warp; it must drop both the pods from its wings or the pod from its centerline. See (G14.3) if dropping pods while moving faster than Speed 1.

Pseudo pods (G14.6) might be carried, but for balance reasons pseudo pods have to be carried in opposition. The raid mothership cannot carry a pseudo pod under a wing and real pod under the opposite wing. It could carry a pseudo pod under its centerline and real pods under its wings.

The ship cannot operate more than two battle pods, carrier pods, or fast patrol ship pods at one time, but was fully capable of operating any three single-weight pods. If the ship is operating a space control pod, it cannot carry any other type of pod.

No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the raid mothership.

Unlike tugs based on cruisers and smaller ships, the movement cost and Turn Mode of the raid mothership does not vary with the pods carried; see Annex #3A.

As the ship was not intended to function as the command element of a battle fleet, its command facilities were rather spartan for a ship of its size.

The raid mothership is a variant of the dreadnought (R18.6).

Seeking Weapons: The raid mothership can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6*.

Known names: Cloud Lancer, Cloud Rider.

#### PARAVIAN LIGHT DREADNOUGHT

(R18.11) LIGHT DREADNOUGHT (DNL): Conceived in the waning days of peace before the outbreak of the General War, the Paravian light dreadnought was typical of the class of heavy raiders. It was intended to be fast enough to outrun any possible pursuit but armed heavily enough to defeat the escorts of any small convoys it ran across. It was not intended to operate as the centerpiece of a battle fleet. As with most light dreadnoughts, it wound up being used as the command ship for smaller secondary battle squadrons when not committed to a raid. Such use tended to be at the peak of operational readiness when moving behind enemy lines. Even minor damage or delayed maintenance could result in the ship being vulnerable to interception.

This ship is a variant of the dreadnought (R18.6) but the changes were sufficiently extreme that it is considered a new class.

Seeking Weapons: The light dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

Fast: This ship is a "fast" ship. SSD and counter are in *Module C6.* Known names: *Cloud Sky*.

## PARAVIAN MARAUDERS — R18

#### PARAVIAN HEAVY BATTLECRUISER AND VARIANTS

(R18.12) HEAVY BATTLECRUISER (BCH): As the General War progressed, the Paravians found their pre-war ship designs less and less satisfactory in the face of the increasing firepower of their opponents. Like the various other empires, the Paravians sought to keep pace with the stresses of combat by improving their ship designs. The heavy battlecruiser was an improved pre-war command cruiser, but the modifications were extensive. Increases in power output and reserve power went along with improvements in firepower and shielding. The ship was faster, and deadlier, then the original design, while retaining the maneuverability of the ship.

This ship is a variant of the heavy cruiser (R18.16) but the changes were sufficiently extreme that it is considered a new class. Variants include the battle carrier (R18.14) and battle control Ship (R18.13).

Landing: The heavy battlecruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The heavy battlecruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in Module C6.

Known names: Hurricane, Tornado.

(R18.13) BATTLE CONTROL SHIP (BCS): The Paravians combined the long-range strike ability of fast patrol ships with the combat capabilities of their heavy battlecruiser to create this ship. The fighters were intended for use as both local security patrols and as an adjunct to the ship's combat power. As with the battle control ships of other empires, the ship and its supporting escorts would form the nucleus of a battle group for offensive and defensive missions, but would also be used as an independent patrol and raiding force. In this latter role, whenever possible a scout of some kind would be attached to the group, but due to the shortage of such ships (and the many other calls for them) this was more often honored in the breach than the observance.

The battle control ship is a variant of the heavy battlecruiser (R18.12).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

Year	Escorts	Fighters
Y182	CWA, DWA	6xCrane or
		6xDuck
Y183+	CWA, DWA	6xCrane

Landing: The battle control ship can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The battle control ship can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: None. SSD and counter are in *Module C6.* Known names: *Cyclone, Tempest.* 

(R18.14) BATTLE CARRIER (BCV): A heavy battlecruiser redesigned to accommodate a squadron of fighters while retaining the power and firepower of the basic design. These ships, as indeed the heavy battlecruiser itself, served in the place of dreadnoughts where command facilities were deemed most important. Unlike dreadnoughts, they were also used, with their attendant escort groups, as independent patrol and reaction forces.
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The battle carrier is a variant of the heavy battlecruiser (R18.12).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y181-Y182	CWA, DWA	12xCrane or 12xDuck or 6xSwan-F or 6xSwan-FI
Y183+	CWA, DWA	12xCrane or 6xSwan-F or 6xSwan-Fl

Landing: The battle carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The battle carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6*. Known names: *Monsoon*.

#### PARAVIAN HEAVY CRUISER AND VARIANTS

(R18.15) COMMAND CRUISER (CC): Designed to lead a squadron of heavy cruisers or a large task force, the primary capability of the ship was its flag facilities. The added quantum wave torpedo increased its punch, and the additional impulse engines provided the power for it. The command cruiser, like the heavy cruiser was found to be increasingly power deficient as the General War spread across the Alpha Octant, and an APR refit was installed to give the ship greater speed.

As with command cruisers of most empires, ships of this type often patrolled their own sectors while coordinating the operations of subordinate ships, and even conducted raids and border incursions into Gorn Confederation and Inter-Stellar Concordium space during times of "peace" to seek out enemies to destroy. Captains selected to command these ships were always those who were the most aggressive and being groomed for promotion to higher command. Commodores and admirals were not always present on these ships, unless the ship was being used as the command platform for an operation.

The command cruiser is a variant of the heavy cruiser (R18.16).

Landing: The command cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The command cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Storm King, Storm Duke, Storm Leader.

(R18.16) HEAVY CRUISER (CA): Taking advantage of improved warp dynamics, the heavy cruiser was able to sustain damage to its warp engines without suffering a degradation of its ability to maneuver. The ship, as with all Paravian warships, was designed to bring its battery of quantum wave torpedoes to bear on a target, then swiftly turn to rearm them and attack again. The phaser battery was arranged primarily to provide a defense against the plasma torpedoes of the opposing empires, but was strong enough to give good support to the quantum wave torpedoes as the battle developed. As technology advanced, the ship was deemed power deficient, and a refit installing auxiliary power reactors was instigated in Y168, giving the ship slightly more speed. The ship's ability to land on planets gave it added operational and strategic flexibility, but limited its overall size.

This is a base hull. Variants include the command cruiser (R18.15), strike carrier (R18.17), survey cruiser (R18.18), and tug (R18.56). The fast cruiser (R18.19) is built on a drastically modified heavy cruiser hull.

Landing: The heavy cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The heavy cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6*.

Known names: Storm Rider, Storm Walker, Storm Lancer, Storm Knight, Storm Warrior.

(R18.17) STRIKE CARRIER (CVS): The Paravians produced this design to provide fighter support for their task forces, but ultimately used them, and their escorts, mostly as independent patrol squadrons in critical areas. The combination had enough firepower to deal with any single raider (although it could not catch a fast raider, it could sometimes intercept them). The limit on the numbers of heavy cruiser hulls that could be built kept the overall number of strike carriers down. It is thought that no more than a half dozen of them were built between the start of the General War and the conclusion of the Andromedan War.

The strike carrier is a variant of the heavy cruiser (R18.16).

Carrier: This ship	is a true	carrier; see	(J4.75), (	J4.93),
(J11.13), and (J15.22).				

Year	Escorts	Fighters
Y169	DWE, FFE or CWE, FFE or 2xFFE	12xQuail
Y170-Y172	DWE, FFE or CWE, FFE or 2xFFE	12xQuail or 12xRaven
Y173-Y174	CWE, DWE or DWE, FFE	12xCrane or 12xQuail or 12xRaven
Y175-Y176	CWA, DWA or DWA, FFA	12xCrane or 12xQuail or 12xRaven
Y177	CWA, DWA or 2xDWA	12xCrane or 12xQuail or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I
Y178	CWA, DWA or 2xDWA	12xCrane or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y179	CWA, DWA	12xCrane or 12xDuck or 6xSwan or 6xSwan-I or

		6xSwan-F or 6xSwan-Fl
Y180-Y182	CWA, DWA	12xCrane or 12xDuck or 6xSwan-F or 6xSwan-Fl
Y183+	CWA, DWA	12xCrane or 6xSwan-F or 6xSwan-FI

Landing: The strike carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The strike carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in Module C6.

Known names: Storm Carrier, Storm Bringer.

(R18.18) SURVEY CRUISER (SR): The Paravians found they needed a better and more survivable survey ship than the survey freighters they had been using and produced this design. It was a heavily modified heavy cruiser, retaining some of the ship's heavy firepower in order to help the ship survive encounters with the "unexpected." Lab facilities were spacious and the copious shuttle bay allowed for detachments to be left on different continents, or even planets and moons during surveys. The Paravians produced at least six ships of this class before the General War, and are believed to have lost four of those, mostly due to "unknown causes." It is believed that one or more of the ships was destroyed while trying to scout passages into Inter-Stellar Concordium or Gorn Confederation space to improve the chances of Paravian raiding forces to slip through.

The survey cruiser is a variant of the heavy cruiser (R18.16).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

In peacetime, the shuttles are usually admin [(J2.0)/(R1.F1)] types, although most carried one heavy transport shuttle (R1.F5). The ship might replace two admin shuttles with ground assault shuttles (R1.F4) in special circumstances (S3.2), such as a planet with particularly vicious wildlife. Some carried one MRS shuttle (J8.0) (MRS shuttles are not included in the ship's BPV), although supplies were limited and survey cruisers did not have a high priority.

Landing: The survey cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The survey cruiser can control a number of seeking weapons equal to its sensor rating (F3.21). See also (F3.213).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Storm Seeker, Storm Finder.

#### PARAVIAN FAST CRUISER

(R18.19) FAST CRUISER (CF): As with most empires in the final decade before the outbreak of the General War the Paravians developed a "fast" ship for the purpose of conducting raids deep behind their enemy's front lines. The engines were always a weakness of these designs (for all empires) as they proved difficult to produce in any numbers, and the need to reduce the mass of the ship imposed limits on the firepower that could be carried. The Paravian design included APRs, and this actually pioneered their use in refits

### PARAVIAN MARAUDERS — R18

to older designs, such as the heavy cruiser. While fast, the need to hit targets hard and then get away forced the ships to get closer to their targets and make heavier offensive use of the phaser battery. This resulted in the ships sustaining enough damage that raiding operations often had to be cut short or risk losing the ship. Most of the raids ships of this class conducted wound up being not much deeper than those conducted by the heavy cruisers.

The fast cruiser is a variant of the heavy cruiser (R18.16).

Landing: The fast cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The fast cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* Known names: *Storm Killer, Storm Hunter.* 

#### PARAVIAN LIGHT CRUISER AND VARIANT

(R18.20) LIGHT CRUISER LEADER (CLL): Designed to lead squadrons of light cruisers or small task forces of mixed ships, the light cruiser leader included a modest increase in firepower [actually matching the heavy cruiser (R18.16)] with slight increases in power and shielding. In Paravian service, most of the flag officers assigned to these ships were those who, for various reasons, were not chosen for further promotion. Often their previous command had been captain of a command cruiser (R18.15). While being promoted to a rank and given responsibilities of commanding larger units, they were always subject to the supervision of superior officers (those whose flags were found in the command cruisers and larger ships). Still, many of these "failed" flag candidates would be assigned independent missions in support of larger operations, and many of them performed guite well. It was perhaps seen that their experience might rein in the more hotheaded of the officers given direct command of these ships who, impressed with their own firepower, might have gone too far into "harm's way." The addition of the APR refit beginning in Y168 provided the ship with more power, and thus more speed, but good captains would often not load one or more of the quantum wave torpedoes when their plasma-armed opponent was rushing upon them in order to have more power for maneuver.

The light cruiser leader is a variant of the light cruiser (R18.21).

Landing: The light cruiser leader can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The light cruiser leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*. Known names: *Wind King, Wind Lord*.

(R18.21) LIGHT CRUISER (CL): Entering squadron service a few years after the heavy cruiser (R18.16), the light cruiser was designed to carry nearly the same weapons battery. This resulted in a ship that was either over-gunned or underpowered depending on the point of view. Shielding could be seen as inadequate, and captains always risked being overwhelmed by the plasma torpedoes of their enemies if they were not careful. Having enough power to move and keep the quantum wave torpedo launchers pounding on the target required a careful balancing act. The addition of the

### STAR FLEET BATTLES

APR refit beginning in Y168 redressed this problem only slightly.

This is a base hull. Variants include the light cruiser leader (R18.20).

Landing: The light cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The light cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6*.

Known names: Wind Runner, Wind Flyer, Wind Singer, Wind Lancer, Wind Hunter.

#### PARAVIAN WAR CRUISER AND VARIANTS

(R18.22) WAR CRUISER LEADER (CWL): The Paravians slightly enlarged the hull of their war cruiser to create this variant. The enlargement was not applied to other variants due to its cost. The resulting ship, including the added power, weapons, and shields, was a good all-around ship for the Paravians and often led task forces in secondary missions and diversionary attacks as well as frequently operating as an independent patrol ship. They seldom actually carried flag officers unless there was a shortage of other command vessels, but were usually commanded by the senior and most experienced of the junior captains who were waiting for a heavy cruiser to command.

The war cruiser leader is a variant of the war cruiser (R18.23).

Landing: The war cruiser leader can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war cruiser leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Flight Leader, Flight King.

(R18.23) WAR CRUISER (CW): The Paravian war cruiser was typical of the designs of most war cruisers in the Alpha Octant providing the firepower of a heavy cruiser on a smaller hull. The "hot warp" engines of such ships provided sufficient power to use the weapons effectively while moving at relatively high combat speeds. This was aided by the arming cycles of the ship's weapons, which enabled captains to easily divert some or all of the ship's energy to speed as needed, temporarily sacrificing firepower. As with the war cruisers of most empires, the Paravian war cruiser hull was the basis of many variants during the General War.

This is a base hull. Variants include the war cruiser leader (R18.22), the war cruiser carrier (R18.24), escort war cruiser (R18.25), aegis war cruiser (R18.25A), commando war cruiser (R18.26), war cruiser minesweeper (R18.27), war cruiser fast patrol ship tender (R18.28), war cruiser scout (R18.29), and light tactical transport (R18.30). The fast war cruiser (R18.31) is built on a drastically modified war cruiser hull.

Seeking Weapons: The war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6*.

Known names: Flight Song, Flight Singer, Flight Dreamer, Flight Dawn, Flight Saber.

(R18.24) WAR CRUISER CARRIER (CWV): One of the earliest carriers to enter Paravian service, the ship gave up much in the conversion in an effort to both operate a full squadron of fighters and remain an effective combatant in its own right. The war cruiser class was already deficient in transporters, and this design only made that situation worse, but the Paravians believed that other ships would be able to use their transporters to supplement those of the carrier. As with carrier groups of most empires, the Paravians initially intended the carrier and its attendant escorts to act as part of a larger battle force, but often assigned them to operate as patrol groups in the depths of space. The good firepower of a Paravian carrier group made encountering one an unpleasant experience for ships of opposing empires; even the Andromedans learned to treat a Paravian carrier group with respect.

The war cruiser carrier is a variant of the war cruiser (R18.23).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y169	DWE, FFE or 2xFFE	12xQuail
Y170-Y172	DWE, FFE or 2xFFE	12xQuail or 12xRaven
Y173-Y174	CWE, FFE or DWE, FFE	12xCrane or 12xQuail or 12xRaven
Y175-Y176	CWA, DWA or DWA, FFA	12xCrane or 12xQuail or 12xRaven
Y177	CWA, DWA or 2xDWA	12xCrane or 12xQuail or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I
Y178	CWA, DWA or 2xDWA	12xCrane or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y179	CWA, DWA	12xCrane or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y180-Y182	CWA, DWA	12xCrane or 12xDuck or 6xSwan-F or 6xSwan-FI
Y183+	CWA, DWA	12xCrane or 6xSwan-F or 6xSwan-Fl

Landing: The war cruiser carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war cruiser carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Flight Carrier, Flight Bringer.

(R18.25) ESCORT WAR CRUISER (CWE): Entering service contemporaneously with the war cruiser carrier (R18.24), ships of this type provided the "heavy" escort for all carriers of size class 3 or larger. They were primarily fitted with phasers to help defeat the plasma torpedoes of the opposing empires while covering the carrier as it recovered its fighters, but retained some quantum wave torpedoes to support the carrier in direct combat. Close in, the ships were dangerous duelers in their own right, but getting close could be problematic and they usually remained close to their assigned carriers.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The escort war cruiser is a variant of the war cruiser (R18.23).

Landing: The escort war cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The escort war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6*.

Known names: Flight Guardian, Flight Protector.

(R18.25A) AEGIS WAR CRUISER (CWA): In Y175 all surviving escort war cruisers were fitted with full aegis (D13.0) and all new production escort cruisers included full aegis from that point. The ships were redesignated "aegis war cruisers."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The aegis war cruiser is a variant of the war cruiser (R18.23).

Landing: The aegis war cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The aegis war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21) and has full aegis (D13.0). See also (J15.332).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort war cruiser SSD (R18.25) in *Module C6;* use the escort war cruiser counters in *Module C6.* 

Known names: Flight Guardian, Flight Protector.

(R18.26) COMMANDO WAR CRUISER (CWG): The Paravian commando war cruiser was intended to supplement and support landing operations conducted by other Paravian ships. As such its non-warp power generation systems were reduced to a near minimal capabilities in favor of carrying more troops and shuttles. While it retained the full phaser array of the war cruiser for defensive purposes it lacked offensive firepower, which nominally left it under armed for purposes of independent raids. The Paravians, however, often used these ships in independent strikes on poorly defended colonies, sometimes supported by destroyers or frigates.

The commando war cruiser is a variant of the war cruiser (R18.23).

Landing: The commando war cruiser can land on planets using the aerodynamic landing system (P2.433).

Landing Force: The 37 boarding parties (D7.0) include two heavy weapons squads (D15.81). There are four ground

### PARAVIAN MARAUDERS - R18

combat vehicles (D15.82). This was roughly a short battalion (R18.M1) and is included in the ship's BPV.

Shuttles: Five ground assault shuttles (R1.F4), one heavy transport shuttle (R1.F5), two admin shuttles [(J2.0)/(R1.F1)], these shuttles are included in the ship's BPV.

Seeking Weapons: The commando war cruiser can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Flight Trooper, Flight Stormer.

(R18.27) WAR CRUISER MINESWEEPER (CWM): The Paravian war cruiser minesweeper enjoyed the distinction of being perhaps the most heavily armed and capable cruiser sized minesweeper in the Alpha Octant. The ability of the quantum wave torpedo to be used to sweep mines together with its high rate of launch allowed the Paravians to retain the full battery of the war cruiser in the design. This allowed the ship to operate as a normal cruiser when not involved in other operations. In attacks on bases defended by minefields, if the ship were not too badly damaged while breaching the field, it would participate in the subsequent assault on the base. The Paravian fleet command tended to select those captains deemed the most cautious to command these ships in an effort to avoid losing them, or having them crippled in other operations and not available. Even so, the Paravian fleet often found itself short on minesweepers for critical operations due to their captains having gotten their ships too badly damaged in fights while on patrols. The lack of a need for tractor beams to sweep mines with seeking weapons resulted in no increase in this system in the design.

Two shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The war cruiser minesweeper is a variant of the war cruiser (R18.23).

This ship is a true minesweeper (M2.45), see also (M8.0). Landing: The war cruiser minesweeper can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war cruiser minesweeper can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Flight Hunter, Flight Finder.

(R18.28) WAR CRUISER FAST PATROL SHIP TENDER (CWP): The Paravian war cruiser fast patrol ship tender was something of a disappointment. Reduction in power systems made it a less than satisfactory scout ship and it had minimal support facilities for the fast patrol ships it carried. Several were lost during the Andromedan War when they proved unable to hold off Andromedan forces until relief could arrive after finding an Andromedan rapid transit network node.

The war cruiser fast patrol ship tender is a variant of the war cruiser (R18.23).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Landing: The war cruiser fast patrol ship tender can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war cruiser fast patrol ship tender can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: None.

SSD and counter are in *Module C6*.

Known names: Flight Harrower, Flight Raider.

(R18.29) WAR CRUISER SCOUT (CWS): A straightforward conversion of the war cruiser (R18.23), the war cruiser scout somewhat hampered by its lack of sufficient lab facilities to make full use of its specials sensors. Most analysts regarded the ship's power generation capabilities as only barely sufficient to the needs of a cruiser sized scout. Ships of this type were carefully managed by the Paravian fleet command, generally only allocated to the most critical operations, whether defensive or offensive in nature. Even so, the ships were sometimes found where they did not belong, supporting smaller forces or even having to defend themselves from an unanticipated attack while en route elsewhere (this was, of course, an event that sometimes affected the scouts of any empire).

The war cruiser scout is a variant of the war cruiser (R18.23).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Landing: The war cruiser scout can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war cruiser scout can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Flight Seeker, Flight Eyes.

(R18.30) LIGHT TACTICAL TRANSPORT (LTT): As with most empires, the Paravians found their need for tugs outstripping their ability to produce them and keep them in operation. They adopted the same solution as other empires, creating a light tug version of their war cruiser. Being smaller and cheaper these were produced in greater numbers and were more frequently hazarded in direct support of combat operations, leading to heavier losses. As with most light tactical transport designs the ship included internal cargo bays, although the amount of cargo carried was relatively small. Still it enabled the ships to support planetary assault operations by themselves landing on planets to deliver heavy equipment.

Like all war cruiser tugs, the movement cost and Turn Mode vary with the pods carried. The movement cost of the light tactical transport with one pod is 1.00 energy points per hex. The movement cost of the light tactical transport with a double-weight pod is 1.33 energy points per hex; see Annex #3A. This ship cannot carry a triple-weight pod such as the space control pod (R18.67).

The light tactical transport is a variant of the war cruiser (R18.23).

Landing: The light tactical transport can land on planets using the aerodynamic landing system (P2.433) if it is not carrying a pod.

Seeking Weapons: The light tactical transport can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Flight Hauler, Flight Packer.

#### PARAVIAN FAST WAR CRUISER

(R18.31) FAST WAR CRUISER (CWF): As with most empires in the final decade before the outbreak of the General War the Paravians developed a "fast" ship for the purpose of conducting raids deep behind their enemy's front lines. The engines were always a weakness of these designs

#### (for all empires) as they proved difficult to produce in any numbers, and the need to reduce the mass of the ship imposed limits on the firepower that could be carried. The Paravian fast war cruiser design, while fast, needed to hit targets hard which made heavier offensive use of the phaser battery necessary. The ships were primarily used to intercept enemy raiders rather than conducting independent raids on their own, but some ships were sent on raid missions.

The fast war cruiser is a variant of the war cruiser (R18.23), but the changes were sufficiently extreme that it is considered a new class.

Landing: The fast war cruiser can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The fast war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Flight Sword*, *Flight Arrow*.

#### PARAVIAN HEAVY WAR DESTROYER

(R18.32) HEAVY WAR DESTROYER (HDW): A multimission ship intended to quickly change mission profiles as needs emerged. As with most such ships of the class across Alpha Octant, most of these ships were given an initial configuration and never changed it during their active service. Several of the ships were converted to the scout/fast patrol ship tender mission during the Andromedan conflict and proved reasonably effective in hunting down rapid transit nodes.

As with all heavy war destroyers, the ship carries a pair of fighters for additional firepower and is treated as a "casual carrier" (J4.62) for determining supplies, but there are ready racks (J4.89) for the fighters.

This ship is a variant of the war destroyer (R18.36) but the changes were sufficiently extreme that it is considered a new class. The distinctive "V" shaped top tail (caused by the need to space the two center warp engines) made this perhaps the most easily recognizable ship in Paravian service. There are no variants as any ship of this class might be operating in any variant mode at one time or another and then be switched to another mode; see (G33.0).

Carrier: This ship is a true carrier if it has eight size-1 or four size-2 fighters; see (J4.75), (J4.93), (J11.13), and (J15.22). This ship is a casual carrier (J4.62) if it has seven or fewer size-1 fighters or three or fewer size-2 fighters.

This ship has two shuttle bays. Transfers between the bays are not possible.

· · ·	/		
	Year	Escorts	Fighters
	Y180+	At least one (G33.42), but	Varies, at
		if operating heavy fighters	least 8 size-1
		escorts are not required	or 4 size-2
			fighters

Landing: The heavy war destroyer can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The heavy war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21). It may have full aegis (D13.0) installed if configured as an escort (G33.43); see also (J15.332).

SSD and counters are in Module C6.

Known names: *Soaring Wing*, *Soaring Spear*, *Soaring Arrow*, *Soaring Lance*.

### **STAR FLEET BATTLES**

#### PARAVIAN DESTROYER AND VARIANT

(R18.33) DESTROYER LEADER (DDL): The destroyer leader has a curious design history. It was originally built to be an improved destroyer, but the design proved so expensive that it was not cost effective to use as a standard destroyer. Often a destroyer leader would be included as one of the two or three ships accompanying a cruiser on a raid, but even more often they were used to strengthen squadrons of destroyers left screening areas of Paravian space. This use was later formalized and the design became known as the destroyer leader (rather than the "improved destroyer"). The added power and additional heavy weapon made the ship a tough fight for an unrefitted Gorn light cruiser.

The destroyer leader is a variant of the destroyer (R18.34).

Landing: The destroyer leader can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The destroyer leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Fire Leader, Fire King.* 

(R18.34) DESTROYER (DD): The destroyer was conceived as a support ship for the cruisers, and two or more would often accompany a cruiser, whether heavy or light, on a raiding mission into hostile space. One of their principle tasks was self-sacrifice in order to allow the larger (and more valuable) ship to escape if the raid was intercepted by a force to powerful to defeat. Losses among destroyers before the General War were heavier than for any other class of Paravian warship as they were often used for independent patrols to allow cruisers to be gathered for more important incursions. The APR refit improved the ship's power curve appreciably making it faster than many of its opponents.

This is a base hull. Variants include the destroyer leader (R18.33).

Landing: The destroyer can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The destroyer can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6*.

Known names: Fire Cloud, Fire Wind, Fire Wing, Fire Sword, Fire Sky.

#### PARAVIAN WAR DESTROYER AND VARIANTS

(R18.35) WAR DESTROYER LEADER (DWL): The war destroyer leader benefited from the Paravian's experience with the destroyer leader. The added quantum wave torpedo launcher was supplemented by increases in the impulse engines of the basic war destroyer design and the slight increase in shielding made the ship somewhat more survivable. Ships of this type often led raids by squadrons of destroyers, sometimes supplemented by frigates, into the near reaches of the Paravian's enemies in order to keep them "on the back foot" and not able to launch large raids of their own. It was not unusual to find ships of this type patrolling alone, but as with the leaders of other empires there was never a squadron composed of such ships, or of such ships and destroyer leaders.

The war destroyer leader is a variant of the war destroyer (R18.36).

Landing: The war destroyer leader can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war destroyer leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Rain Leader, Rain King.

(R18.36) WAR DESTROYER (DW): The Paravian war destroyer was designed to be what the original destroyer was not; fast and powerful. It took a lot of the lessons in the design of the destroyer leader and applied them to a new hull. The hot warp engines gave the ship an exceptional power curve with ample power for its quantum wave torpedoes. The ability to selectively arm or not arm the quantum wave torpedoes (or even the phasers) for a cycle or two to maneuver into an attack position or evade plasma torpedoes only emphasized the ship's tactical flexibility. The APR refit was also incorporated into the design giving the ship a superb power curve. The war destroyer soon supplanted the destroyer when accompanying raids and as their numbers increased, the destroyers were relegated to secondary theaters and convoy escort roles.

This is a base hull. Variants include the war destroyer leader (R18.35), mobile carrier (R18.37), escort war destroyer (R18.38), aegis war destroyer (R18.38A), war destroyer scout (R18.39), war destroyer minesweeper (R18.40), commando war destroyer (R18.41), war destroyer fast patrol ship tender (R18.42), and war destroyer strategic transport (R18.43). The heavy war destroyer (R18.32) is built on a drastically modified war destroyer hull and regarded as a new class.

Landing: The war destroyer can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Rain Song, Rain Singer, Rain Dreamer, Rain Dawn, Rain Saber, Rain Warrior.

(R18.37) MOBILE CARRIER (DWV): The Paravians realized that war had changed with the appearance of warp capable attrition units, i.e., fighters, and began producing carriers both to take advantage of the new paradigm, and to protect their own fleet from it. Production rates of ships meant there were never going to be enough large carriers and so the Paravians turned to their smaller ships to build up their attrition forces. As with their larger carriers, the Paravians attempted to retain the full array of offensive firepower even while adding fighters to the design. The mobile carrier conversion was one of the more successful efforts.

Mobile carrier groups took over much of the patrolling within Paravian space, and the escort duties for convoys in threatened zones, mostly supplementing police forces but sometimes the group would be the sole escorts for a small but critical convoy. Sometimes a mobile carrier group would be the only available carrier force of a reserve battle squadron responding to an enemy incursion, and in such cases they were much better than nothing at all.

The mobile carrier is a variant of the war destroyer (R18.36).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y170-Y172	FFE or	8xQuail or
	2xFFE	8xRaven
Y173-Y174	DWE or	8xCrane or
	FFE or	8xQuail or
	2xFFE	8xRaven
Y175-Y176	DWA or	8xCrane or
	FFA	8xQuail or
		8xRaven
Y177	DWA or	8xCrane or
	FFA	8xQuail or
		8xRaven or
		8xDuck or
		4xSwan or
		4xSwan-I
Y178	DWA or	8xCrane or
	FFA	8xRaven or
		8xDuck or
		4xSwan or
		4xSwan-I or
		4xSwan-F or
		4xSwan-FI
Y179	DWA	8xCrane or
		8xDuck or
		4xSwan or
		4xSwan-I or
		4xSwan-F or
		4xSwan-FI
Y180-Y182	DWA	8xCrane or
		8xDuck or
		4xSwan-F or
		4xSwan-FI
Y183+	DWA	8xCrane or
		4xSwan-F or
		4xSwan-FI

Landing: The mobile carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The mobile carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: *Rain Sword*, *Rain Mace*, *Rain Falchion*, *Rain Demon*, *Rain Bow*.

(R18.38) ESCORT WAR DESTROYER (DWE): Conceived as an intermediate escort for the large carriers the escort war destroyer was produced in considerable numbers. The emphasis of the design was plasma defense, which left the ship with too few phaser-1s for distant fighting, but it retained a pair of quantum wave torpedo launchers to support the combat operations of the carrier. Some took the place of escort war cruisers in cases where losses left insufficient numbers of those available and the carrier group was needed.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The escort war destroyer is a variant of the war destroyer (R18.36).

Landing: The escort war destroyer can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The escort war destroyer can control

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a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Rain Guard, Rain Shield.

(R18.38A) AEGIS WAR DESTROYER (DWA): In Y175 all surviving escort war destroyers were fitted with full aegis (D13.0) and all new production escort war destroyers included full aegis from that point. The ships were redesignated "aegis war destroyers."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The aegis war destroyer is a variant of the war destroyer (R18.36).

Landing: The aegis war destroyer can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The aegis war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21) and has full aegis (D13.0). See also (J15.332).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort war desroyer SSD (R18.38) in *Module C6;* use the escort war destroyer counters in *Module C6.* 

Known names: Rain Guard, Rain Shield.

(R18.39) WAR DESTROYER SCOUT (DWS): As with most empires the Paravians found they needed more scouts than they could divert war cruiser hulls to provide and created this variation of their war destroyer. The conversion was simple and straightforward and ships of this type often supported task forces of cruisers sent on raiding missions when a war cruiser scout was not available. Like most war destroyer scouts this Paravian version was often used to plug gaps in the strategic sensor network or provide supplementary coverage in areas where enemy activity was believed to be on the increase.

The war destroyer scout is a variant of the war destroyer (R18.36).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Landing: The war destroyer scout can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war destroyer scout can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Rain Seeker, Rain Eyes.

(R18.40) WAR DESTROYER MINESWEEPER (DWM): The Paravian war destroyer minesweeper enjoyed the distinction of being perhaps the most heavily armed and capable destroyer-sized minesweeper in the Alpha Octant. The ability of the quantum wave torpedo to be used to sweep mines together with its high rate of launch allowed the Paravians to retain the full battery of the war destroyer in the design. This allowed the ship to operate as a normal destroyer when not involved in other operations. In attacks on defended minefields, if the ship was not too badly damaged while breaching the field it would participate in the subsequent assault. The Paravian fleet command tended to select those

junior captains deemed the most cautious to command these ships in an effort to avoid losing them, or having them crippled in other operations and not available. Successful captains would usually find themselves promoted (if they survived) to command a war cruiser minesweeper. The lack of a need for tractor beams to sweep mines with seeking weapons resulted in no increase in this system in the design.

Both shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The war destroyer minesweeper is a variant of the war destroyer (R18.36).

This ship is a true minesweeper (M2.45), see also (M8.0). Landing: The war destroyer minesweeper can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war destroyer minesweeper can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Rain Hunter, Rain Finder.

(R18.41) COMMANDO WAR DESTROYER (DWG): The Paravians converted several war destroyers to this design (usually during construction) to supplement and support the commando war cruisers and to support operations by raiding squadrons in less critical areas. The ships were also frequently used to move replacement personnel between planets and bases. It was not unusual for a ship of this type to sent to slip through and deliver replacements to a raiding squadron behind enemy lines.

The commando war destroyer is a variant of the war destroyer (R18.36).

Landing: The commando war destroyer can land on planets using the aerodynamic landing system (P2.433).

Landing Force: The 37 boarding parties (D7.0) include two heavy weapons squads (D15.81). There are four ground combat vehicles (D15.82). This was a battalion of troops (R18.M1) and is included in the ship's BPV.

Shuttles: Four ground assault shuttles (R1.F4), one heavy transport shuttle (R1.F5), two admin shuttles [(J2.0)/(R1.F1)], these shuttles are included in the ship's BPV.

Seeking Weapons: The commando war destroyer can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Rain Trooper, Rain Stormer.

#### (R18.42) WAR DESTROYER FAST PATROL SHIP TENDER

**(DWP):** The Paravians found fast patrol ships a necessary evil. Their presence in the fleets of their enemies required them to deploy their own just to fend off the attacks by the Confederation and Concordium gunboats. Finding the needs for other variants of the war cruiser limited the number of hulls available for PF tenders, the Paravians produced this variant of the war destroyer. Conditions aboard were cramped with the gunboat crews placing considerable strain on the ship's life support systems while aboard. The ship's regular crew considered it a relief when the gunboats were sent on a longrange mission, or even better were taken by a larger ship and they could return to base to pick up replacement gunboats and their crews.

Ships of this class often acted as scouts in smaller combat operations, but even these were sometimes used to try to support larger ships where they did not belong and had inadequate power reserves to be effective.

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The war destroyer fast patrol ship tender is a variant of the war destroyer (R18.36).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Landing: The war destroyer fast patrol ship tender can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The war destroyer fast patrol ship tender can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: None. SSD and counter are in *Module C6.* Known names: *Rain Harrower, Rain Raider.* 

(R18.43) WAR DESTROYER STRATEGIC TRANSPORT (DWT): The war destroyer design was modified to create this strategic transport to supplement the tugs and theater transports. It was more survivable than the theater transport if only because of its size and better shielding. Ships of this type did not normally venture into enemy territory, but in some cases were used for fast resupply of critical elements to a raiding force operating behind enemy lines using their internal cargo volume.

The SSD provides the data for both single-weight and double-weight pods, but any pods carried by this ship are inactive and every box in such a pod is treated as a "cargo" damage point. This war destroyer strategic transport can carry one pod, which can be double-weight. This ship cannot carry a triple-weight pod such as the space control pod (R18.67).

Like all tugs, the movement cost and Turn Mode vary with the pod carried. The movement cost of the war destroyer strategic transport with a single-weight pod is 0.75 energy points per hex, with a double-weight pod it is 1.0 energy points per hex; see Annex #3A. Note that other war destroyer variants cannot carry pods.

The war destroyer strategic transport is a variant of the war destroyer (R18.36).

Landing: The war destroyer strategic transport can land on planets using the aerodynamic landing system (P2.433) if it is not carrying a pod.

Seeking Weapons: The war destroyer strategic transport can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Rain Hauler.

#### PARAVIAN FRIGATE AND VARIANTS

(R18.44) FRIGATE LEADER (FFL): An improved version of the basic frigate with a superior power curve making it a deadly duelist in its size class, although the increase in firepower was limited. It is unclear why the improvements in this design were not retrofitted to the basic frigate, perhaps indicating difficulties in construction. Ships of this type were often found patrolling alone rather than leading a squadron of frigates. It was not uncommon for these ships to be sent on patrol in isolated areas while a destroyer would be used to lead two frigates in a task force.

The frigate leader is a variant of the frigate (R18.45).

Landing: The frigate leader can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The frigate leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168

and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Air Leader, Air King.* 

(R18.45) FRIGATE (FF): Typical of the small ship for small missions employed by many empires, the Paravian frigate had barely enough systems to be able to operate independently of larger ships (although it would need to call up the nearest cruiser if it ran into anything significant). It had a relatively good power curve and a heavy weapons load, the APR refit increased its capabilities. It was, however, a relatively unmaneuverable ship for its size.

This is a base hull. Variants include the frigate leader (R18.44), escort carrier (R18.46), escort frigate (R18.47), aegis frigate (R18.47A), fast carrier resupply ship (R18.48), frigate scout (R18.49), commando frigate (R18.50), minehunter frigate (R18.51), theater transport frigate (R18.52), and police flagship (R18.53).

Landing: The frigate can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The frigate can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Air Song, Air Singer, Air Dreamer, Air Dawn, Air Saber, Air Warrior.

(R18.46) ESCORT CARRIER (FFV): The Paravian frigate adapted to the role of being a carrier surprisingly well. The ship's design easily absorbed a half-squadron of fighters with no reductions in other systems. The design entered squadron service in Y170 and was initially used in the convoy escort role in response to the appearance of carriers operated by Orion pirates earlier. As with most small carriers, the need for attrition units saw some of these pressed into service in battles where they were too small to survive (although some managed to). It was not unusual to find a ship of this type (with or without its attendant escort) with no fighters, having been ordered to transfer them to a larger carrier. [Even the commander of a mobile carrier (R18.37) could steal the fighters, and escort, of an escort carrier.]

Due to its small size and ease of production, the escort carrier was perhaps the most numerous carrier in Paravian service at any one time [even outnumbering the police carrier (R18.55) if only because the Paravian Navy had a larger budget]. Ships of this class were still in service in Y205, albeit by that time they were being transferred to the police forces.

The escort carrier is a variant of the frigate (R18.45).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y170-Y172	FFE or	6xQuail or
	2xFFE	6xRaven
Y173-Y174	FFE or	6xCrane or
	2xFFE	6xQuail or
		6xRaven
Y175-Y176	FFA	6xCrane or
		6xQuail or
		6xRaven
Y177	FFA	6xCrane or
		6xQuail or
		6xRaven or
		6xDuck or

		3xSwan or 3xSwan-I
Y178	FFA or	6xCrane or 6xRaven or 6xDuck or 3xSwan or 3xSwan-I or 3xSwan-F or 3xSwan-FI
Y179	FFA	6xCrane or 6xDuck or 3xSwan or 3xSwan-I or 3xSwan-F or 3xSwan-FI
Y180-Y182	FFA	6xCrane or 6xDuck or 3xSwan-F or 3xSwan-Fl
Y183+	FFA	6xCrane or 3xSwan-F or 3xSwan-Fl

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Landing: The escort carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The escort carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The APR refit was included in the design. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Air Sword, Air Mace, Air Falchion, Air Demon, Air Bow.

(R18.47) ESCORT FRIGATE (FFE): Conceived as a light escort for use by small carriers and carriers assigned to less active theaters, their small size and ease of production saw them assigned to virtually every carrier at one time or another. They, understandably, sustained the highest loss rate among the carrier escorts, but continued in production and service to the end of the Andromedan War. As with all other carrier escorts, quantum wave torpedo launchers were retained to allow the ship to engage distant targets in support of its carrier. It was heavily loaded with phaser-3s to fend off plasma torpedoes launched at the carrier it was supporting. While the short range of these weapons put it at a disadvantage in engaging enemy ships at range, they made it a dangerous close in combatant; not something an enemy wanted to face while trying to reach the carrier.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The escort frigate is a variant of the frigate (R18.45).

Landing: The escort frigate can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The escort frigate can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The APR refit was included in the design. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Air Guard, Air Shield.

(R18.47A) AEGIS FRIGATE (FFA): In Y175 all surviving escort frigates were fitted with full aegis (D13.0) and all new production escort frigates included full aegis from that point. The ships were redesignated "aegis frigates."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters.

The aegis frigate is a variant of the frigate (R18.45).

Landing: The aegis frigate can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The aegis frigate can control a number of seeking weapons equal to its sensor rating (F3.21) and has full aegis (D13.0). See also (J15.332).

Refits: The APR refit was included in the design. The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort frigate SSD (R19.24) in *Module C6;* use the escort frigate counters in *Module C6.* 

Known names: Air Guard, Air Shield.

(R18.48) FAST CARRIER RESUPPLY SHIP (FCR): This was a heavily modified frigate designed to deliver replacement fighters, personnel, and stores to carrier groups so that they could continue operating rather than withdrawing back to a base or a secure area to be resupplied by a convoy. There were never enough of these ships to keep all of the Paravian carrier groups in operation. Their use as replacement escorts, even if not done too frequently, only exacerbated the situation when one was badly damaged or destroyed, as they tended to be the most exposed ship in such cases. These ships would sometimes attempt to slip through enemy lines to resupply a carrier, sometimes in company with a strategic transport to resupply other ships of a raiding squadron, which again led to unnecessary losses.

The fast carrier resupply frigate added a ready rack (J4.89) and limited aegis system (D13.4) for its mission of resupplying carrier groups with new replacement fighters, pilots, and drones. The limited aegis system allowed the fast carrier resupply ship to operate as an escort while resupplying the carrier. This ability led to some of these ships being pressed into service as temporary escorts when a carrier was missing one.

The fast carrier resupply ship is a variant of the frigate (R18.45).

Landing: The fast carrier resupply ship can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The fast carrier resupply ship can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Air Bringer, Air Fetcher.

(R18.49) FRIGATE SCOUT (FFS): This was a modified frigate designed to provide electronic warfare support to Paravian squadrons and the primary mobile provider of electronic warfare support for several years in Paravian service. The long range of the quantum wave torpedoes and the ability to transfer the guidance of torpedoes about to hit their targets to the ship with the most ECCM masked the overall weakness of the design. While its small size made it vulnerable, especially if was attempting to jam a target with offensive electronic warfare, it was able to survive heavy fighting by staying out of effective plasma torpedo range. Its place in the battle line was gradually taken over by larger scouts with more power and special sensors. However, ships

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of this class remained in service, and in production, all through the General War and into the Andromedan War because there was always more need for scouts than were available.

The frigate scout is a variant of the frigate (R18.45).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Landing: The frigate scout can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The frigate scout can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: The "APR" refit was available beginning in Y168 and was universal by Y172. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Air Seeker, Air Eyes.

(R18.50) COMMANDO FRIGATE (FFG): The Paravian commando frigate was originally conceived as a simple transport, intended to move personnel and small cargoes between bases and planets and not as an assault ship. Records are on unclear when a ship of the type was first used in a raid, but it appears to have happened very shortly after the ships entered service. Whether this was an accident or intentional is not known, but in the succeeding years, large Paravian raids would almost always include one of these ships as an ancillary, allowing the commodore or admiral an additional tool in his kit. Within Paravian space the ships continued to fulfill their originally intended mission of personnel transport, but might still be diverted to the assault role if a pirate base were discovered or if a Paravian colony needed to have invaders removed. While the assault role was largely taken over by larger commando ships during the General War, ships of this type remained in service for the transportation role and would sometimes be diverted again to the commando mission.

The commando frigate is a variant of the frigate (R18.45). Landing: The commando frigate can land on planets using the aerodynamic landing system (P2.433).

Landing Force: The 18 boarding parties (D7.0) include one heavy weapons squad (D15.81). There are two ground combat vehicles (D15.82). This was roughly a half a battalion (one company) of troops (R18.M1) and is included in the ship's BPV.

Shuttles: Two ground assault shuttles (R1.F4) and one heavy transport shuttle (R1.F5); these shuttles are included in the ship's BPV.

Seeking Weapons: The commando frigate can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Air Trooper, Air Stormer.

(R18.51) MINEHUNTER FRIGATE (FFM): As minefields spread across the Alpha Octant, the Paravians found themselves with a need to breach fields of their enemies in order to conduct their operations. The Paravians initially turned to their frigate design to create a minesweeper, and quickly found that their quantum wave torpedoes gave them an edge in this role. Unlike the minesweepers of many other Alpha Octant empires that had to rely on phasers and extensive tractor arrays to sweep a gap, the Paravians were able to retain their rapid fire quantum wave torpedoes. This allowed the minehunter frigate to operate as a normal frigate

in combat. There was a disadvantage that too many of them would be lost in combat, creating shortages when they were needed most. As a result, the Paravian admirals tended to restrict the use of these ships unless the mission specifically required their ability to quickly create a gap in a minefield. As the General War progressed, ships of this class were largely restricted to probing undefended minefields to draw a reaction, or to quickly repair damage to minefields created by enemy action or other causes.

Both shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The minehunter frigate is a variant of the frigate (R18.45). This ship is a true minesweeper (M2.45); see also (M8.0).

Landing: The minehunter frigate can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The minehunter frigate can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Air Hunter, Air Finder.

(R18.52) THEATER TRANSPORT FRIGATE (FFT): Much of the movement of logistics in any empire is accomplished through the use of freighters. Critical cargoes, which must be delivered quickly, are often moved by armed priority transports or free traders. Large bulk cargoes that cannot wait for the arrival of a freighter to be loaded are often hauled by theater transports. These latter include the various combat pods used by the tugs of the empire. Better armed than most freighters, the theater transport is a vital link in the logistics of any empire, but assignment to them is not generally sought. They are too important to be used for less than important missions, making them targets on their lonely travels (when they cannot find a convoy or warship going the same way) for pirates and raiders. The Paravian theater transport frigate was typical of the general class of theater transports, but had the misfortune that the Paravian admiralty would often order ships of this type to try to slip through enemy lines to deliver needed spares to raiding squadrons. This use resulted in Paravian theater transport frigates suffering greater losses than any other ships of their general class.

The SSD provides the data for both single-weight and double-weight pods, but any pods carried by this ship are inactive and every box in such a pod is treated as a "cargo" damage point. This theater transport can carry one pod, which can be double-weight. This ship cannot carry a triple-weight pod such as the space control pod (R18.67).

Like all tugs, the movement cost and Turn Mode vary with the pod carried. The movement cost of the theater transport frigate with a single-weight pod is 0.67 energy points per hex; with a double-weight pod it is 1.0 energy points per hex; see Annex #3A. Note that other frigate variants cannot carry pods.

The theater transport frigate is a variant of the frigate (R18.45).

Landing: The theater transport frigate can land on planets using the aerodynamic landing system (P2.433) if not carrying a pod.

Seeking Weapons: The theater transport frigate can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Air Hauler.

(R18.53) POLICE FLAGSHIP (FLG): This was created as a jack-of-all-trades ship to support the operations of the police forces within Paravian space. This ship was a near complete set of all the vital missions that could be performed.

It could sweep a rogue minefield (albeit, it had to do so with phasers and tractor beams and its minesweeping shuttle).

It could patch up a damaged freighter (or other ship) so that it could make it to port (or hold out until more rescue forces could arrive).

It could deliver critical supplies.

It could control the operations of traffic over a wide area and provide at least some electronic warfare support to a convoy or police squadron.

It could bring to bear the muscle of a landing force to resolve a local dispute.

It included highly trained investigative teams to get to the bottom of local crimes.

The one thing it could not do was fight its own battles against anything more powerful than an armed small freighter; for that it relied on being able to call up any local police ships.

This ship is a true minesweeper (M2.45); see also (M8.0).

The police flagship is a variant of the frigate (R18.45).

Landing Force: The 18 boarding parties (D7.0) include one heavy weapons squad (D15.81) and two ground combat vehicles (D15.82). This was a company of troops (R19.M1) and is included in the ship's BPV.

Shuttles: One ground assault shuttle (R1.F4), one heavy transport shuttle (R1.F5), one minesweeping shuttle (R1,F2) [an exception to (M8.12)], and three admin shuttles [(J2.0)/(R1.F1)]; these shuttles are included in the ship's BPV. This ship is authorized to purchase a multi-role shuttle (J8.0) as an exception to (J8.511).

Scout: It can use all scout functions (G24.0). Special sensor is destroyed by "torpedo" damage points. When purchased as part of a battle force use the ship's combat BPV, not its economic BPV under (G24.35).

Landing: The police flagship can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The police flagship can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Watch Bird, Watch Wing, Watch Strike, Watch Guard.

### PARAVIAN POLICE CORVETTE AND VARIANT

(R18.54) POLICE CORVETTE (POL): As with most empires, the Paravians had a huge volume of space to patrol and only so many funds in order to build the fleet to do so. The result of the conflict of these two needs saw a large number of very small ships built to maintain a presence, and many of these were controlled by "local" governments as "police forces" rather than "naval forces." This prevented the local naval commanders from stripping all possible ships from an area without first coordinating and getting the permission of those protecting the local populations. The Paravian police corvette was produced in great numbers, typical of the police ships of most empires and possible due to its small size (making it both cheap and easy to build). It benefited from using the same engines as the frigate, making it a relatively lively ship, even if its weapons would not impress a single Light Raider. However, its speed and relatively high maneuverability enabled ships of this class to hold off Light Raiders until help

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arrived, and to pursue those Light Raiders in hopes of finding their bases.

This is a base hull. Variants include the police carrier (R18.55).

Landing: The police corvette can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The police corvette can control a number of seeking weapons equal to its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: This ships were given numbers rather than names, although as with numbered ships of most empires many were given informal names by their crews.

(R18.55) POLICE CARRIER (PLV): The police carrier was the first Paravian carrier to enter service in any numbers. This was a combination of its ease of build (due to its small size), and the earlier exposure of the police forces to the use of fighters by the Orions. Indeed, the deck crews of the larger Paravian carriers were first trained by members of the police forces.

Paravian police carriers operated largely as normal police ships with an embarked half-squadron of fighters. They lacked some of the finer points of police ships (emergency stores to succor colonies in trouble were dispensed with in the design to make room for the fighters), but were otherwise fully functional. While the ships often operated in conjunction with another police ship as an informal escort, it was just that: informal. Escorts were almost never officially assigned, but even this sometimes happened, and on a few occasions a police carrier had an escort frigate assigned for a period of time (only when the carrier had been temporarily seconded to the navy).

These were the second most numerous carrier in service, but the escort carrier was produced in greater numbers (if only because the fleet had a larger budget and controlled more yard capacity). Ships of this class remained in service well into the Andromedan War, but were clearly obsolescent even before the Paravians entered the General War.

The police carrier is a variant of the police corvette (R18.54).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y168-Y169	None or POL	6xQuail
Y170-Y172	None or POL	6xQuail or 6xRaven
Y173-Y174	None or POL	6xCrane or 6xQuail or 6xRaven
Y175-Y176	None or POL	6xCrane or 6xQuail or 6xRaven
Y177	None or POL	6xCrane or 6xQuail or 6xRaven or 6xDuck or 3xSwan or 3xSwan-I
Y178	None or POL	6xCrane or 6xRaven or 6xDuck or 3xSwan or 3xSwan-I or 3xSwan-F or 3xSwan-FI

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Y179	None or POL	6xCrane or 6xDuck or 3xSwan or 3xSwan-I or 3xSwan-F or 3xSwan-FI
Y180-Y182	None or POL	6xCrane or 6xDuck or 3xSwan-F or 3xSwan-Fl
Y183+	None or POL	6xCrane or 3xSwan-F or 3xSwan-Fl

Landing: The police carrier can land on planets using the aerodynamic landing system (P2.433).

Seeking Weapons: The police carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The APR refit was included in the design. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: This ships were given numbers rather than names, although as with numbered ships of most empires many were given informal names by their crews.

#### PARAVIAN TUG

(R18.56) TUG (TG): The Paravians needed a tug just as most empires and theirs was built with the idea that it should be a fully capable cruiser. It carried the full armament of a cruiser, and with added weapons pods became a formidable opponent even if the pods did make it sluggish.

The tug can carry one pod on its centerline or two pods side by side (one under each wing). If two pods are carried, both must be the same weight, i.e., it cannot carry one double-weight pod and one single-weight pod at the same time.

No interbay shuttle transfers (J1.59) are possible between pods, or between the pods and the shuttle bay of the tug.

Like all tugs, the movement cost and Turn Mode vary with the pods carried. The movement cost of the tug with two pods or one double-weight pod is 1.5 energy points per hex; the movement cost of the tug with three pod weights is 2.0 energy points per hex; see Annex #3A.

The tug is a variant of the heavy cruiser (R18.16).

Landing: The tug can land on planets using the aerodynamic landing system (P2.433) if not carrying pods.

Seeking Weapons: The tug can control a number of seeking weapons equal to its sensor rating (F3.21). This ability may be increased by various pods.

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Calambrian, Copius, Ehgarkan.

#### PARAVIAN PODS

A variety of pods were created for the tug. Pods never had official names. Pod counters for separated pods are in *Module C6*.

(R18.57) CARGO POD (P-C): Cargo pods are simply cargo boxes; there is no crew or other function. When detached, any damage points scored on the pod are considered to be cargo damage points.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.58) BATTLE POD (P-B): This pod provided additional weapons and personnel making a tug or light tactical transport a more difficult opponent. Pods of this type were rarely carried by Paravian tugs, to include raid motherships, while supporting the operations of a raiding force as they limited the supplies that could be carried and thus reduced the time interval of the raid. They were more commonly seen inside Paravian space where they might be added to a tug that was going to help defend a fixed site such as a base or planet. In such case it was not unusual for the tug to be the largest ship present and for it to act as the command ship for the force. The flag facilities were often used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.59) CARRIER POD (P-V): The Paravians designed this pod to turn their tug into a carrier with a full squadron of fighters. A light tactical transport would become a light carrier with one of these pods. The design included additional APRs to help with rearming the fighter's quantum wave torpedoes. Raid motherships rarely carried more than one pod of this type during an operation, using the fighters for local defense patrols when the ships it was supporting were striking targets. Raid motherships were too expensive to risk as carriers in their own right with such pods (and might carry up to three such pods). However, there are recorded cases of motherships being pressed into service in defensive actions, and the records might still reveal a case where one acted as a carrier with two or three of these pods.

Carrier: This pod makes the tug or light tactical transport that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22). No interbay shuttle transfers (J1.59) are possible between pods, or between the pods and the shuttle bay of the tug.

Mines cannot be laid from fighter bays (M2.113). Note that the tug will have its own shuttle bay giving the tug and pod(s) combination multiple bays. An additional pod might have its own shuttle bay.

When two pods were carried by a tug, the escorts and fighters were:

Year	Escorts	Fighters
Y171-Y172	DWE, FFE or CWE, FFE or 2xFFE	12xQuail or 12xRaven
Y173-Y174	CWE, DWE or DWE, FFE	12xCrane or 12xQuail or 12xRaven
Y175-Y176	CWA, DWA or DWA, FFA	12xCrane or 12xQuail or 12xRaven
Y177	CWA, DWA or 2xDWA	12xCrane or 12xQuail or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I
Y178	CWA, DWA or 2xDWA	12xCrane or 12xRaven or 12xDuck or

		6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y179	CWA, DWA	12xCrane or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y180-Y182	CWA, DWA	12xCrane or 12xDuck or 6xSwan-F or 6xSwan-FI
Y183+	CWA, DWA	12xCrane or 6xSwan-F or 6xSwan-Fl

When carried by a light tactical transport<sup>+</sup> or a single pod is carried by a tug, the escorts and fighters were:

Year	Escorts	Fighters
Y171-Y172	FFE or	6xQuail or
	2xFFE	6xRaven
Y173-Y174	DWE or	6xCrane or
	FFE or	6xQuail or
	2xFFE	6xRaven
Y175-Y176	DWA or	6xCrane or
	FFA	6xQuail or
		6xRaven
Y177	DWA or	6xCrane or
	FFA	6xQuail or
		6xRaven or
		6xDuck or
		3xSwan or
		3xSwan-I
Y178	DWA or	6xCrane or
	FFA	6xRaven or
		6xDuck or
		3xSwan or
		3xSwan-I or
		3xSwan-F or
		3xSwan-FI
Y179	DWA	6xCrane or
		6xDuck or
		3xSwan or
		3xSwan-I or
		3xSwan-F or
		3xSwan-Fl
Y180-Y182	DWA	6xCrane or
		6xDuck or
		3xSwan-F or
		3xSwan-Fl
Y183+	DWA	6xCrane or
		3xSwan-F or
1		3xSwan-FI

A raid mothership would generally not be intended to operate as a carrier, but if this happened, it would doubtless be provided whatever escorts were available.

†LTVs (light tactical transport with a carrier pod) were always last in line for escorts and would often have to make do with two escort frigates (R18.47)/aegis frigates (R18.47A) due to a shortage of other escorts.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Seeking weapons: The carrier pod cannot control seeking weapons when detached, but increases the tug's seeking weapon control rating by three for each pod carried, but to no more than double the tug's sensor rating, i.e., three pods does not increase the seeking weapon control rating of

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a raid mothership by nine. A special sensor (if another pod has one) can be used to further increase the tug's sensor rating; see (F3.213).

The SSD is on Paravian pods sheet #2 SSD in *Module C6*.

(R18.60) BARRACKS POD (P-T): As with their initial commando ships, the Paravian barracks pod was not conceived as an assault pod to be used to actually attack defended locations, but as a means of moving personnel efficiently. When initially seen they were used to transport crewmen (and Marines) to replace losses on the other ships of the raid force. Eventually one or more of the pods were pressed into service to deliver a large landing force to a planet that was particularly well defended by ground forces (even though the tug had to lower the pods to the surface by tractor). From that point it was not unusual to see them used in that role repeatedly. Normally a raid mothership would have one such pod of this type carrying crew replacements (some of which might be boarding parties). In rare cases a raid mothership might be used to assault a planet and might carry two or even three such pods (four on a battleship raid mothership) rather than any other pods, but this would represent an unusually critical operation.

In a campaign where replacement crew is carried the mix of crew to boarding parties will have to be determined by the player before the campaign begins; there is no adjustment to the pod's BPV in such a case.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Landing Force: The 37 boarding parties (D7.0) include two heavy weapons squads (D15.81). There are four ground combat vehicles (D15.82). This was a battalion of Marines (R18.M1) and is included in the pod's BPV.

Shuttles: Two ground assault shuttles (R1.F4) and one heavy transport shuttle (R1.F5); these shuttles are included in the pod's BPV. No interbay shuttle transfers (J1.59) are possible between pods, or between the pods and the shuttle bay of the tug.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.61) SELF-DEFENSE POD (P-SD): Pods of this type increased the firepower available to defend against the plasma torpedoes and ships of the neighboring empires. They were rarely used on ships supporting operations behind enemy lines because of the reduced cargo volume.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.62) FAST PATROL SHIP TENDER POD (P-PF): A pair of pods of this type enabled a tug to operate a full flotilla of fast patrol ships. The large repair systems allowed the tug to perform repairs on casual fast patrol ships of the ships it was operating with. The special sensors allowed the tug to locate distant targets its fast patrol ships could attack without itself coming under attack (this did not always work out). No tug or mothership can carry more than two pods of this type. If even one pod of this type is carried, the ship is considered a "true fast patrol ship tender" and cannot operate heavy fighters. After fast patrol ships entered service, it was not unusual for a raid mothership to include one of these pods as one of the three it could carry. Its primary purpose in such a case was to repair fast patrol ships and provide a special sensor to better avoid surprise attack on the mothership; any fast patrol ships carried were used either for local security or to replace those lost by other ships.

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The repair systems on this pod can only be used to repair fast patrol ships (K2.611).

PF Tender: This pod turns the tug (or raid mothership) to which it is docked into a true PF tender (K2.0), and such a ship cannot operate heavy fighters (J10.0) on any carrier pods it may be operating.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.63) REPAIR POD (P-R): At least one pod of this type would usually (not always) be carried by a raid mothership to support the raiding force. It was typical of the repair pods used by most empires. While there was not enough repair capability to overhaul a damaged ship, it would allow such a ship to be patched up and make its way back to Paravian space. Ships with lesser damage could be made ready to continue the raid.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #1 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.64) FAST PATROL SHIP TRANSPORT POD (P-PT): The Paravians found they needed to replace fast patrol ships faster than they had assumed, and often there was not time to transfer a fast patrol ship transported as cargo and then assemble it for operations before the base receiving it was attacked again, or before the assembled fast patrol ship could be sent forward to link up with a tender that needed replacements. Some of this was handled by simply taking fast patrol ships from ships with lower priorities (to include casual fast patrol ships), but this left gaps in the patrol defenses. Inevitably, the Paravians came to the same conclusion as other empires and deployed pods designed to deliver fully assembled if not yet operational fast patrol ships and replacement crews to the areas where they were most needed. The fast patrol ships carried by this pod will never have booster packs (these would be fitted by the receiving tender), and will have only one crew unit [placing them under the restrictions of (G9.42) as per (K1.311)]; it cannot carry more crew units until it is "serviced." To be serviced the fast patrol ship must dock to a fast patrol ship tender and have one repair point allocated to it by the repair systems of the tender, i.e., a unit which has a "P" in its notes column on the Master Ship Chart. Once a fast patrol ship is launched from this pod, it cannot return to it.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #2 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.65) HEAVY FIGHTER FCR POD (P-HT): When heavy fighters went into widespread service, the Paravians noted that they could not be carried in their existing fast carrier resupply ships (R19.51) and used these special pods to transport replacement heavy fighters to those carriers that operated them. These pods can carry heavy fighters but cannot operate, land, refuel, or rearm them. The one shuttle bay was used to "warm up" replacement heavy fighters, which could only launch once, and could not land. The bay did have ready racks and could fully arm the heavy fighters before sending them on their way to their carriers (these are marked "H" for heavy fighter). This type of pod can carry standard fighters (under the same restrictions) but cannot arm them via

ready racks as the racks are for heavy fighters; they will have to use (J4.8962) and (J4.892). The shuttle bay includes a heavy transport shuttle (R1.F5) to facilitate cargo transfer. No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #3 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.66) SCOUT POD (P-SC): The Paravians, did not expect combat electronic warfare to be a major element of fleet battles given the nature of seeking weapons, whether their own quantum wave torpedoes or the plasma torpedoes of their enemies. They built scout pods so tugs could, in an emergency, provide sector scans and fleet warning. It would not be unusual for a raid mothership to have a pod of this type to watch for the possibility of enemy patrols locating it and its task force, particularly when the task force was off raiding a target. It was, however, rare to have such a pod on a raid simply because the reduced cargo volume would inhibit the overall time the raid could operate. More often the pods were used on tugs and light tactical transports pressed into service as scout ships when the Paravians found, as did all other empires, that combat electronic warfare would be critical during the General War (and beyond), and the side with the most powerful scout was often the side that prevailed.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "phaser" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Paravian pods sheet #2 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.67) SPACE CONTROL SHIP POD (P-SCS): The Paravians created this pod to temporarily increase the number of "space control ships" they could have in action. It could only be carried by a tug, or by a raid mothership. (Battleship motherships cannot carry this pod because the distance between the centerline docking station and the wing docking stations is too great due to the need to be able to dock one or two pods under the hull.) It was not intended for this pod to be used by a raid mothership behind enemy lines, but on several occasions (in a rarity) the Paravians sent two raid motherships to support operations, one carrying a normal assortment of support pods (cargo, carrier, repair, etc.), and one equipped with this pod.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Carrier: This pod makes the tug or light tactical transport that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22). No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

PF Tender: This pod turns the tug (or raid mothership) to which it is docked into a true PF tender (K2.0), and such a ship cannot operate heavy fighters (J10.0).

Mines cannot be laid from fighter bays (M2.113). Note that the tug will have its own shuttle bay giving the tug and pod(s) combination multiple bays. An additional pod might have its own shuttle bay.

When carried by a tug or raid mothership, the escorts and fighters were:

Year	Escorts	Fighters
Y182	CWA, DWA	12xCrane or

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Y183+	CWA DWA	12xCrane	
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Weight: This is a triple-weight pod with a towing cost of 0.6777.

Seeking weapons: The space control ship pod cannot control seeking weapons when detached, but increases the tug's seeking weapon control rating to double its sensor rating. The use of a special sensor might further increase the number of seeking weapons that can be controlled (F2.313).

SSD is on Paravian pods sheet #4 in *Module C6*; counters for detached pods are in *Module C6*.

(R18.68) HEAVY CARRIER POD (P-VA): The Paravians designed this pod to turn their tug into a heavy carrier with two full squadrons of fighters. A light tactical transport would become a carrier with one of these pods. The design included additional APRs to help with rearming the fighter's quantum wave torpedoes. Raid motherships rarely carried more than one pod of this type (on the centerline) during an operation, using the fighters for local defense patrols when the ships it was supporting were striking targets. Raid motherships were too expensive to risk as carriers in their own right with such pods (and might carry up to three such pods). However, there are recorded cases of motherships being pressed into service in defensive actions, and the records might still reveal a case where one acted as a carrier with two or three of these pods.

Carrier: This pod makes the tug or light tactical transport that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22). No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

Mines cannot be laid from fighter bays (M2.113). Note that the tug will have its own shuttle bay giving the tug and pod(s) combination multiple bays. An additional pod might have its own shuttle bay.

Year	Escorts	Fighters
Y173-Y174	CWE, DWE, FFE or DWE, 2xFFE	24xCrane or 24xQuail or 24xRaven or 12 of any two
Y175-Y176	CWA, DWA, FFA or DWA, 2xFFA	24xCrane or 24xQuail or 24xRaven or 12 of any two
Y177	CWA, DWA, FFA or CWA, 2xDWA	24xCrane or 24xQuail or 24xRaven or 12 of any two or 12 of one and 12xDuck, or 6xSwan or 6xSwan-I
Y178	CWA, DWA, FFA or CWA, 2xDWA	24xCrane or 24xRaven or 12 of each or 12 of one and 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y179	CWA, 2xDWA	24xCrane or 12xCrane and 12xDuck or 6xSwan or 6xSwan-I or

When two pods are carried by a tug, the escorts and fighters were:

		6xSwan-F or 6xSwan-Fl
Y180-Y182	CWA, 2xDWA	24xCrane or 12xCrane and 12xDuck or 6xSwan-F or 6xSwan-FI
Y183+	2xCWA, DWA	24xCrane or 12xCrane and 6xSwan-F or 6xSwan-Fl

When a single pod is carried by a light tactical transport or a single pod is carried by a tug, the escorts and fighters were:

Year	Escorts	Fighters
Y173-Y174	CWE, DWE or DWE, FFE	12xCrane or 12xQuail or 12xRaven
Y175-Y176	CWA, DWA or DWA, FFA	12xCrane or 12xQuail or 12xRaven
Y177	CWA, DWA or 2xDWA	12xCrane or 12xQuail or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I
Y178	CWA, DWA or 2xDWA	12xCrane or 12xRaven or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y179	CWA, DWA	12xCrane or 12xDuck or 6xSwan or 6xSwan-I or 6xSwan-F or 6xSwan-FI
Y180-Y182	CWA, DWA	12xCrane or 12xDuck or 6xSwan-F or 6xSwan-FI
Y183+	CWA, DWA	12xCrane or 6xSwan-F or 6xSwan-Fl

A raid mothership would generally not be intended to operate as a carrier, but if this happened, it would doubtless be provided whatever escorts were available.

†LTVAs (light tactical transport with a heavy carrier pod) were always last in line for escorts and would often have to make do with two escort frigates (R18.47)/aegis frigates (R18.47A) due to a shortage of other escorts.

Weight: This is a double-weight pod with a towing cost of 0.3300.

Seeking weapons: The heavy carrier pod cannot control seeking weapons when detached, but increases the tug's seeking weapon control rating by three for each pod carried, but to no more than double the tug's sensor rating, i.e., three pods does not increase the seeking weapon control rating of a raid mothership by nine. A special sensor (if another pod has one) can be used to further increase the tug's sensor rating; see (F3.213).

The SSD is on Paravian pods sheet #2 SSD in *Module C6.* 

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#### (R18.F) PARAVIAN FIGHTERS

Counters for Paravian fighters are found in *Module C6*, these can be supplemented with generic fighter counters found in *Module J*.

(R18.F1) THUNDERFINCH SUPERIORITY FIGHTER (TF): The Thunderfinch was the first Paravian fighter intended to supplement the defenses of fixed installations. It was small, slow, and fragile but benefited from the long range of its primary weapon (the quantum wave torpedo) which gave it considerable standoff distance. It was armed with a single phaser-3. The quantum torpedo launch tube is loaded in the same manner as a disruptor (J4.84). The fighter could only carry a single quantum wave torpedo, although the ready rack can hold two charges. The carrier or ground base loads the freezers normally. The quantum wave torpedo launched by the fighter is a standard torpedo, but fighters cannot be armed with overloaded weapons. This fighter only rarely saw deployment on carriers and generally only when shortages of other fighters left it the only type available (or when they were recovered by a carrier after their base was destroyed). Thunderfinchs remained in service until at least Y174, but by that time they were mostly found in isolated rear areas where their most likely opponents were Orions or monsters. The last fighters of this type were retired by Y175.

These fighters initially did not have chaff packs; these were installed in Y168, no change in BPV. This fighter type was never equipped with a mega pack.

Note: To save space these fighters are often listed as just "Finch."

**Thunderfinch-E (TFE):** This was the electronic warfare variant of two-seat Thunderfinch (J4.43) which entered service in Y172. This fighter did not have a quantum wave torpedo launcher, but did have one built-in electronic warfare pod and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Thunderfinch-Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Thunderfinch fighters is included on the size-1 fighters page of *Module C6*.

(R18.F2) THUNDERQUAIL SUPERIORITY FIGHTER (TQ): The Thunderquail entered widespread service in Y165, but did not fully replace the Thunderfinch (R18.F1) until Y175. It was the primary front-line fighter by Y169. It was not much of an improvement over Thunderfinch except that it carried two quantum wave torpedoes. However, it can only launch one per turn, and the second cannot be launched within eight impulses of the first one being launched. As with the Thunderfinch, its quantum wave torpedo tubes are reloaded in the same manner as disruptors (J4.84), and the torpedoes cannot be overloaded. This fighter saw wide deployment on carriers, but Thunderravens (R18.F3) began replacing them in Y170. Thunderguails remained available for duty until Y177 when the last of them were withdrawn from service except for use in schools as trainers. The last fighters of this type were retired in Y179.

These fighters initially did not have chaff packs; these were installed in Y168, no change in BPV. This fighter type was never equipped with a mega pack.

Note: To save space these fighters are often listed as just "Quail."

**Thunderquail-E (TQE):** This was the electronic warfare variant of two-seat Thunderquail (J4.43) which entered service in Y172. This fighter did not have quantum wave torpedo launchers, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its

### **STAR FLEET BATTLES**

squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Thunderquail-Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Thunderquail fighters is included on the size-1 fighters page of *Module C6*.

### (R18.F3) THUNDERRAVEN SUPERIORITY FIGHTER (TR):

The Thunderraven was not really a new fighter type so much as a "product improved" Thunderguail. The improvements were significant, however. The Thunderraven was faster, more maneuverable, and able to launch both of its quantum wave torpedoes at the same time (on the same impulse), provided both were launched at the same target. If both quantum wave torpedoes are not launched on the same impulse, then the second quantum wave torpedo cannot be launched until the following turn, and not within eight impulses of the first quantum wave torpedo being launched. The quantum wave torpedo tubes are reloaded in the same manner as disruptors (J4.84) and cannot be overloaded. Production of Thunderravens in large numbers began in Y169, and they largely supplanted the Thunderquail by Y170. The Thunderaven in its turn was rendered obsolete by the Thundercrane beginning in Y173 and like earlier fighters, it was largely relegated to rear area security by Y178. Thunderravens remained available for duty until Y181 when the last of them were withdrawn from service except for use in schools as trainers. The last Thunderravens were retired in Y184.

This fighter type always had one chaff pack, but was never equipped with a mega pack.

Note: To save space these fighters are often listed as just "Raven."

**Thunderraven-E (TRE):** This was the electronic warfare variant of two-seat Thunderraven (J4.43) which entered service in Y172. This fighter did not have quantum wave torpedo launchers, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Thunderraven-Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Thunderraven fighters is included on the size-1 fighters page of *Module C6*.

#### (R18.F4) THUNDERCRANE SUPERIORITY FIGHTER (TC):

This was the single most common fighter in Paravian service. It was larger, faster, more maneuverable, and more heavily armed than the previous fighters. In addition it could launch both of its quantum wave torpedoes during a single turn, even during a single impulse, at either the same or two different targets. Thundercranes entered wide spread service in Y173 and had supplanted all previous fighters in front-line service by Y175. They remained in service until at least Y205, and by Y185 had even replaced the earlier fighters in the training schools.

A mega pack was developed for this fighter adding a second quantum torpedo charge to each of its quantum torpedo tubes (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges.

Note: To save space these fighters are often listed as just "Crane."

**Thundercrane-E (TCE):** This was the electronic warfare variant of two-seat Thundercrane (J4.43). This fighter did not have quantum wave torpedo launchers, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Thundercrane-Es always had two chaff packs, and when fitted with a mega pack gained two additional pod rails (J16.245).

A squadron of 12 Thundercrane fighters is included on the size-1 fighters page of *Module C6*. Fighters of this type are found on most carriers and other Paravian SSDs that have fighters in *Module C6*.

(R18.F5) THUNDERDUCK ASSAULT FIGHTER (TD): The Thunderduck was introduced in Y177, at the same time as the Thunderswan. It was a heavy and ungainly beast, built for one purpose: to get close enough to deliver its load of quantum wave torpedoes. The Thunderduck had four launchers each holding one charge, all of which could be launched in a single impulse at a single target, or at multiple targets, or launched over several impulses, or over several turns. While tough and relatively fast, it was by the standards of Y177 under-armed and many were lost in dogfights. However, the Thunderduck remained in production until Y182 when it was withdrawn from service.

Thunderducks rarely operated in "pure" squadrons. Commonly a flight of up to three Thunderducks would replace three Thundercranes in a given fighter squadron. This was never popular with the pilots of the Thundercranes who would find themselves trying to protect the Thunderducks rather than engaging the enemy.

A mega pack was developed for this fighter adding a second quantum torpedo charge to each of its quantum torpedo tubes (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges. A charge provided by the mega pack could be fired at the same time (assuming the quantum wave torpedo launcher had already fired its normal charge) as a charge or charges from other quantum wave torpedo launchers.

Note: To save space these fighters are often listed as just "Duck."

**Thunderduck-E (TDE):** This was the electronic warfare variant of two-seat Thunderduck (J4.43). This fighter did not have quantum wave torpedo launchers, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Thunderduck-És always had two chaff packs, and when fitted with a mega pack gained two additional pod rails (J16.245).

A squadron of 12 Thunderduck fighters is included on the pod sheet #4 page of *Module C6*.

(R18.F6) THUNDERSWAN HEAVY FIGHTER (TS): This was the Paravian entry into the heavy fighter field. The original version suffered from a too slow tactical speed as did most of the heavy fighters of other empires [the Federation F-111 (R2.F11) was a significant exception]. It was heavily armed, having three quantum wave torpedo launchers each with two charges. It could launch three quantum wave torpedoes in a single turn, but no one launcher could fire twice in a single turn or within eight impulses of firing on a previous turn. The phaser armament was second only to the Federation F-111, and that only because the F-111's phaser-G was so devastating at close range. Fighters of this type entered service in Y177, but their performance was disappointing and most were quickly relegated to planetary defense units. Virtually all fighters of this type were withdrawn from front-line service in Y179, being supplanted by the Thunderswan-F (R18.F8), and from service in planetary defense units by Y182, being used only for training from that point.

Thunderswans always had two chaff packs and as with all heavy fighters included a built-in electronic warfare pod;

see (R1.F7A) for electronic warfare fighters. A mega pack was developed for this fighter adding a second quantum torpedo charge to each of its quantum torpedo tubes (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges.

Note: To save space these fighters are often listed as just "Swan."

A squadron of six Thunderswan heavy fighters is included on the size-2 fighters sheet in *Module C6*.

(R18.F7) THUNDERSWAN-I INTERCEPTOR HEAVY FIGHTER (TSI): This was a variant of the original Thunderswan that entered service in Y177. It was intended to attack enemy fighter strikes on the theory that its slower speed would not prove much of a handicap if it could interpose itself between the attackers and their target. It retained two quantum wave torpedo launchers each with one charge in order to be able to break up the incoming fighter strike (or retain at least some ship attack capability). The Thunderswan-Is were regarded as less than successful and like the basic Thunderswan were withdrawn from service by Y179.

Thunderswan-Is always had two chaff packs and as with all heavy fighters included a built-in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. No mega pack was developed for this fighter.

Note: To save space these fighters are often listed as just "Swan-I."

A squadron of six Thunderswan-I heavy fighters is included on the size-2 fighters sheet in *Module C6*.

(R18.F8) THUNDERSWAN-F FAST HEAVY FIGHTER (TSF): In Y178 improved engines for the Thunderswan were developed and the improved firing arc of the rear phaser-3 was installed in the basic Thunderswan frame (made possible by space provided by other improvements) resulting in the Thunderswan-F. This fighter remained in service through the end of the General War and into the Andromedan War. It was finally withdrawn from service in Y207.

Thunderswan-Fs always had two chaff packs and as with all heavy fighters included a built-in electronic warfare pod, see (R1.F7A) for electronic warfare fighters. A mega pack was developed for this fighter adding a second quantum torpedo charge to each of its quantum torpedo tubes (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges. A charge provided by the mega pack could be fired at the same time (assuming the quantum wave torpedo launcher had already fired its normal charge) as a charge or charges from other quantum wave torpedo launchers.

Note: To save space these fighters are often listed as just "Swan-F."

A squadron of six Thunderswan-F heavy fighters is included on the size-2 fighters sheet in *Module C6*.

THUNDERDSWAN-FI (R18.F9) FAST HEAVY **INTERCEPTOR FIGHTER (TSFI):** The improved engines of the Thunderswan-F were also installed on the Thunderswan-I design resulting in the Thunderswan-FI. The improvements in the engine (smaller and more efficient) allowed not just the installation of a second rear arc phaser-3, but great improvements in the firing arcs of the fighter's forward phasers. Gorn Confederation pilots learned to respect the Thunderswan-FI when it intercepted them. Thunderswan-FIs were gradually withdrawn from service during the Andromedan War as they were not effective in combating Andromedan ships. By Y192 they could only be found in training squadrons.

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Thunderswan-FIs always had two chaff packs and as with all heavy fighters included a built-in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. A mega pack was developed for this fighter adding a second quantum torpedo charge to each of its quantum torpedo tubes (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges. A charge provided by the mega pack could be fired at the same time (assuming the quantum wave torpedo launcher had already fired its normal charge) as a charge from the other quantum wave torpedo launcher.

Note: To save space these fighters are often listed as just "Swan-FI."

A squadron of six Thunderswan-FI heavy fighters is included on the size-2 fighters sheet in *Module C6*.

(R18.F10) THUNDERGOOSE MEDIUM BOMBER-A (TG-A): This was the first bomber deployed by the Paravians to supplement planetary defense. The design used the engines from the existing heavy freight shuttle (R1.F13) on a heavily modified frame. It had three quantum wave torpedo launchers each carrying two charges. It could launch one charge per launcher per turn, but not within a quarter turn of a given launcher firing on a previous turn. The original design entered service in Y167 and remained in service in secondary sectors and rear areas until at least Y175.

These bombers initially did not have chaff packs; these were installed in Y168, at no change in BPV. This bomber type was never equipped with a mega pack. An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers, which cannot be used before Y172.

Note: To save space these bombers are often listed as just "Goose-A."

A squadron of six Thundergoose-A medium bombers is included on the bombers sheet in *Module C6*.

(R18.F11) THUNDERGOOSE MEDIUM BOMBER-B (TG-B): Capitalizing on the stronger frame of the Thundergoose, this improved variant entered service in Y173. Improved engines doubled the previous speed and other improvements allowed wider firing arcs on the forward and rear phasers. The Thundergoose-As were supplanted by this new bomber by Y175. The Thundergoose-B would itself be supplanted by the Thundergoose-C by Y179. As with the Thundergoose-A, this bomber had three quantum wave torpedo launchers each carrying two charges. It could launch one charge per launcher per turn, but not within a quarter turn of a given launcher firing on a previous turn.

An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers. This bomber always had one chaff pack. This bomber type was never equipped with a mega pack.

Note: To save space these bombers are often listed as just "Goose-B."

A squadron of six Thundergoose-B medium bombers is included on the bombers sheet in *Module C6*.

**(R18.F12) THUNDERGOOSE MEDIUM BOMBER-C (TG-C):** The final version of the Thundergoose series of bombers, the Thundergoose-C entered service in Y177 and resulting in Thundergoose-Bs being phased out of service by Y179. The Thundergoose-C would remain in service until the end of the Andromedan War, and there is some indication that these bombers were still found defending planets in Y207. As with the Thundergoose-A, this bomber had three quantum wave torpedo launchers each carrying two charges. It could launch one charge per launcher per turn, but not within a quarter turn of a given launcher firing on a previous turn.

An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers. This bomber always had two chaff packs. This bomber type was sometimes equipped with a mega pack, but the only effect was to double the bomber's speed and slightly increase its durability (J16.249).

Note: To save space these bombers are often listed as just "Goose-C."

A squadron of six Thundergoose-C medium bombers is included on the bombers sheet in *Module C6*.

(R18.F13) THUNDERGANDER HEAVY BOMBER (TG-H): Loosely based on the frame of the very heavy freight shuttle (R1.F14) the Thundergander entered service in Y178 after a long and difficult development period. (Unusually, the first prototype of this bomber supposedly flew in Y169. Constant technical problems, including several crashes and a spectacular explosion that killed the design company's top flight test crew, prevented it from entering production.) The Thundergander had four quantum wave torpedo launchers each carrying two charges. It could launch one charge per launcher per turn, but not within a quarter turn of a given launcher firing on a previous turn. The constant delays saw many improvements added to the original design, including the wider phaser firing arcs installed on the Thundergoose-C and improved engines (the original design was only capable of Speed 12). Unfortunately, the Thundergander proved difficult to mass-produce due to exceptionally tight design tolerances and it never saw very wide deployment. It is estimated that there were 20 Thundergoose squadrons deployed for every one Thundergander squadron.

Two electronic warfare pods were included in the design; see (R1.F7A) for electronic warfare bombers. This bomber always had two chaff packs. This bomber type was sometimes equipped with a mega pack, but the only effect was to double the bomber's speed and slightly increase its durability (J16.249).

Note: To save space these bombers are often listed as just "Gander."

A squadron of six Thundergander heavy bombers is included on the bombers sheet in *Module C6*.

#### (R18.M) PARAVIAN GROUND FORCES

#### (R18.M1) PARAVIAN MARINES BATTALION ORGANIZATION

- HQ element (1 squad + 1 non-combat crew unit)
  - 2 companies, each:
  - 1 HQ element (1 squad + 1 heavy weapons squad) 4 platoons (4 squads each)

Paravian Marine battalions might be reinforced with an additional company. The line companies were usually referred to as "talons." Commandos were never organic to battalions, but assigned on a temporary basis if a need was identified. They were regarded as specialist troops and generally kept under the direct command of the senior officer and distributed as he saw fit. This often meant that they stayed on warships for use in operations against enemy ships rather than participating in ground combat operations.

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#### (R18.M2) PARAVIAN COMMANDOS AND PRIME TEAMS

The Paravians organized "talon flights" (commando units) including six members. All were trained and qualified as commandos, but any further skills might vary from a fully qualified medic to someone who had a couple of days of training as a sniper (or was just a plain commando).

Some talon flights were given special training (or acquired skills over periods of normal operations) and were redesignated as superior raptor flights composed of a commander, scout, combat engineer, rocket gunner, sniper, and medic. All were trained as commandos; their specialist training reached the fully qualified level. Any raptor with leadership potential was taken out of his team and sent to Raptor Leader School, then sent to lead a new team or a team that had lost its leader in combat. (A leader who had to recover from wounds would be assigned to a new team when he returned to duty, being replaced in his original team by someone from Raptor Leader School.) Every important ship had a raptor team. The Raptor Wing maintained a training school for new recruits (who had to be qualified talon flight commandos) which taught them the specialized skills needed to create raptor wings or replace losses in them. Any talon (commando) could apply for that specialized training, but had to show self-taught basic skills in their chosen specialty. Rigorous testing eliminated 90% of those talons who volunteered for raptor training, but most of those who were accepted remained in the school until they reached the qualification level required. The Raptor Training Wing maintained its high standards at all times. even if it meant that some ships never got raptor teams (as new such teams could not be formed fast enough). Priority went to replacing losses in established teams. Wounded raptors often took extra training during their convalescence to receive a double-gualification in specialty skills, and some raptor teams had a double-specialist and an ordinary non-specialist talon because that was what was available. The Raptor Training Wing also trained other specialists (scientists, computer experts, and many other skills) but these "wild raptors" were never a permanent part of any team, but were only assigned as needed.

#### (R18.PF) PARAVIAN FAST PATROL SHIPS

Gunboats, also known as fast patrol ships, PFs, and (incorrectly) as "pseudo-fighters," came into service across the galaxy during Y178-Y182. Originally invented by the Lyrans (R11.PF0), the technology (for the special engines that made them possible) was quickly copied by almost everyone.

Gunboats have tremendous firepower for their size, but are cheap to build. Their range is short (they operate mostly from bases and special "tenders"). They increase the firepower of a fleet without increasing the fleet's size (which is limited by the command abilities of the flagship).

Generic Paravian gunboat (PF) counters are in *Module C6.* 

(R18.PF0) SONGBIRD INTERCEPTOR (INT): The standard conjectural interceptor type.

Variants include

Songbird-F fighter-conveyor (K3.8)

Songbird-S scout (K3.75)

A Songbird squadron SSD is in *Module C6*; use the generic Paravian gunboat counters in *Module C6*.

(R18.PF1) HUMMINGBIRD PF: Equivalent to the fast patrol ships of other empires. Standard versions include:

Hummingbird-C cargo (R1.PF1) Hummingbird-F fighter-conveyor (R1.PF5) Hummingbird-G ground assault (R1.PF3) Hummingbird-L leader (R1.PF6) Hummingbird-S scout (R1.PF2) Hummingbird-M mine warfare (R1.PF4) Hummingbird-Q survey (R1.PF8) Hummingbird-R recovery (R1.PF9) Hummingbird-WB workboat (R1.PF7)

See (R1.PF1)-(R1.PF9) for rules on standard versions. The leader and scout are on the Hummingbird flotilla

SSD in *Module C6*; the others are on the Paravian fast patrol ships variants page of the *Module C6* SSD book. All Paravian fast patrol ship counters are designated "PF" to facilitate their use.

A Hummingbird flotilla SSD is provided in *Module 6*. SSDs for most gunboats and gunboat variants are in *Module C6*. One SSD shows a standard flotilla; another shows a variant flotilla of Hummingbird-P phaser-armed fast patrol ships.

(R18.PF2) HUMMINGBIRD-P (HBP): Initially designed as an escort, it was produced in large numbers and found its way into standard Hummingbird flotillas (replacing one or two Hummingbirds) as well as use on the casual mech-links of various ships. A leader version was produced and flotillas composed entirely of Hummingbird-Ps saw service (usually with a scout), but sometimes one or two of the Hummingbird-Ps would be replaced by standard Hummingbirds. There is a leader version.

An SSD of this flotilla is provided in Module C6.

(R1.PF1-18) HUMMINGBIRD-C (PFC): This was the standard cargo PF variant; see (R1.PF1) in *Module K*. An SSD is provided on the *Module C6* PF variants page.

(R1.PF2-18) HUMMINGBIRD-S (PFS): This was the standard scout PF variant; see (R1.PF2) in *Module K.* 

An SSD is provided on the Hummingbird PF flotilla page and the Hummingbird-P PF flotilla page in *Module C6*.

(R1.PF3-18) HUMMINGBIRD-G (PFG): This was the standard ground assault PF variant; see (R1.PF3) in *Module K*.

An SSD is provided on the *Module C6* PF variants page.

(R1.PF4-18) HUMMINGBIRD-M (PFM): The Paravian mine warfare fast patrol ship was perhaps the worst designed minesweeper in Paravian service, a distinction it took from the police flagship. While quantum wave torpedoes were effective in sweeping mines, the small size of the gunboat hull made it impossible to retain the two (or even one of the) quantum wave torpedo launchers of the standard Hummingbird while installing the ability to lay mines and operate minesweeping shuttles. Most gunboats of this type only rarely ventured beyond their assigned bases where they tended the minefield of the base. Mission requirements, however, did see some of these boats sent on missions with standard flotillas to breach or patch minefields where no other asset was available to do so; see (R1.PF4) in *Module K*.

This ship is a true minesweeper (M2.45); see also (M8.0).

An SSD is provided on the Module C6 PF variants page.

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(R1.PF5-18) HUMMINGBIRD-F (PFF): This was the standard fighter-conveyor PF variant. The Paravians only used these to resupply carriers with fighters or to help deliver ground assault shuttles as part of raids. The gunboat's systems were unable to maintain the weapon charges of the fighters (no fighter being carried by a Hummingbird-F can have any quantum wave torpedo charges loaded) making their use for distant fighter strikes impractical. It should be noted that Hummingbird-Fs in some cases were used to carry fighters to casual fighter bases (J13.0), where the fighters would then be armed and sent on their way. Further, sometimes Hummingbird-Fs transporting fighters (or other shuttle types) would come under attack and would have to launch the fighters to at least add their phasers to their defense. See (R1.PF5) in *Module K*.

An SSD is provided on the Module C6 PF variants page.

(R1.PF6-18) HUMMINGBIRD-L (PFL): A standard leader type and a phaser-armed variant are included on the appropriate flotilla pages in *Module C6*. See (R1.PF6) in *Module K*.

(R1.PF7-18) WORKBOAT (WB): The Paravians produced workboats to provide more mobility to those looking for rich strikes of the various minerals needed to fuel their war machine, particularly the rare materials needed to make advanced technology work. It is otherwise a standard variant of the general type, that is to say workboats. See (R1.PF7) in *Module R11*.

An SSD is on the PF variants page of *Module C6*. Use any PF counter.

(R1.PF8-18) SURVEY FAST PATROL SHIP (PFQ): An example of the general type. The Paravians used these in the same manner as other empires. See (R1.PF8) in *Module R12*.

Survey fast patrol ships operated by civilian agencies will downgrade any phaser-1s to phaser-2s; reduce the BPV of the survey fast patrol ship by one point for each phaser-1.

An SSD is on the PF variants page of *Module C6*. Use any PF counter.

(R1.PF9-18) RECOVERY FAST PATROL SHIP (PFR): Losses among gunboats were always high, and more than one escape pod was not rescued because it could not be picked up under fire or a boat could not be repaired fast enough to return to the battle scene to rescue it. Recovery fast patrol ships were a solution to the problem. While not a perfect one, the savings in the lives of crews who did not have to be replaced and the prevention of the abandoning of gunboats otherwise too badly damage to return to their base more than paid for this variant. See (R1.PF9) in *Module R12*.

An SSD is on the PF variants page of *Module C6*. Use any PF counter.

### (K5.2) WEAPON SPECIFICATION CHART EXTRACT

### PARAVIAN FAST PATROL SHIP DAMAGE ALLOCATION

For purposes of damage allocation (K5.2) Weapon-A is quantum wave torpedo (also transporter on leader).

Weapon-B is N/A (tractor on leader). Weapon-C is phaser-1 (also shuttle on leader).

END OF SECTION (R18.0) MODULE C6

# **KEEPING IN TOUCH**

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Operating for 14 years now, this is our primary game development platform. Over 1,500 fans are registered, and there are three dozen active topics every day, ranging from news to product ideas, from rules questions (with answers) to tactical advice (with counter tactics), from ship proposals to player campaigns. While the board is huge, the powerful software allows you to customize your free account to only read the topics you want. This board requires "real name" registration so that you get credit for anything you propose or contribute.

You can find this at: www.StarFleetGames.com/discus/

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http://www.starfleetgames.com/federation/phpbb2/index.php

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## FACEBOOK

Our page on Facebook continues to grow (passing 1,700 friends) and has become the "quick way" to stay in touch with what's going on in the *SFU*. Jean post about five times a day, with news, links to the blog, art, and other things. She is the main voice you will hear there. If she doesn't know the answer to your question, she will pester someone until you get one.

We hope to see you soon! Here's the link:

http://www.facebook.com/pages/Amarillo-Design-Bureau-Inc/231728653279?ref=mf.

Hundreds of people on our page on Facebook have never been on our BBS, yet add to the ongoing development of the *SFU*. If you are very busy on a given day, checking our page would tell you quickly if something important has been announced.

#### TALKSHOE

Paul Franz runs a live "radio talk show" via the Internet every Thursday night at 9:30pm Eastern Time (daylight time when applicable). He hosts *SFU* players who want to discuss various issues, and sometimes has surprise guests (Stephen V. Cole, Jean Sexton, Steven P. Petrick) appear.

You can join the fun either by going through the TalkShoe website: (URL: http://www.talkshoe.com/tc/17702) or by phoning in (724-444-7444) and entering the TalkShoe ID for the event (17702). You can ask questions or just listen.

TalkShoe is also downloadable as a podcast for those that cannot make it. Also, if you can't make it but would like to have a particular subject discussed, email Paul Franz beforehand.

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These are the official PDF press releases which go out to the wholesalers, retailers, game industry media, and to those individuals (such as yourself) who have asked to be put on the mailing list. The most recent Star Fleet Alerts are on the website:

http://www.starfleetgames.com/starfleetalert.shtml

Most of these are about new product releases, but we also use them for special events and to promote our various other activities (such as those listed here).

We really need to do more alerts and make them more relevant and I am determined that this will happen in the future.

If you haven't signed up for the Star Fleet Alerts yet, email Support@StarFleetGames and ask to be put on the list.

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### **CARNIVON HORDES — R19**

### (R19.0) THE CARNIVON HORDES

The Carnivons are a species that is often described as "wolf like," but they are in fact genetically related to the Kzintis and Lyrans and all three apparently descended from some ancestral species. How they came to be on such widely separated worlds is unclear. Curiously, the felinoid species (descended from solitary hunters) were able to create fairly unified stellar empires, while the Carnivons (descended from pack hunters) remain a species rather than a nation.

Carnivons stand about 1.5m tall and mass about 75kg. Males are often slightly larger, and of course there is a certain amount of variation between individuals. While Carnivons as tall as 1.7m are not unusual, none are known to have reached or exceeded 2m. They are covered with coarse fur that ranges from black to gray to brown. In most cases, the fur of a given individual varies slightly, with darker colors on the back, tail, and legs than on the face, arms, or front. Carnivons walk erect and have opposable thumbs, just as their felinoid cousins do. Carnivons reach physical maturity within a year, but are regarded as juveniles until their hormones balance at about three years old. Carnivons are regarded as too old to fight by their 25th birthday and few survive into their 30s.

There is no such thing as a Carnivon government. There are, at any given time, from a dozen to two dozen hordes (each of millions of members) subdivided into packs (each with hundreds of thousands of members). As with other empires, most of the populations live out their lives on planets and either never go into space or do so only once (to reach a new colony world). Alliances, competition, disputes, and even civil wars between hordes are common and territories are ever-shifting. Each pack is a feudal state, with its own ships, colonies, and business interests. Some are autocratic, some democratic, and others have familial structures. Packs (and even hordes) have been known to divide or merge (sometimes violently).

A few warlords have tried to unify the hordes, but none have succeeded in merging more than few, and none of the mergers survived the "overlord." There is no single "home planet" as with other empires, although the Carnivons are well aware of the single planet their species came from.

In lieu of a central government, the Carnivons have a number of "judges" who, while holding no territory or starships of their own, rule on disputes between or even within hordes. To attack or even interfere with a judge, or to reject his ruling, means that all of the other hordes will quickly attack the offender. The Carnivon horde leaders (known as "war lords") accept the rulings of the judges as the only real way they can reduce internal conflict and focus their attentions outward on conquest. Hordes, and the packs that make up the subdivisions of hordes, often exchange young members to preserve genetic diversity. Some hordes are renowned for their specialized schools or other facilities and other hordes send students to them. Colonies often include groups from more than one horde.

Carnivons were, in ancient times, pack hunters who brought down even the largest prey by swarming attacks. They brought this mindset into space with them in the form of the heel nipper weapon. Carnivon squadrons tend to regard single-ship duels as something of a mistake, and prefer to operate in squadrons. Units will often spread their ships out to cover wider territories, but any ship that encounters an enemy will try to link up with the rest of its squadron before engaging in battle. The Carnivon fleet tends to include a higher percentage of smaller ships, and the Carnivons will send three frigates where the Lyrans or Kzintis would send one cruiser. The larger ships (Bear-Dog dreadnoughts and Wolf heavy cruisers) tend to be used as command ships, enforcers, and problem solvers. Carnivon ships are different from most others in that the crew do not have cabins or staterooms, but sleep in relatively small cubicles reminiscent of caves. Most off-duty time is spent in common areas engaged in various sports or other social activities.

While in ancient times the Carnivons decided leadership by combat, they realized as their society became more complex and technological that there were many kinds of strength and leadership, and that the ability to understand and use technology counted in the selection of military officers at least as much as valor and combat skills. Like their felinoid cousins, the Carnivons have a series of military academies and other schools, and those who join the military are highly professional. Planet-bound civilians engage in the usual trades and industries. Extensive agricultural areas are seen on all colony worlds but these are primarily used to produce feed for meat animals of various kinds. Carnivons generally prefer to kill their own food and eat it raw, but will store a half-eaten carcass in a refrigerator just as humans would. Carnivons eat little other than meat, but do grow various herbs and some vegetables to provide flavor or for medicine. Most Carnivon civilians will have a small garden of their own favorite plants for this purpose. Starship crews for the most part subsist on stored or replicated meat as keeping live prey animals (and tons of feed grain for them) on board is impractical. A few live animals are kept, however, for special banquets and holiday meals. Carnivons are not (for the most part) noted as being particularly religious, but most do pay at least some homage to ancient forest spirits, and the spirits of prey animals hunted and consumed.

The Lyrans and Kzintis hated the Carnivons on sight (their first contact was in Y55), more so even than they hated each other. The Carnivons attacked both felinoid empires in Y56, as both lay exhausted from the First Lyran-Kzinti War. The Carnivons drove a wedge between the Kzintis and Lyrans, reaching the WYN Cluster in Y65. What followed was a period of near peace as the Lyrans were busy fighting the Hydrans while the Kzintis were preoccupied with the Klingons. The Carnivons were content to hold the territory they had, and the felinoid empires grudgingly left them alone.

In Y106, the Kzintis (flushed with their victory over the Klingons) launched a new war against the Carnivons, cleverly destroying one horde at a time, knowing no other horde would come to their aid. The Lyrans quickly followed suit, although the two felinoid empires were not allied by any means. (Each just wanted to capture as much Carnivon territory as possible.) In only a few years, the war was over as the Lyrans and Kzintis could find no more Carnivons to kill, but could not tell if they had destroyed all of their planets or not.

Two historical episodes, however, give rise to alternative histories in which the Carnivons existed at the start of the General War.

Historically, two Carnivon hordes at the eastern end of the Carnivon territory were being attacked, one by the Kzintis and the other by the Lyrans. The two briefly allied in an attempt to survive, but were finally overwhelmed. The last of their ships dove into the radioactive walls of the WYN Star Cluster, denying the felines the chance to kill them. The WYNs later found the wreckage of Carnivon ships on one of their planets, but no survivors.

In Y92, a Carnivon war lord succeeded in merging three of the (then) 14 hordes and was well on his way to becoming the mythical Gookwar (leader of all Carnivons) when poisoned by an assassin from a rival horde.

Carnivons were created for SFB by Stephen V. Cole, who also created all of their weapons and technology.

**HISTORICAL MAPS** 

### **STAR FLEET BATTLES**



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### **CARNIVON HORDES – R19**

### CARNIVON ALTERNATE HISTORY #1: The Carnivon Empire

This alternative is fairly simple. The legendary Greycoat Lothbog, "Overlord of the Three Hordes", somehow succeeded in convincing the other 11 hordes to join him in a unified nation about Y96. Taking the title of Gookwar, he established a joint fleet, and set about to develop the economy and culture of his subjects. They shared a common language, and Greycoat Lothbog encouraged a sharing of art, literature, and music from every planet on every other planet.

Greycoat Lothbog established a government with representatives not from the previous hordes, but from each colony planet. (Each such colony usually had Carnivons from several hordes.) The Carnivon Empire was organized into four "overlordships," with a leader selected by the assembly in each region (all of them former war lords or overlords). Each region sent delegates to the national assembly and it was this assembly that controlled the national budget and (eventually) selected his successor. The military remained under national command, with officers selected from every colony world and trained in a single academy on the Carnivon capital. The fleet was organized into eight squadrons, which did not correspond to overlordship boundaries. No ship could have more than a few officers from a single planet, or a majority from a single overlordship.

The one thing Greycoat Lothbog did not do was to wage war, other than occasionally ordering one squadron to support another against a feline incursion. The Carnivons had learned that being between two enemies made it impossible to wage war against either of them without being attacked by the other. The Kzintis and Lyrans never learned to leave the Carnivons alone, being defeated during failed invasions in Y106, Y125, Y144, and Y157. (There are claims that the Feline-Carnivon War of Y125 was actually started by a failed Carnivon invasion of Kzinti space.)

At the start of the General War, the Klingons and Lyrans were firmly allied against the Hydrans. The Klingons had fought several wars with the Kzintis but the Lyrans barely remembered their ancient feline enemies, having not fought them in nearly a century.

The Carnivons were not allied to anyone, although they harbored Orion Pirates who raided Kzinti, Lyran, and (rarely) Klingon space. Klingon diplomats were busily at work trying to convince the Carnivons to join them in the conquest of the Kzinti Hegemony, promising a share of the territory. The Carnivons considered the offer, but only if the Klingons could guarantee that the Lyrans would not attack them.

### CARNIVON ALTERNATE HISTORY #2: The Carnivon of the Cluster

Historically, only the last few badly damaged ships from the two Carnivon hordes entered the WYN Cluster, and they did not survive in good enough shape to successfully land on a planet. In our alternate history, the two hordes voluntarily dove into the WYN Cluster with three dozen intact warships and their entire logistics trains (although most of the crews of the cargo ships did not survive). The Kzintis and Lyrans "knew" that the Carnivons had just committed suicide, and were only too happy to congratulate themselves over their victory and turn west seeking more Carnivons to slaughter.

**Y106:** The two Carnivon hordes unexpectedly found themselves alive, albeit in badly crippled ships. They were, at least, in normal space inside a hollow sphere of radiation. They were able to stay in operation long enough to survey the worlds they found, discovering them to be rich and ripe for occupation. They selected three worlds and began landing

their supply and transport ships, keeping the warships in orbit. Crews were rotated by transporter. The Carnivons actually had more ships and (because of their logistics trains) more technology than the Usurper would have when he arrived.

Y109: The 27 warships that had survived the passage into the Cluster were restored to something close to full functionality. (This included two dreadnoughts.) Factories, mines, and farms were in operation on the three planets. Asteroid mining had begun, and survey teams were at work on the other planets of the Cluster. Every Carnivon female had already given birth to a dozen pups, the first of which were old enough to be productive workers. (They were decades ahead of what the historical Usurper could accomplish starting from a much smaller population base with relatively few females.) Despite stories of the "bad old days" of division, the Carnivons of the Cluster were a unified people, perhaps the first time in recorded Carnivon history that this was true. (There were still the occasional hotheads who would try to go their own way, but there were plenty of planets and remote areas where they could be sent to cool off.) The Carnivons of the Cluster had little interest in the fate of the other Carnivon hordes.

Y113: The Carnivons began work on a shipyard.

**Y116:** The Usurper arrived (two crippled cruisers and two crippled frigates), but his squadron was quickly annihilated by the WYN Cluster Carnivons.

**Y122:** The Carnivons completed their first new-construction warship and continued to expand their shipyard.

Y136: The Orion raider Amarillus arrived and was quickly captured by the Carnivons. This ship's technology was a boon to the Carnivons, providing phaser-1s and the knowledge that disruptors could be overloaded. The crew of the Amarillus had nothing to bargain with (as their ship had been captured) other than their technical knowledge, and they lived out their lives as virtual slaves. The Carnivons had no need for more population, and frankly had no interest in importing the malcontents, troublemakers, and failed rebels from the three surrounding empires. (Those empires simply resorted to executing such riff-raff rather than exporting them to the Cluster.) The Carnivons of the Cluster had no need to beg for any ships they could get as they had two entire fleets of repaired ships and several entirely new ones. Even better, the ships of the Carnivons of the Cluster were real warships, not kitbashed freighters, wrecks, and derelicts.

**Y137:** The repaired *Amarillus* is sent outside the Cluster with a Carnivon crew to gather news from the outside galaxy. They find nothing surprising, other than the almost irrelevant news that all Carnivons have been exterminated. The Carnivons begin refitting their ships with the new captured technology. The Carnivons continue growing their population and fleet. They keep about 30 ships in operation, mothballing the rest.

**Y143:** The Carnivons formally establish secret trade links with the Orions, but don't want to trade with the felines and don't trust the Klingons.

**Y158:** The Carnivons watch the Four Powers War with interest but never reach a decision to join it. By now, the three surrounding empires know the Carnivons are there, but have little interchange with them.

**Y168:** The General War begins with the swift Coalition conquest of the Hydrans. The Klingons do not attack the Kzintis until Y171 or the Federation until Y174.

**Y178:** The Carnivons burst out of the Cluster to build a new empire at the expense of the Coalition. (The Carnivons are *de facto* co-belligerents with the Alliance.) The Carnivons take everything within 2,000 parsecs of the Cluster but cannot build bases fast enough to expand further.

**Y185:** The General War ends. What Kzintis remain alive are part of the Federation. The Klingons and Lyrans

### **R19 – CARNIVON HORDES**

recognize the Carnivon conquests "for now" but plan on a further war. These plans, however, are interrupted by the ISC Pacification and the Andromedan War.

#### **CARNIVON GENERAL UNITS**

Carnivon starbases, battle stations, other bases, auxiliaries, defense satellites, monitors, fleet repair docks, captor mines, and ground bases are generally the same as those used by the Klingons with one disruptor cannon replacing each disruptor, death bolts replacing drone racks, and with heel nippers replacing some other weapons. For BPV purposes, consider a disruptor cannon equal in value to a disruptor of the same range, death bolt racks equal to type-B drone racks (add 1 BPV for a refitted death bolt), and heel nippers roughly equal to a disruptor of Range 10.

The Carnvions use drogues (G34.0), having available the phaser, sensor, and decoy types. Their version of the heavy weapons drogue uses three death bolts.

#### (R19.0) CARNIVON GENERAL UNITS

General units that can be used by the Carnivons are listed here with needed changes. General units requiring no changes, e.g., small and large freighters, most augmentation modules, etc., are not listed and are simply used as is.

(**R1.1-19**) **STARBASE (SB)**: Weapon #1 is disruptor cannons Range 40, Weapon #2 is death bolt racks (each rack has four magazines holding six death bolts, add one deck crew per death bolt rack, i.e., a total of six), and Weapon #3 is heel nippers with 360° firing arcs. Delete Weapon #4.

Fighters if hangar bay modules (R1.4) are present:

YĚAR	FIGHTERS
Y167-Y169	6, 12, 18, or 24 JK-1.
Y170-Y172	6, 12, 18, or 24 JK-1 or JK-2 or a mix of both.
Y173-Y175	6, 12, 18, or 24 JK-2 or JK-3 or a mix of both.

- Y176-Y179 6, 12, 18, or 24 JK-3 or JK-4 or a mix of both.
- Y180+ 6, 12, 18, or 24 JK-4.

Fighters if heavy fighter hangar modules (R1.70) are present [note: a starbase can have two heavy fighter squadrons, if the starbase has PF docking modules (R1.16) it is a true PF tender and cannot operate heavy fighters at all]:

#### YEAR FIGHTERS

- Y177-Y178 6, 12, 18, or 24 JK-3 or JK-4 or a mix of both, 6 or 12 DG-1 or DG-1i, or a mix of both.
- Y179 6, 12, 18, or 24 JK-3 or JK-4 or a mix of both, 6 or 12 DG-2 or DG-2i, or a mix of both.
- Y180+ 6, 12, 18, or 24 JK-4, 6 or 12 DG-2 or DG-2i, or a mix of both.

In Y172 some starbases had a refit similar to the one that would be installed on Federation starbases in Y181. This refit converted the #4 docking module into a large hangar bay able to operate a squadron of assault fighters. See (R1.1A).

#### YEAR FIGHTERS

	-	_
Y172	12 HY-1.	
Y173-Y175	12 HY-2.	
V176	12 HV-3	

1170	12111-0.
Y177	12 HY-3 or 6 DG-1 or DG-1i.

Y178 12 HY-3 or 6 DG-2 or DG-2I.

The starbase has six shuttle bays, each of which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the starbase, or between the starbase and the bays of any augmentation module, or between augmentation modules are not possible.

Refits: DERFACS was installed in Y169, no change in BPV.

A generic SSD and counter are in Basic Set.

**(R1.2-19) BATTLE STATION (BATS):** Weapon #1 is disruptor cannons Range 40, Weapon #2 is a death bolt rack with four magazines (24 death bolts total), add one deck crew. Weapon #3 is a heel nipper with the same firing arcs as the phasers in the docking module.

Fighters if hangar bay modules (R1.4) are present:

YĔAR	FIGHTERS
Y167-Y169	6 or 12 JK-1.
Y170-Y172	6 or 12 JK-1 or JK-2 or a mix of both.
Y173-Y175	6 or 12 JK-2 or JK-3 or a mix of both.
Y176-Y179	6 or 12 JK-3 or JK-4 or a mix of both.
Y180+	6 or 12 JK-4.
Fighters if he	eavy fighter hangar bay modules (R1.70) are

present [note: if the base has PF docking modules (R1.16) it is a true PF tender and cannot operate heavy fighters]:

#### YEAR FIGHTERS

Y177-Y178	6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-
	1 or DG-1i.

Y179 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.

Y180+ 6 or 12 JK-4, 6 DG-2 or DG-2i.

The battle station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the battle station and the bays of any augmentation module or between augmentation modules are not possible.

Refits: DERFACS was installed in Y169, no change in BPV.

A generic SSD is in *Basic Set;* use the generic Base Station counter in *Basic Set.* 

(R1.3-19) BASE STATION (BS): Weapon #1 is a disruptor cannon Range 30 and Weapon #2 is two standard death bolt racks (add two deck crews). Weapons #3 and #4 are heel nippers, one with an LS firing arc, one with an RS firing arc.

Fighters if hangar bay modules (R1.4) are present:

YEAR	FIGHTERS
Y167-Y169	6 or 12 JK-1.
Y170-Y172	6 or 12 JK-1 or JK-2 or a mix of both.
Y173-Y175	6 or 12 JK-2 or JK-3 or a mix of both.
Y176-Y179	6 or 12 JK-3 or JK-4 or a mix of both.
Y180+	6 or 12 JK-4.
Fighters if he	eavy fighter hangar bay modules (R1.70) are
sent [note: if t	the base has PF docking modules (R1.16) it

is a true PF tender and cannot operate heavy fighters]:

#### YEAR FIGHTERS

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- Y177-Y178 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-1 or DG-1i.
- Y179 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.

Y180+ 6 or 12 JK-4, 6 DG-2 or DG-2i.

The base station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the base station and the bays of any augmentation module or between augmentation modules are not possible.

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Refits: DERFACS was installed in Y169, no change in BPV. In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the base's BPV by two points.

A generic SSD and counter are in Basic Set; a Klingon specific SSD is in Module R1.

#### (R1.4-19) HANGAR BAY MODULE (HBM):

Fighters per hangar bay modules if hangar bay modules are present. The information is per hangar bay module. Hangar bay modules are class-A augmentation modules and must be docked to a class-A docking station to be operational. See the ship description for the base for the number of class-A docking positions the base has.

YEAR FIGHTERS Y167-Y169 6 JK-1. Y170-Y172 6 JK-1 or 6 JK-2. Y173-Y175 6 JK-2 or 6 JK-3. Y176-Y179 6 JK-3 or 6 JK-4. Y180+ 6 JK-4.

This module has one shuttle bay. Mines cannot be laid from this module (M2.113). Transfers between this augmentation module and the bays of any other augmentation module or the bay or bays of the base to which it is attached are not possible.

An SSD appears on base SSDs and in Module R1; there is no counter as the unit cannot function if it is not attached to a base. If in transit (being carried by a freighter or a tug), it is inactive.

(R1.7A-19) LARGE Q-SHIP (L-Q): Use a Klingon large Qship, but delete the security stations and delete the UIM refit. Replace the disruptors with disruptor cannons Range 22, replace the drone racks with death bolt racks (add two deck crews), and replace the anti-drone with a heel nipper with an RA firing arc.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by two points.

Klingon L-Q SSD is in Basic Set; use a generic large freighter counter. A generic L-Q counter (labeled Q L) is in Module R1.

(R1.7B-19) SMALL Q-SHIP (S-Q): Use a Klingon small Qship, but delete the security stations, delete the UIM refit, replace the disruptor with a disruptor cannon Range 22, and replace the drone rack with a death bolt rack and one deck crew

Refits: In Y175 the death bolt rack is refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by one point.

Klingon S-Q SSD is in Basic Set; use a generic small freighter counter. A generic S-Q counter (labeled Q S) is in Module R1.

(R1.9-19) FREE TRADER (FT): Free Traders in Carnivon space will normally have a phaser-2 or a phaser-3 in the option mount.

A generic SSD and counter are in Advanced Missions.

(R1.10-19): FLEET REPAIR DOCK (FRD): Weapon #1 will be phaser-2s, Weapon #2 will be phaser-3s, Weapon #3 will be death bolt racks (add two deck crews).

Fighters if hangar bay modules (R1.4) are present:

YEAR	FIGHTERS
Y167-Y169	6 or 12 JK-1.
Y170-Y172	6 or 12 JK-1 or JK-2 or a mix of both.
Y173-Y175	6 or 12 JK-2 or JK-3 or a mix of both.
Y176-Y179	6 or 12 JK-3 or JK-4 or a mix of both.

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Y180+ 6 or 12 JK-4.

Fighters if a heavy fighter hangar bay module (R1.70) is present [note: if the fleet repair dock has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

#### ÝEĂR FIGHTERS

Y177-Y178 0 or 6 JK-3 or JK-4. 6 DG-1 or DG-1i. Y179

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0 or 6 JK-3 or JK-4, 6 DG-2 or DG-2i.

Y180+ 0 or 6 JK-4, 6 DG-2 or DG-2i.

The FRD has one shuttle bay. Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the fleet repair dock and the bay of any augmentation module or between augmentation modules are not possible.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the fleet repair dock's BPV by two points.

A generic SSD and counter are in Advanced Missions.

(R1.13A-19) SMALL AUXILIARY CARRIER (AxCVL): Weapon-A is 2xphaser-1-360°s, Weapon-B is death bolt racks (add two deck crews).

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

YEAR	FIGHTERS	
Y167-Y169	12 JK-1.	
Y170-Y172	12 JK-1 or JK-2 or a mix of both.	
Y173-Y175	12 JK-2 or JK-3 or a mix of both.	
Y176-Y179	12 JK-3 or JK-4 or a mix of both.	
Y180+	12 JK-4.	

This ship has one shuttle bay. This ship cannot operate disruptor cannon-armed fighters.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by two points.

A generic AxCVL SSD is in Basic Set. Use a generic freighter counter from Basic Set or a generic AxCVL counter from Module J.

(R1.13B-19) LARGE AUXILIARY CARRIER (AxCVA): Weapon-A is 3xphaser-2-360°s, Weapon-B is death bolt racks (add two deck crews), Weapon-C is a heel nipper-RA.

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

YEAR FIGHTERS Y167-Y169 24 JK-1.

Y170-Y172 24 JK-1 or JK-2 or a mix of both.

Y173-Y175 24 JK-2 or JK-3 or a mix of both.

Y176-Y179 24 JK-3 or JK-4 or a mix of both.

Y180+ 24 JK-4.

This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor cannon-armed fighters.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by two points.

There is currently no generic carrier SSD, so use the Federation AxCVA SSD from Module J replacing the type-G drone racks with the Weapon-B phaser-3s as noted above, use a generic freighter counter from Basic Set, or use a generic AxCVA counter from Module J.

(R1.14-19) GROUND BASED DEFENSE STATIONS: The Carnivons use GBDP, GBD1, and GBD2. For a disruptor cannon ground base, replace the disruptors of a GBDD with disruptor cannons Range 40 with FH firing arcs and replace the APRs with AWRs, with no change in BPV.

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#### Refits: DERFACS was installed in Y169 to bases armed with disruptor cannons, no change in BPV.

Generic SSDs for these ground bases and generic ground base counters are in Advanced Missions and Module R1.

(R1.15-19) DEFENSE SATELLITES: The Carnivons use the phaser variant (2xphaser-2s + 2xphaser-2s + 2xphaser-3s). For a disruptor cannon defense satellite, take a disruptorarmed version and replace the disruptors with disruptor cannons (2xphaser-2s + 2xdisruptor cannons + 2xphaser-3s); the defense satellite cannot overload the disruptor cannons which fire every other turn (or if controlled, one could be fired on one turn and the other on the following turn).

Generic SSDs for these defense satellites and generic defense satellite counters are in Advanced Missions.

(R1.20-19) SMALL ARMED FREIGHTER (F-AS): The Carnivons use the phaser-armed version unchanged. For a disruptor cannon armed version, use a disruptor-armed version but replace the disruptor with a disruptor cannon Range 15 with an FA firing arc. There are no death bolt or heel nipper armed versions.

SSDs for these small armed-freighters and generic F-AS counters are in Advanced Missions.

(R1.21-19) LARGE ARMED FREIGHTER (F-AL): The Carnivons use the phaser-armed version unchanged. For a disruptor cannon armed version use a disruptor armed version but replace the disruptors with disruptor cannons Range 22 with a FA firing arcs. There are no death bolt or heel nipper armed versions.

SSDs for these large armed-freighters and generic F-AL counters are in Advanced Missions.

(R1.22-19) MONITOR (MON): Weapon-A is disruptor cannon-40-FA; Weapon-B is 4xphaser-2-360°s, Weapon-C and Weapon-D are death bolt racks.

Fighters if using a fighter pallet:

YĔAR	FIGHTERS
Y167-Y169	12 JK-1.
Y170-Y172	12 JK-1 or JK-2 or a mix of both, or 8 JK-1
	or JK-2 and 4 HY-1.
Y173-Y175	12 JK-2 or JK-3 or a mix of both, or 8 JK-2
	or JK-3 and 4 HY-2 or HY-2.
Y176	12 JK-3 or JK-4 or a mix of both, or 8 JK-3
	or JK-4 and 4 HY-2 or HY-3.
Y177	12 JK-3 or JK-4 or a mix of both, or 8 JK-3
	or JK-4 and 4 HY-2 or HY-3, or 6 DG-1 or
	DG-1i.
Y178-Y179	12 JK-3 or JK-4 or a mix of both, or 8 JK-3

- or JK-4 and 4 HY-3, or 6 DG-2 or DG-2i. Y180+
- 12 JK-4, or 8 JK-4 and 4 HY-3, or 6 DG-2 or DG-2i.

The monitor with the fighter pallet has two bays: the monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet (note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

#### YEAR FIGHTERS

12 JK-4, or 8 JK-4 and 4 HY-3. Y180+

The monitor with the space control pallet has two bays, the monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

Refits: DERFACS was installed in Y169, no change in BPV. In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added: this increases the ship's BPV by two points.

A generic monitor SSD and counter are in Advanced Missions; a Klingon specific SSD is in Module R1.

(R1.24-19) MOBILE BASE (MB): The Carnivon mobile base has phaser-2s.

Fighters if hangar bay modules (R1.4) are present: Y167-Y169 6 or 12 JK-1. Y170-Y172 6 or 12 JK-1 or JK-2 or a mix of both. Y173-Y175 6 or 12 JK-2 or JK-3 or a mix of both. Y176-Y179 6 or 12 JK-3 or JK-4 or a mix of both. 6 or 12 JK-4. Y180+

Fighters if heavy fighter hangar bay modules (R1.70) are present [note: if the base has a PF docking module (R1.16), it is a true PF tender and cannot operate heavy fighters]:

YEAR	FIGHTERS
Y177-Y178	0 or 6 JK-3 or JK-4, 6 DG-1 or DG-1i.
Y179	0 or 6 JK-3 or JK-4, 6 DG-2 or DG-2i.
Y180+	0 or 6 JK-4, 6 DG-2 or DG-2i.
The mobile	base has two shuttle bays, which may

have shuttle decks (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the mobile base, or between the mobile base's bays and the bays of any augmentation module, or between augmentation modules are not possible.

An mobile base SSD with phaser-2s and a generic mobile base counter are in Module R1.

(R1.27A-19) SMALL AUXILIARY PF TENDER (AxPFS):

Weapon #1 is phaser-2-360°, Weapon #2 is death bolt racks (add two deck crews); the death bolt racks always had six death bolts and two reloads.

A generic AxPFS SSD and counter are in Module K.

(R1.27B-19) LARGE AUXILIARY PF TENDER (AxPFL): Weapon #1 is phaser-2-360°, Weapon #2 is death bolt racks (add two deck crews). The death bolt racks always had six death bolts and two reloads.

A generic AxPFL SSD and counter are in Module K.

(R1.28A-19) SMALL GROUND FIGHTER BASE (FGB-S): Bases of this type operated flights of pure superiority fighters, or pure assault fighters, rather than mixed formations as found on most carriers. Cargo boxes if superiority fighters are used usually held additional anti-drones. Cargo boxes on bases which operated assault fighters are replaced by APRs.

Fighters (note: fighter ground bases cannot operate heavy fighters, only heavy fighter ground bases can):

YEĂR	FIGHTERS
Y165-Y169	6 JK-1.
Y170-Y172	6 JK-1 or JK-2, or HY-1.
Y173-Y175	6 JK-2 or JK-3 or HY-1 or HY-2.
Y176-Y179	6 JK-3 or JK-4 or HY-2 or HY-3.

4 or HY-2 or HY-3.

6 JK-4 or HY-3. Y180+

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic FGB-S SSD is in Module R1; generic ground base counters are in Advanced Missions and Module R1.

(R1.28B-19) MEDIUM GROUND FIGHTER BASE (FGB-M): Bases of this type operated squadrons of pure superiority fighters, or pure assault fighters, rather than mixed formations

# STAR FLEET BATTLES

as found on most carriers. Cargo boxes if superiority fighters are used usually held additional anti-drones. Cargo boxes on bases which operated assault fighters are replaced by APRs.

Fighters (note: fighter ground bases cannot operate heavy fighters, only heavy fighter ground bases can): YEAR FIGHTERS

Y165-Y169 12 JK-1.

Y170-Y172 12 JK-1 or JK-2, or HY-1.

Y173-Y175 12 JK-2 or JK-3 or HY-1 or HY-2.

Y176-Y179 12 JK-3 or JK-4 or HY-2 or HY-3.

Y180+ 12 JK-3 01 JK-4 01 H F

Y180+ 12 JK-4 OF HY-3.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic FGB-M SSD is in *Module R1*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28C-19) GROUND MISSILE BASE (GMB): The Carnivons operated a version of this base with death bolt racks replacing the drone racks. Add one crew unit and four deck crews. Cargo boxes hold 200 spaces of additional death bolts.

Refits: Prior to Y175 the death bolt racks had four positions and one reload. The Y175 refit increased these to six positions and two reloads.

A generic GMB SSD is in *Module R1*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28G-19) SMALL MILITARY GARRISON (GMG): The Carnivon version uses the phaser-2.

A generic GMG SSD is in *Module R1*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28J-19) SMALL PF GROUND BASE (GPF): Cargo boxes hold spare warp booster packs.

A generic GPF SSD and generic GPF counter are in *Module K;* generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.28K-19) PLANETARY CONTROL BASE (GPC): Cargo boxes hold two sets of spare warp booster packs (total of three per fighter or PF) with the remainder of the storage being anti-drones for the fighters.

Fighters:

#### YEAR FIGHTERS

Y182+ 12 JK-4 or HY-3.

This base is a true PF tender and cannot operate heavy fighters.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic GPC SSD is in *Module K*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.30-19) SYSTEM ACTIVITY MAINTENANCE STATION (SAMS): WPN is either 2xphaser-2-360°s or 2xdisruptor cannons Range 22 with 360° launching arcs. Phaser-X is always phaser-2.

A generic SAMS SSD and counter are in Module R1.

(R1.31-19) AUXILIARY SPACE CONTROL SHIP (AxSCS): Weapon #1 is phaser-2-360°, Weapon #2 is death bolt racks (add two deck crews). The death bolt racks always had six death bolts and two reloads.

rigniers.	
YEAR	FIGHTERS
Y182+	12 JK-4.

This ship is a true PF tender and cannot operate heavy fighters. This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor cannon-armed fighters.

A generic AxSCS SSD and counter are in *Module K*.

**(R1.35-19) CIVILIAN BASE STATION (BSC):** Weapon #1 is a death bolt rack (add one deck crew), Weapon #2 and the heavy phasers (PH-) are all phaser-2s, Weapon #3 and Weapon #4 are phaser-3-360°.

Fighters if hangar bay modules (R1.4) are present:

- YĚAR FIGHTÉRS
- Y167-Y169 6 or 12 JK-1.

Y170-Y172 6 or 12 JK-1 or JK-2 or a mix of both.

Y173-Y175 6 or 12 JK-2 or JK-3 or a mix of both.

Y176-Y179 6 or 12 JK-3 or JK-4 or a mix of both.

Y180+ 6 or 12 JK-4.

Fighters if a heavy fighter hangar bay module (R1.70) is present [note: if the base has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

#### YEAR FIGHTERS

- Y177-Y178 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-1 or DG-1i.
- Y179 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.

Y180+ 6 or 12 JK-4, 6 DG-2 or DG-2i.

The civilian base station has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the civilian base station and the bays of any augmentation module or between augmentation modules are not possible.

Refits: In Y175 the death bolt rack is refitted to hold six death bolts and a second reload is added; this increases the base's BPV by one point.

A generic civilian base station SSD is in *Module C3;* ship description is in *Module R1;* use the generic base station counter from *Basic Set.* 

(R1.38-19) FREE PROSPECTOR (FTP): Free prospectors in Carnivon space will normally have a phaser-2, phaser-3, or prospecting cannon in the option mount.

A generic SSD is in *Module F1;* use a generic Free Trader counter from *Advanced Mission*.

(R1.41-19) FREE TROOPER (FTR): Free troopers in Carnivon space will normally have a phaser-2 or phaser-3 in the option mount.

A generic SSD and FTR counter are in Module M.

(R1.46A-19) MEDIUM BOMBER BASE (BMB): Carnivon medium bombers use this base.

Bombers:	
YEAR	BOMBERS
Y168-Y172	6 BR-1.
Y173-Y175	6 BR-1 or BR-2.
Y176-Y177	6 BR-2.
Y178-Y179	6 BR-2 or BR-3.
Y180+	6 BR-3.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in *Module J2;* generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.46B-19) HEAVY BOMBER BASE (BHB): Carnivon heavy bombers use this base.

### **CARNIVON HORDES – R19**

## **R19 — CARNIVON HORDES**

Bombers:

YEAR BOMBERS

Y179+ 6 KO.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in *Module J2*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.47-19) SECTOR BASE (STB): Weapon #1 is disruptor cannons Range 40 including DERFACS. Weapon #2 is a death bolt rack with four magazines (24 death bolts total); add one deck crew. Weapon #3 is a heel nipper with the same firing arcs as the phasers in the docking module.

Fighters if hangar bay modules (R1.4) are present:

YEAR FIGHTERS Y175 6 or 12 JK-2 or JK-3 or a mix of both.

Y176-Y179 6 or 12 JK-3 or JK-4 or a mix of both.

Y180+ 6 or 12 JK-4.

Fighters if heavy fighter hangar bay modules (R1.70) are present [note: if the base has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

YEAR FIGHTERS

Y177-Y178	6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-
	1 or DG-1i.

Y179 6 or 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.

Y180+ 6 or 12 JK-4, 6 DG-2 or DG-2i.

The sector base has one shuttle bay, which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the sector base and the bays of any augmentation module or between augmentation modules are not possible.

A generic SSD and counter are in *Module R8*.

(R1.48A-19) SMALL HEAVY FIGHTER BASE (HFB-S): Carnivon heavy fighters use these bases. Cargo boxes are converted to APRs.

Fighters:

YEAR FIGHTERS

Y177-Y178 3 DG-1 or DG-1i.

Y179+ 3 DG-2 or DG-2i.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in *Module R8*; generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.48B-19) HEAVY FIGHTER BASE (HFB): Carnivon heavy fighters use these bases. Cargo boxes are converted to APRs.

Fighters:	
YFAR	FIGHTERS

	TIGHTERS
Y177-Y178	6 DG-1 or DG-1i.

Y179+ 6 DG-2 or DG-2i.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in *Module R8;* generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.48C-19) HEAVY FIGHTER PLANETARY CONTROL BASE (HFC): Carnivon heavy fighters use these bases. Cargo boxes hold spare warp booster packs. Fighters:

### YĚAR FIGHTERS

- Y177-Y178 12 JK-3 or JK-4 or a mix of both, 6 DG-1 or DG-1i.
- Y179 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.
- Y180+ 12 JK-4, 6 DG-2 or DG-2i.

The bay is "outdoors" and has no restrictions on the number of shuttles that can launch and land at any one time, is immune to chain reactions (D12.0), and (of course) cannot lay T-bombs (R1.28A).

A generic SSD is in *Module R8;* generic ground base counters are in *Advanced Missions* and *Module R1*.

(R1.53-19) SECURITY SKIFF (SSK): Delete the drone rack and the skiff's BPV is reduced by two points.

A generic SSD and counter are in Module R8.

(R1.55-19) HEAVY AUXILIARY CARRIER (HAV): Weapon #1 is phaser-2s, Weapon #2 is heel nippers, #1 with an LF+L arc and #2 with an RF+R arc, Weapon #3 is a heel nipper with an RA arc, Weapon #4 is death bolts (add four deck crews), and Weapon #5 is phaser-3s.

Fighters (note: auxiliary carriers cannot operate heavy fighters, only auxiliary heavy fighter carriers can):

YEAR	FIGHTERS
Y167-Y169	24 JK-1.
Y170-Y172	24 JK-1 or JK-2 or a mix
Y173-Y175	24 JK-2 or JK-3 or a mix
Y176-Y179	24 JK-3 or JK-4 or a mix
Y180+	24 JK-4

This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor cannon-armed fighters.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by four points.

A generic SSD and counter are in Module R8.

(R1.56-19) HEAVY AUXILIARY PF TENDER (HAP): Weapon #1 is phaser-2s, Weapon #2 is heel nippers with #1 having an L and LR arc, and #2 having an R and RR arc, Weapon #4 is death bolts (add four deck crews), and Weapon #5 is phaser-3s. Death bolt racks always had six death bolts and two reloads.

A generic SSD and counter are in Module R8.

(R1.57-19) HEAVY SPACE CONTROL SHIP (HSC): Weapon #1 is phaser-2s, Weapon #2 is heel nippers with #1 having an L and LR arc, and #2 having an R and RR arc, Weapon #4 is death bolts (add four deck crews), and Weapon #5 is phaser-3s. Death bolt racks always had six death bolts and two reloads.

Fighters: YEAR

YEAR	FIGHTERS
Y182+	12 JK-4.

This ship is a true PF tender and cannot operate heavy fighters. This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor cannon-armed fighters.

A generic SSD and counter are in Module R8.

(R1.58-19) SMALL AUXILIARY GUARD SHIP (SAC): Weapon options are disruptor cannon Range 15-FA, phaser-2-FA, or death bolt rack (add one deck crew per rack).

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by one point per death bolt rack.

A generic SSD and counter are in *Module R8*.

## STAR FLEET BATTLES

of both.

of both.

of both.

#### (R1.59-19) LARGE AUXILIARY GUARD SHIP (LAC): Weapon options are disruptor cannon Range 22-FA, phaser-2-FA, or death bolt rack (add one deck crew per rack)

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by one point per death bolt rack.

A generic SSD and counter are in Module R8.

(R1.60-19) HEAVY AUXILIARY GUARD SHIP (HAC): Weapon options are disruptor cannon Range 22-FA, phaser-2-FA, or death bolt rack (add one deck crew per rack). Rear hull weapons are: Weapon #1 is phaser-2s, Weapon #3 is heel nipper-RA, Weapon #4 is death bolts (add four deck crews), and Weapon #5 is phaser-3s.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by one point per death bolt rack.

A generic SSD and counter are in Module R8.

#### (R1.65-19) CIVILIAN LUXURY FAST TRANSPORT (FTT):

Civilian luxury fast transports in Carnivon space will normally have phaser-2s or phaser-3s in the option mount.

A generic SSD and counter are in Module R8.

(R1.67-19) PRIME TRADERS (PT): Prime traders in Carnivon space will normally have phaser-1-360°s, phaser-2-360°s, or disruptor cannons Range 22-FA (often two different weapons are used, e.g., a disruptor cannon and a phaser-2) in the option mounts.

A generic SSD and counter are in Module R8.

(R1.68U-19) SELF-DEFENSE SKID TYPE-II: The Carnivons only use the phaser-only versions of the self-defense skids.

A generic SSD is in Module R8; there is no separate counter.

(R1.68V-19) SELF-DEFENSE SKID TYPE-III: The Carnivons only use the phaser-only versions of the self-defense skids.

A generic SSD is in Module R8; there is no separate counter.

(R1.68W-19) FIGHTER SKID: The fighters on this skid will, of course, be whatever is borrowed from the Carnivon ground base the skid is supporting as per the rules for this skid type. This cannot be an armed assault fighter as the skid has no ability to maintain an armed disruptor cannon on a fighter, but it could be an assault fighter with an unarmed disruptor cannon.

The skid has a single bay; transfers between this skid and any shuttle bays on the freighter, on other skids carried by the freighter, or on any ducktails carried by the freighter are not possible.

A generic SSD is in Module R8; there is no separate counter.

#### (R1.70-19) HEAVY FIGHTER HANGAR BAY MODULE (HFM):

Fighters per heavy fighter hangar bay modules if hangar bay modules are present. The information is per hangar bay module. Hangar bay modules are class-A augmentation modules and must be docked to a class-A docking station to be operational. See the ship description for the base for the number of class-A docking positions the base has. Only one HFM can be on a base, except a starbase or stellar fortress which can have two such augmentation modules. If a PF docking module (R1.16) is being used by the base, the base is a true PF tender and cannot operate heavy fighters and would have no use for this module:

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YEAR FIGHTERS

Y177-Y178 6 DG-1 or DG-1i. Y179+

6 DG-2 or DG-2i.

Transfers between this augmentation module and the bays of any other augmentation module or the bay or bays of the base to which it is attached are not possible.

SSD is in Module R8; there is no counter as the unit cannot function if it is not attached to a base. If in transit (being carried by a freighter or a tug), it is inactive.

(R1.71-19) FAST MONITOR (MNF): Weapon-A is disruptor cannon-40-FA, Weapon-B is 4xphaser-2-360°s, Weapon-C is heel nipper LF +L, Weapon-D is heel nipper, RF +R.

Fighters if	using a carrier pallet:	
YEAR	FIGHTERS	

LAK	FIGHTERS
167 V160	10 11/1

- Y167-Y169 12 JK-1. Y170-Y172 12 JK-1 or JK-2 or a mix of both, or 8 JK-1 or JK-2 and 4 HY-1.
- Y173-Y175 12 JK-2 or JK-3 or a mix of both, or 8 JK-2 or JK-3 and 4 HY-2 or HY-2.
- 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 Y176 or JK-4 and 4 HY-2 or HY-3.
- 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 Y177 or JK-4 and 4 HY-2 or HY-3, or 6 DG-1 or DG-1i.
- 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 Y178-Y179 or JK-4 and 4 HY-3, or 6 DG-2 or DG-2i.
- Y180+ 12 JK-4, or 8 JK-4 and 4 HY-3, or 6 DG-2 or DG-2i

The fast monitor with the fighter pallet has two bays: the fast monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet (note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

#### FIGHTERS YEAR

Y183+ 12 JK-4, or 8 JK-4 and 4 HY-3.

The fast monitor with the space control pallet has two bays: the fast monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

A generic SSD and counter are in Module R9.

(R1.74-19) HEAVY AUXILIARY TROOP TRANSPORT (FTH): Weapon #1 is phaser-2s, Weapon #3 is a heel nipper-RA, Weapon #4 is death bolt racks (add four deck crews, design includes the Y175 refit), and Weapon #5 is phaser-3s.

Refits: In Y175 the death bolt racks are refitted to hold six death bolts and a second reload is added; this increases the ship's BPV by four points.

A generic SSD and counter are in Module R11.

(R1.75-19) LARGE AUXILIARY HEAVY FIGHTER CARRIER (LAH): Weapon-A is 3xphaser-2-360°s, Weapon-B is death bolt racks (add two deck crews), Weapon-C is a heel nipper-RA. Death bolt racks always had six death bolts and two reloads.

Fighters:

#### YEAR FIGHTERS

- Y177-Y178 12 JK-3 or JK-4 or a mix of both, 6 DG-1 or DG-1i.
- Y179 12 JK-3 or JK-4 or a mix of both, 6 DG-2 or DG-2i.
- 12 JK-4, 6 DG-2 or DG-2i. Y180+

This ship has two shuttle bays; transfers between the bays are not possible.

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### **STAR FLEET BATTLES**

A generic SSD and counter are in Module R11.

### (R1.76-19) SMALL AUXILIARY HEAVY FIGHTER CARRIER

**(SAH):** Weapon-A is 2xphaser-1-360°s, weapon-B is death bolt racks (add two deck crews). Death bolt racks always had six death bolts and two reloads.

#### Fighters: YEAR FIG

YEARFIGHTERSY177-Y1786 DG-1 or DG-1i.Y179+6 DG-2 or DG-2i.This ship has a single shuttle bay.A generic SSD and counter are in Module R11.

(R1.77-19) LARGE AUXILIARY SCOUT (LAS): Weapon #1 is phaser-2s, Weapon #2 is phaser-3s, and Weapon #3 is a heel nipper-RA.

A generic SSD and counter are in *Module R11*.

(R1.78-19) SMALL AUXILIARY SCOUT (SAS): Weapon #1 is phaser-2 and Weapon #2 is phaser-3s (one LS, one RS).

A generic SSD and counter are in *Module R11*.

(R1.79-19) COMMUNICATIONS RELAY STATION (CCS): WPN is either 2xphaser-2-360°s, or 2xdisruptor cannons Range 22 with 360° launching arcs. Phaser-X is always phaser-2.

A generic SSD and counter are in Module R11.

(R1.81-19) ADVANCED TECHNOLOGY FLEET REPAIR DOCK (FRX): Weapon #1 will be phaser-1s, Weapon #2 will be phaser-3s, Weapon #3 will be death bolt racks (add two deck crews). All weapons are advanced technology versions. Advanced technology Carnivon ships will appear in future products. Rules for advanced technology death bolts and death bolt racks will appear in a later module; in the interim the death bolt racks on this unit always held six death bolts and had two reloads.

Fighters if hangar bay modules (R1.4) are present:

YEAR FIGHTERS

Y183+ 6 or 12 JK-4.

Fighters if a heavy fighter hangar bay module (R1.70) is present [note: if the advanced fleet repair dock has a PF docking module (R1.16) it is a true PF tender and cannot operate heavy fighters]:

#### YEAR FIGHTERS

Y183+ 0 or 6 JK-4, 6 DG-2 or DG-2i.

The FRX has one shuttle bay. Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bay of the advanced fleet repair dock and the bays of any augmentation module or between augmentation modules are not possible.

A generic SSD and counter are in Module R11.

(R1.83-19) LIGHT MONITOR (LMN): Weapon-A is 4xdisruptor cannons Range 30-FA, Weapon-B is 4xphaser-2-360°s, Weapon-C is death bolt racks (add two deck crews).

Fighters if using a carrier pallet:

- YEAR FIGHTERS
- Y167-Y169 12 JK-1. Y170-Y172 12 JK-1 or JK-2 or a mix of both, or 8 JK-1 or JK-2 and 4 HY-1.
- Y173-Y175 12 JK-2 or JK-3 or a mix of both, or 8 JK-2 or JK-3 and 4 HY-1 or HY-2.
- Y176 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 or JK-4 and 4 HY-2 or HY-3.
- Y177 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 or JK-4 and 4 HY-2 or HY-3, or 6 DG-1 or DG-1i.

Y178-Y179 12 JK-3 or JK-4 or a mix of both, or 8 JK-3 or JK-4 and 4 HY-3, or 6 DG-2 or DG-2i.

Y180+ 12 JK-4, or 8 JK-4 and 4 HY-3, or 6 DG-2 or DG-2i.

The light monitor with the fighter pallet has two bays; the light monitor's bay and the fighter pallet's bay. The fighter pallet has two launch tubes (J1.54). Mines cannot be laid from the fighter pallet's bay (M2.113). Transfers between the two bays are not possible.

Fighters if using a space control pallet (note: with a space control pallet the monitor is a true PF tender and cannot operate heavy fighters.)

#### YEAR FIGHTERS

Y182+ 12 JK-4.

The light monitor with the space control pallet has two bays; the light monitor's bay and the space control pallet's bay. The space control pallet has two launch tubes (J1.54). Mines cannot be laid from the space control pallet's bay (M2.113). Transfers between the two bays are not possible.

Refits: DERFACS is installed in Y169, with no change in BPV. Prior to Y175 the death bolt racks have only four rack spaces and one reload, six racks spaces and two reloads thereafter with the BPV increased by two points.

A generic SSD and counter are in Module R11.

(R1.84-19) FREE ESCORT CARRIER (FEV): Free escort carriers in Carnivon space will normally have phaser-2s or phaser-3s in the option mounts.

Fighters:

YEAR FIGHTERS

Y166+ 12 varies.

This ship has two shuttle bays; transfers between the bays are not possible. This ship cannot operate disruptor cannon-armed fighters or heavy fighters.

A generic SSD and counter are in Module R11.

(R1.85-19) PRIME CORVETTE (PTC): Torpedoes will be disruptor cannon Range 15-FAs. Phaser options are phaser-2s.

A generic SSD and counter are in Module R11.

(R1.86-19) ARMED CUTTER (CUT): Phaser-X is a phaser-2; drones are phaser-2s (one LS, one RS).

A generic SSD and counter are in Module R11.

(R1.88-19) FREE Q-SHIP (FTQ): Option mount can be phaser-2 or phaser-3.

A generic SSD and counter are in Module R12.

(R1.89-19) STELLAR FORTRESS (STF): Weapon #1 is disruptor cannons Range 40 including DERFACS, Weapon #2 is death bolt racks (each rack has four magazines holding six death bolts, add one deck crew per death bolt rack, i.e., a total of six), and Weapon #3 is heel nippers with 360° firing arcs. Delete Weapon #4.

Fighters if hangar bay modules (R1.4) are present:

- YEAR FIGHTERS
- Y179 6, 12, 18, or 24 JK-3 or JK-4 or a mix of both.

Y180+ 6, 12, 18, or 24 JK-4.

Fighters if heavy fighter hangar modules (R1.70) in are present [note: a stellar fortress can have two heavy fighter squadrons, if the stellar fortress has PF docking modules (R1.16), it is a true PF tender and cannot operate heavy fighters at all]:

#### **YEAR FIGHTERS** Y179 6, 12, 18, o

6, 12, 18, or 24 JK-3 or JK-4 or a mix of both, 6 or 12 DG-2 or DG-2i, or a mix of both.

Y180+ 6, 12, 18, or 24 JK-4, 6 or 12 DG-2 or DG-2i, or a mix of both.

Some Carnivon stellar fortresses included a refit similar to the one that would be installed on some Federation stellar fortresses in Y181. This refit converted the #4 docking module into a large hangar bay able to operate a squadron of assault fighters. See (R1.89A).

YEAR FIGHTERS

Y179+ 12 HY-3 or 6 DG-2 or DG-2I.

The stellar fortress has six shuttle bays, each of which may have a shuttle deck (R1.1G5). Augmentation modules may add additional bays. Hangar bay augmentation module [(R1.4) and (R1.70)] shuttle bays cannot be used to lay mines (M2.113). Transfers between the bays of the stellar fortress, or between the stellar fortress and the bays of any augmentation module, or between augmentation modules are not possible.

A generic SSD and counter are in Module R12.

(R1.95-19) FAST NAVAL TRANSPORT (FNT): Phaser-Xs are phaser-2s.

A generic SSD is in *Module R12;* a generic counter is in *Module R11.* 

#### (R19.N3) OTHER THINGS USED BY THE CARNIVONS

Some other units and rules need definition for use by the Carnivons.

(G34.0) DROGUES: A Carnivon version of the seeking weapons drogue with three death bolts is available (FD20.26). This drogue's death bolts must be made ready by the deck crews of the ship before it can be deployed (F20.20). The Carnivons can use other drogues under the normal rules, e.g., they can use phaser and sensor drogues, but cannot use phaser-G or drone or heavy weapons drogues.

Use any available generic drogue counters found in *Module J2*.

(J4.0) DECK CREWS: Many Carnivon ships have deck crews to operate their death bolt launchers (FD20.20). Unless these ships are otherwise true carriers, such as the battleship (R19.2), they cannot use Commander's Option Points to purchase additional deck crews (J4.816).

(J8.0) MULTI-ROLE SHUTTLES: Carnivon multi-role shuttles are armed with two phaser-3-360°s and one Range 10 disruptor cannon (which must be armed in the same manner as a fighter disruptor cannon).

Generic MRS shuttles are in *Module J*.

(M4.0) CAPTOR MINES: The Carnivons use type-D captor mines. The Carnivons also use a variant of the type-F captor mine, the large one of which is armed with two disruptor cannons while the smaller version has one disruptor cannon. Carnivon type-F captor mines cannot overload their disruptor cannons. The Carnivons also use a rare variant of the of the type-D captor mine armed with heel nippers; no more than two such mines (either size) can be in any one package of mines, and no additional mines of this type may be purchased separately. There is no captor mine armed with death bolts due to the need for the weapon to be prepared for operations during a scenario.

(**R8.0**) **ORION PIRATES:** For purposes of (G15.44) and (G15.7) no cartel considers Carnivon space to be its home territory; but the Cluster Cartel treats Carnivon space as part of its operating zone.

### CARNIVON HORDES - R19

**CONFIRMING:** There is no ECM drone or ECP plasma system available to the Carnivons.

#### (R19.R) REFITS

Carnivon forces use the following refits:

**Y180 MECH-LINK REFIT (R1.R1):** This refit is applied normally under its rules to Carnivon ships. As with most empires, this refit is not included on the SSDs and will have to be calculated by the players. See note under PFs below.

**Y165 EARLY BASE REFITS (R1.R2):** This refit is covered in the description of Carnivon bases to which any aspect of it would be applied, e.g., DERFACS is not present prior to Y169, and standard death bolt racks will have only four death bolts and a single reload prior to Y175.

**CASUAL READY RACKS (R1.R3):** This refit does not currently apply to any Carnivon ship, but is mentioned here to confirm that it was not overlooked.

**Y170 BASE REFITS:** The shields of starbases are 50 boxes (each) prior to Y170, and increased to 70 boxes (each) in this year. Limited aegis is also installed; the starbase has a BPV of 650 in this year.

The shields of battle stations are 30 boxes (each) prior to Y170, and increased to 35 boxes (each) in this year. Limited aegis is also installed; the battle station has a BPV of 215 in this year.

The shields of Base Stations are 21 boxes (each) prior to Y170, and increased to 30 boxes (each) in this year. Limited aegis is also installed; the battle station has a BPV of 138 in this year.

**Y175 BASE REFITS:** The shields of starbases are 70 boxes (each) prior to Y175, and increased to 80 boxes (each) in this year. Full aegis is also installed; the starbase has a BPV of 675 in this year.

The shields of battle stations are 35 boxes (each) prior to Y175, and increased to 40 boxes (each) in this year. Full aegis is also installed; the battle station has a BPV of 230 in this year.

The shields of base stations are 30 boxes (each) prior to Y175, and increased to 35 boxes (each) in this year. Full aegis is also installed; the battle station has a BPV of 148 in this year.

The shields of civilian base stations are 21 boxes (each) prior to Y175, and increased to 30 boxes (each) in this year. Limited aegis is also installed; the civilian base station has a BPV of 138/108 from this year.

**Y180 ADVANCED SHUTTLES (J17.0):** Carnivon ships have advanced shuttles as of Y180 at no cost in BPV.

**Y182 PF SHIELD REFITS (R1.PFR1):** Carnivon fast patrol ships receive shield refits just as non-Carnivon fast patrol ships do in Y182. Note that this means that only prototypes will not have this refit as Carnivon fast patrol ships are in general service the year this refit is applied, but it is also possible that some Carnivon fast patrol ships built early in Y182 might not have had the refit installed.

**Y183 PARTIAL X-REFITS (XR0.0):** No Carnivon advanced technology (X-ship) units or rules have been published except for the advanced technology fleet repair dock (R1.81-19), and it will have to wait for rules on advanced technology death bolts before it can be used fully. The Carnivons can use (XR0.0) partial X-refits for those systems

## **R19 — CARNIVON HORDES**

(phasers, batteries, etc.) that are not specific to them. Y183 has been arbitrarily chosen as a year when these refits would have been available to the Carnivons at present.

(R19.R1) PLUS REFIT: In Y166 the Carnivons began refitting their older classes of ships (CA, CL, DD, FF, and variants thereof) with shield upgrades in an effort to keep them viable as the new "war" classes entered service. The refit also added APRs to the frigate class. Virtually all of these pre-General War designs had received this refit by Y172. The cost of this refit varies based on the added shield boxes and APRs and is included on the ship's SSDs. Ships with this refit are designated with a "+" after their identification, e.g., "CA+," "CL+," "DD+," etc.

(R19.R2) DERFACS REFIT: In Y169 the Carnivons added an improved version of the DERFACS software system to their ships. The improvement simply allowed the software to work with the disruptor cannons as it did with disruptors. Efforts to adapt the Ubitron Interface Module (UIM) to disruptor cannons were unsuccessful prior to advanced technology. This refit does not change the BPV of the ship.

**(R19.R3) Y175 REFIT:** In Y175 the Carnivons refitted their death bolt racks to be able to hold six death bolts in a ready to fire configuration instead of four. The refit also provided a second reload of death bolts for the rack. This refit increases the BPV of the ship by one point per death bolt rack.

#### **CARNIVON BATTLESHIP AND VARIANTS**

(R19.2) BATTLESHIP (BB): When the Carnivons learned of the Klingon attempt to build a battleship, they began a series of design studies to determine if a ship of such mass was possible. As with most empires that embarked on such studies the Carnivons began by scaling up their existing dreadnought. The result, on paper, was an impressive ship well able to stand in the line of battle. The restrictive firing arcs of its heavy weapons combined with its poor maneuverability (a not uncommon problem for such large ships) were somewhat offset by its large array of heel nippers and death bolt racks. The ship was clearly optimized for dealing with the Carnivon's traditional foes, the disruptorarmed Kzinti Hegemony and Lyran Star Empire. As with most empires, the design's reliance on a new larger engine would prove its ultimate downfall. Carnivon engineers were never able to make the larger engine operational, and no ship of this class ever even began construction (although considerable funds were devoted to trying to make the engine work). The B10 design avoided this problem by adding a fourth standard engine (although even the Klingons had serious problems balancing the warp fields of the four engines, one of the causes of the delays in the B10 design entering service)

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds four fighters (or two heavy fighters) and two admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y175	None	6xJK-3, 2xHY-2
Y176	None	6xJK-4, 2xHY-3
Y177	None	6xJK-4, 2xHY-3 or 4xDG-1 or 4xDG-1i
Y178+	None	6xJK-4, 2xHY-3 or 4xDG-2 or 4xDG-2i

### **STAR FLEET BATTLES**

This is a base hull. Variants include the stellar domination ship (conjectural) (R19.3), and battleship carrier (conjectural) (R19.4).

Seeking Weapons: The battleship can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* This ship is conjectural. Known names: *Dagorak, Kratorak.* 

(R19.3) STELLAR DOMINATION SHIP (SDS): A late conjectural design based on heavy modification of the existing battleship plans. This ship would have been a powerful combatant as it retained virtually all of the power systems of the battleship design. It did lose the rear-firing disruptor cannons and its death bolt racks as well as having its phaser-3 array cut back. It gained four fighters over the battleship (giving it a full squadron), a full flotilla of fast patrol ships, and systems to support their operations. The repair bays were not conveniently located and the ship would only have been able to repair the two fast patrol ships on its inboard mech-links. The shuttle bays each had two hatches. In each case one of the hatches was the former death bolt hatch on that side of the ship.

The stellar domination ship is a variant of the battleship (R19.2).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

This ship has two shuttle bays, each of which holds six fighters and two admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y183+	CWA, 2xDWA or 2xCWA, 1xDWA	8xJK-4, 4xHY-3

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The stellar domination ship can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: None. SSD and counter are in *Module C6.* This ship is conjectural. Known names: *Hapotalin, Jungotalin.* 

(R19.4) BATTLESHIP CARRIER (BBV): As design studies for the battleship (R19.2) proceeded the Carnivons considered converting the design into a heavy carrier. Their conversion of their battleship design to a heavy carrier followed the lead of their successful conversion of their dreadnought (R19.5) into a heavy carrier (R19.8). The ship would have had two bays each with two hatches. One shuttle in each bay would have been an MRS (J8.0) if they were available (and a BBV would probably have had the highest priority). Transfers between the bays would not have been possible. Creating the bays required deleting the death bolt racks and their reload storage, but the access to the hatches for launching death bolts allowed the bays to operate as tunnel decks (J1.58). While the ship's firepower was reduced, there was no reduction in its available energy, which allowed it to move quickly and rearm the disruptor cannon freezers of the assault fighters or heavy fighters.

The battleship carrier is a variant of the battleship (R19.2).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds a dozen fighters (or six fighters and three heavy fighters) and three admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y175	CWA, DWA, FFA or	18xJK-3,
	CWA, 2xDWA	6xHY-2
Y176	CWA, DWA, FFA or	18xJK-4,
	CWA, 2xDWA	6xHY-3
Y177	CWA, DWA, FFA or	18xJK-4, 6xHY-3 or
	CWA, 2xDWA	9xJK-4, 3xHY-3,
		6xDG-1 or
		9xJK-4, 3xHY-3,
		6xDG-1i
Y179	CWA, DWA, FFA or	18xJK-4, 6xHY-3 or
	CWA, 2xDWA	9xJK-4, 3xHY-3,
		6xDG-2 or
		9xJK-4, 3xHY-3,
		6xDG-2i
Y180+	CWA, 2xDWA	18xJK-4, 6xHY-3 or
		9xJK-4,3xHY-3,
		6xDG-2 or
		9xJK-4, 3xHY-3,
		6xDG-2i

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The battleship carrier can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6*. This ship is conjectural. Known names: *Tagokan, Majokak*.

#### CARNIVON DREADNOUGHT AND VARIANTS

(R19.5) DREADNOUGHT (DN): The Carnivon dreadnought was an upgrade of an earlier design that was discontinued shortly after this ship entered service. The ship had good forward firepower, and relied on being on the offensive, or support from other ships, to truly protect its rear quarter from attack, although its well placed phaser arrays gave it good all around firepower.

This is a base hull. Variants include the heavy dreadnought (R19.6), space control ship (R19.7), and heavy carrier (R19.8). The light dreadnought (R19.9) is built on drastically modified dreadnought hull.

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed.

SSD and counter are in Module C6.

Known names: Batolan, Bradomok, Latobik.

**(R19.6) HEAVY DREADNOUGHT (DNH):** As with most empires, the Carnivons deployed an improved version of their dreadnought beginning in Y179. Additional APRs provided

**CARNIVON HORDES — R19** 

more power for additional secondary weapons (phasers), and additional death bolt racks were added. The ship included the DERFACS system.

The heavy dreadnought is a variant of the dreadnought (R19.5).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The heavy dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* 

Known names: Bamatam, Frabonor.

(R19.7) SPACE CONTROL SHIP (SCS): A conversion of the heavy carrier variant of the dreadnought intended to take its place as the centerpiece of a major fleet task force. These ships were mostly conversions of existing heavy carriers carried out in the waning days of the General War. The Carnivons' ability to built new dreadnought hulls from scratch was very limited by that time. It is possible that some space control ships were built from scratch during the early days of the Andromedan War, but records are inconclusive. The ship was considered somewhat power deficient, but the reductions in power were matched by reductions in weapons to enable the ship to support a full flotilla of fast patrol ships. While the facilities to support the fast patrol ships were relatively extensive, the ship was only able to repair fast patrol ships on two of its mech-links. This restriction was deemed acceptable by the Carnivons as it was unlikely that the ship would be repairing even a single fast patrol ship under combat conditions, much less two or more.

The space control ship is a variant of the dreadnought (R19.5).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

This ship has two shuttle bays, each of which holds six fighters and two admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y183+	CWA, 2xDWA or	8xJK-4, 4xHY-3
	2xCWA, 1xDWA	

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The space control ship can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: None.

SSD and counter are in *Module C6.* Known names: *Huntmaster*.

(R19.8) HEAVY CARRIER (CVA): This ship was a heavy redesign of the rear portion of the basic dreadnought (R19.5) hull. The death bolt racks were dispensed with and the hatches through which they launched were incorporated into expanded bays. The internal volume required by the bays also led to reductions in the rear phaser armament. An enlarged impulse deck was provided to help provide power to arm the assault fighters as the APR deck was also absorbed into the enlarged shuttle bays and systems to support the fighters. The Carnivons built at least three ships of this class, and may have built a fourth before the General War ended.

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There are indications that at least one ship was still in this configuration during the Andromedan War (or may have been new construction during the war), but the others had been converted to the space control ship (R19.7) design.

The heavy carrier is a variant of the dreadnought (R19.5). Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds a dozen fighters (or six fighters and three heavy fighters) and three admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y172	CWE, DWE, FFE or	18xJK-2,
	CWA, 2xFFE	6xHY-1
Y173-Y174	CWE, DWE, FFE or	18xJK-3,
	CWE, 2xDWE	6xHY-2
Y175	CWA, DWA, FFA or	18xJK-3,
	CWA, 2xDWA	6xHY-2
Y176	CWA, DWA, FFA or	18xJK-4,
	CWA, 2xDWA	6xHY-3
Y177	CWA, DWA, FFA or	18xJK-4,
	CWA, 2xDWA	6xHY-3 or
		9xJK-4, 3xHY-3,
		6xDG-1 or
		9xJK-4, 3xHY-3,
		6xDG-1i
Y179	CWA, DWA, FFA or	18xJK-4,
	CWA, 2xDWA	6xHY-3 or
		9xJK-4, 3xHY-3,
		6xDG-2 or
		9xJK-4, 3xHY-3,
	0	6xDG-2i
Y180+	CWA, 2xDWA	18xJK-4,
		6xHY-3 or
		9xJK-4, 3xHY-3,
		6xDG-2 or
		9xJK-4, 3xHY-3,
		6xDG-2i

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The heavy carrier can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* Known names: *Predetalion*.

### CARNIVON LIGHT DREADNOUGHT

(R19.9) LIGHT DREADNOUGHT (DNL): Conceived in the waning days of peace before the outbreak of the General War, the Carnivon light dreadnought was typical of the class of heavy raiders. It was intended to be fast enough to outrun any possible pursuit but armed heavily enough to defeat the escorts of any convoys it ran across. It was not intended to operate as the centerpiece of a battle fleet. As with most light dreadnoughts, it wound up being used as the command ship for smaller secondary battle squadrons when not committed to a raid. Such use tended to be at the peak of operational readiness when moving behind enemy lines. Even minor damage or delayed maintenance could result in the ship being vulnerable to interception. The Carnivons are believed to have had two ships of this class available before the

#### General War began and may have built a third ship during the General War. At least two ships of this class were still operational during the Andromedan War, and were used to support rapid transit network hunters, using their greater speed to reach the site of a discovered rapid transit network nodal base and destroy it before (hopefully) the Andromedans could reinforce it.

This ship is a variant of the dreadnought (R19.5) but the changes were sufficiently extreme that it is considered a new class.

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The light dreadnought can control a number of seeking weapons equal to its sensor rating (F3.21).

Réfits: The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed.

Fast: This ship is a "fast" ship. SSD and counter are in *Module C6.* Known names: *Dawnstalker, Dawnhunter.* 

CARNIVON HEAVY BATTLECRUISER AND VARIANTS

(R19.10) HEAVY BATTLECRUISER (BCH): The Carnivon heavy battlecruiser was a stretched version of their heavy cruiser (actually, it was stretched version of the command cruiser variant of the heavy cruiser). The additional length allowed the installation of additional weapons, power systems, and shielding to create a more powerful ship better able to survive combat conditions late in the General War. The major increase in firepower was achieved by upgrading the rear phaser-3s of the heavy cruiser design to phaser-2s. The stretching of the ship proved difficult, and production of heavy battlecruiser hulls was very limited, no more than one or two being produced in any given year from Y179 when the prototype was completed. The ship was faster, and deadlier, then the original design, while retaining the maneuverability of the heavy cruiser. Production largely ceased in Y186, although heavy cruiser hulls continued to be built (and a few may have been completed as heavy battlecruisers during the Andromedan War). Heavy cruisers could be converted to advanced technology, while the heavy battle cruiser hulls were not able to absorb that technology, but were still a step up in firepower over a standard heavy cruiser.

This ship is a variant of the heavy cruiser (R19.14) but the changes were sufficiently extreme that it is considered a new class. Variants include the battle carrier (R19.12) and battle control ship (R19.11).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The heavy battlecruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in Module C6.

Known names: Rasotak, Varengon.

(R19.11) BATTLE CONTROL SHIP (BCS): The Carnivons combined the long range strike ability of fast patrol ships with the combat capabilities of a heavy battlecruiser to create this ship. As with most Carnivon carriers, the design dispensed with the death bolt racks of the base hull for expanded shuttle facilities, but used the existing hatches for the death bolts to create tunnel bays for the fighters. The fighters were intended for use as both local security patrols and as an adjunct to the

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### **STAR FLEET BATTLES**

ship's combat power. As with the battle control ships of other empires, the ship and its supporting escorts would form the nucleus of a battle group for offensive and defensive missions, but would also be used as an independent patrol and raiding force. In this latter role, whenever possible a scout of some kind would be attached to the group, but due to the shortage of such ships (and the many other calls for them) this was more often honored in the breach than the observance. At least two ships of this class were built during the waning days of the General War, and it is believed that at least two more were built during the Andromedan War.

The battle control ship is a variant of the heavy battlecruiser (R19.10).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

PF Tender: This ship is a true PF tender (K2.0) and cannot operate heavy fighters (J10.0).

This ship has two shuttle bays, each of which holds three fighters and two admin shuttles. Transfers between these bays are not possible under (J1.59).

S
2xHY-3

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The battle control ship can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: None. SSD and counter are in *Module C6.* Known names: *Equamar*.

(R19.12) BATTLE CARRIER (BCV): This was a heavy battlecruiser redesigned to accommodate a squadron of fighters while retaining the power and firepower of the basic design. This was the second or third heavy battlecruiser produced by the Carnivons, it is unclear which of the two ships was launched first. As with most Carnivon carriers, the design dispensed with the death bolt racks of the base hull for expanded shuttle facilities, but used the existing hatches for the death bolts to create tunnel bays for the fighters. These ships, as indeed the heavy battlecruiser itself, served in the place of dreadnoughts where command facilities were deemed most important. Unlike dreadnoughts, they were also used, with their attendant escort groups, as independent patrol and reaction forces. The Carnivons are believed to have only built two ships of this type, but it is possible one or more additional ships was built during the Andromedan War.

The battle carrier is a variant of the heavy battlecruiser (R19.10).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds six fighters (or three heavy fighters) and two admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y181+	CWA, DWA or	8xJK-4, 4xHY-3 or
	CWA, FFA	6xDG-2 or
		6xDG-2i

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The battle carrier can control a number of seeking weapons equal to half its sensor rating

(F3.211).

Refits: The mech-link refit would probably have been installed.

SSD and counter are in *Module C6.* Known names: *Waldomal, Gorvamak.* 

#### CARNIVON HEAVY CRUISER AND VARIANTS

(R19.13) COMMAND CRUISER (CC): Designed to lead a squadron of heavy cruisers or a large task force, the primary capability of the ship was its flag facilities. The added shielding and battery of phaser-2s together with other systems made it a tougher ship. The plus refit brought the ship's rear shields up to the standards of its forward flank shields.

As with command cruisers of most empires, ships of this type often patrolled their own sectors while coordinating the operations of subordinate ships, and even conducted raids and border incursions into Kzinti Hegemony and Lyran Star Empire space during times of "peace" to seek out enemies to destroy. Commodores and admirals were not always present on these ships, unless the ship was being used as the command platform for an operation.

The command cruiser is a variant of the heavy cruiser (R19.14).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The command cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Podorak*, *Tekumel*.

(R19.14) HEAVY CRUISER (CA): Prior to the General War this ship was the most common size-class-3 hull form in Carnivon service. It was a relatively balanced design, with exploration seen as an important task in addition to being a combat capable ship. The ship was often more than a Kzinti strike cruiser could handle, but more than one was lost in the pre-General War years when a strike cruiser executed a successful overrun attack (usually the Carnivon captain was relatively inexperienced in such cases). The design had little room for growth, and later conversion to the heavy battleceruiser (R19.10) would require adding additional hull sections. Still, this design would soldier on through the General War and into the Andromedan War, and would be the basis for the Carnivon advanced technology cruiser. The phaser battery was arranged primarily to provide a defense against Kzinti drones, but was strong enough to make the ship a good match against Lyran heavy cruisers. The plus refit was installed to strengthen the rear shields in response to encounters with Orion pirates armed with hellbores, although such encounters were very rare.

This is a base hull. Variants include the command cruiser (R19.13), strike carrier (R19.15), survey cruiser (R19.16), death bolt cruiser (R19.17), and tug (R19.56). The fast cruiser (R19.17) is built on a drastically modified heavy cruiser hull.

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The heavy cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

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Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6. Known names: Alkrik, Barkrik, Calkrik, Dorkrik.

(R19.15) STRIKE CARRIER (CVS): The Carnivons produced this design initially to provide more drone defense against the faster Kzinti drones that began appearing in Y165. A carrier's fighters would spread across the task force to keep any given ship from being overwhelmed by a sudden concentration of the faster drones. Operationally, this had problems as the fighters were not as fast as the ships, forcing the task force to choose between high speed and maneuver and "going turtle" to optimize the defensive firepower of the fighters. Ultimately the Carnivons used their carriers, and their escorts, mostly as independent patrol squadrons in critical areas. The combination had enough firepower to deal with any single raider (although it could not catch a fast raider, it could sometimes intercept them). The limit on the numbers of heavy cruiser hulls that could be built initially kept the number of strike carriers down, but as succeeding fighter types appeared with greater speed, more carriers were put into operation. The mega packed fighter was the best fleet defense fighter, but the Carnivons could only field a handful of such squadrons at any one time. Carnivon carrier groups would serve through the General War and at least until the end of the Andromedan War, but most were relegated to unimportant back waters to defend against Orion Pirates during the Andromedan War.

The strike carrier is a variant of the heavy cruiser (R19.14)

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

This ship has two shuttle bays, each of which holds six fighters (or three heavy fighters) and two admin shuttles. Transfers between these bays are not possible under (J1.59).

Year	Escorts	Fighters
Y168-Y169	CWE, FFE	12xJK-1
Y170-Y172	CWE, DWE, FFE or	8xJK-2,
	CWE, 2xFFE	4xHY-1
Y173-Y174	CWE, DWE, FFE or	8xJK-3,
	CWE, 2xFFE	4xHY-2
Y175	CWA, DWA, FFA or	8xJK-3,
	CWA, 2xDWA	4xHY-2
Y176	CWA, DWA, FFA or	8xJK-4,
	CWA, 2xDWA	4xHY-3
Y177	CWA, DWA, FFA or	8xJK-4,
	CWA, 2xDWA	4xHY-3 or
		6xDG-1 or
		6xDG-1i
Y179	CWA, DWA, FFA or	8xJK-4,
	CWA, 2xDWA	4xHY-3 or
		6xDG-2 or
		6xDG-2i
Y180+	CWA, 2xDWA	8xJK-4,
		4xHY-3 or
		6xDG-2 or
		6xDG-2i

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The strike carrier can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The design included the shield upgrades of the plus refit. The DERFACS refit was installed in Y169. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6. Known names: Alkarian Glory.

(R19.16) SURVEY CRUISER (SR): The Carnivon survey cruiser was significantly superior to the previous version in part because it was a variant of the heavy cruiser rather than the early light cruiser (YR19.10). While it had significantly more firepower than the early survey cruiser, the Carnivons did not consider it to be a combat ship, and did not equip it with the best weapons. The disruptor cannons only had a range of 220,000 kilometers and the heaviest phasers were only of type-2. The Carnivons believed these would be sufficient for the ship to fight its way to disengagement, rather than fight to victory. Laboratory facilities were only slightly improved over those found on the heavy cruiser, but were supported by two special sensors. The shuttle bays were expanded at the cost of the basic design's death bolt racks, but part of this went into the additional stores of repair parts (giving the ship a damage control rating of "6"). The Carnivons had three ships of this class in operation between Y128 and Y158 when one was lost due to unknown causes. (Contact was lost and the ship never returned; no log buoy or other debris has been found to date.) No replacement for the lost ship was provided prior to the start of the General War, and records are unclear if any new ships were built during that war or the Andromedan War that followed.

The survey cruiser is a variant of the heavy cruiser (R19.14).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "drone" damage points. See (G24.35) when purchasing this unit as part of a battle force.

In peacetime, the shuttles are usually admin [(J2.0)/(R1.F1)] types, although some carried one heavy transport shuttle (R1.F5) during some periods. The ship might replace two admin shuttles with ground assault shuttles (R1.F4) in special circumstances (S3.2), such as a planet with particularly vicious wildlife. Some carried one multi-role shuttle (J8.0) (multi-role shuttles are not included in the ship's BPV), although supplies were limited and survey cruisers did not have a high priority.

This ship has two bays, each of which has two hatches and is a tunnel deck (J1.58). Each bay can launch or land two shuttles every other impulse, or launch or land one shuttle every impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The survey cruiser can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Far Treador.

(R19.17) DEATH BOLT CRUISER (CB): Designed as a fire support ship, death bolt cruisers were originally intended to provide supplemental death bolt launches when a Carnivon task force was sent to attack a fixed location, such as a base or a planet. The enemy would be unable to maneuver away from the death bolts and would have to deal with them, reducing the firepower that could be applied to the attacking Carnivon ships. The ships were also useful in developing a cloud of death bolts behind which a defeated Carnivon task force, or one suddenly faced with unexpected enemy

reinforcements, could withdraw. The advent of medium speed death bolts began changing the role of the ships, and they were often included in task forces seeking battle in open space. The faster death bolts were a presence an opposing force could not ignore, and fast speed death bolts only improved this situation for the Carnivons.

The seeking weapon control rating of this ship was increased in order to better support its bombardment mission, but the Carnivons largely expected other ships to assume guidance of death bolts launched by this ship to free up its own control channels for additional launches. The plus refit brought the ship's rear shields up to the standards of its forward flank shields. The Y175 refit increased the initial storage of death bolts both on the death bolt racks themselves and in ready storage, as the ship was not expected to engage in direct combat itself.

The death bolt cruiser is a variant of the heavy cruiser (R19.14).

Bombardment: This ship has two hundred spaces of spare death bolts stored in its cargo boxes. Death bolts require one deck crew action (J4.817) to be moved from cargo storage to the reload storage of a given death bolt rack. The death bolt racks themselves are reloaded normally as any other death bolt rack.

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The death bolt cruiser can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Torkan*, *Vorkan*, *Lorkan*.

#### CARNIVON FAST CRUISER

(R19.18) FAST CRUISER (CF): The fast cruiser was a heavily modified heavy cruiser using new engines to achieve sustained speeds most ships were not capable of. The ship's designed mission was to slip behind enemy lines and strike suddenly at vulnerable targets, using its superior speed to escape after the attack and otherwise avoid interception. The Carnivons built three of these ships prior to their involvement in the General War, the first entering service in Y166. Records indicate that two more were built during the General War, both as replacements for ships lost in action. Another may have been built during the Andromedan War, again as a replacement for a lost ship. The engines were always a weakness of these designs (for all empires) as they proved difficult to produce in any numbers, and the need to reduce the mass of the ship imposed limits on the firepower that could be carried. While fast, the need to hit targets hard and then get away forced the ships to get closer to their targets and make heavier offensive use of the phaser battery. This resulted in the ships sustaining enough damage that raiding operations often had to be cut short or risk losing the ship.

The fast cruiser is a variant of the heavy cruiser (R19.14).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The fast cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have

been universal.

SSD and counter are in *Module C6.* Known names: *Fast Runner*.

#### CARNIVON LIGHT CRUISER AND VARIANT

(R19.19) LIGHT CRUISER LEADER (CLL): Designed to lead squadrons of light cruisers or small task forces of mixed ships within larger battlefleets, the light cruiser leader included a small increase in firepower with slight increases in power and shielding. The ship was no more maneuverable than the larger heavy cruiser, but served as a good companion to the larger ship. As with light cruisers of other empires, the light cruiser leader was often assigned independent patrol missions in less important sectors. The known Carnivon Order of Battle said that four ships of this class were in service at the start of the General War, and that none of them survived beyond Y180 (when the last ship was reportedly destroyed). It is unclear if any replacement ships were built during the General War, or if there were only the four ships. Several ships of this class were lost prior to the General War and replaced with new construction, but during the General War the Carnivons favored war cruiser hulls (R19.22), which could be built faster and cheaper, over continuing production of the venerable light cruiser design.

The light cruiser leader is a variant of the light cruiser (R19.20).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The light cruiser leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed if any ships of this class remained in service in Y182, but would not have been universal.

SSD and counter are in *Module C6*. Known names: *Larkig*, *Folkig*, *Parkig*.

(R19.20) LIGHT CRUISER (CL): This design actually entered service before the larger heavy cruiser, perhaps as a sort of "proof of concept" for the new "middle years" technology upgrades before the Carnivons invested in larger hulls. Carnivon records indicate that at least 15 ships of this type were constructed, but by the start of the General War only 10 were in service, the others having been lost in action or to various other causes. At least three ships of this class were still listed as available at the start of the Andromedan War, but none of them survived that conflict. The ships generally served (prior to the Andromedan War) as "fillers" for large task forces or as patrol ships in sectors not deemed important enough for a larger unit (or when a larger unit simply was not available). They were able to hold their own against Lyran and Kzinti light cruisers or destroyers, but found Orion Raider Cruisers difficult opponents. By the middle of the General War the surviving ships were relegated to duty as convoy escorts or station ships and continued in that role during the Andromedan War. Even then, the ships might be assigned temporary patrol sectors.

This is a base hull. Variants include the light cruiser leader (R19.19).

This ship has two shuttle bays. Each bay can launch or land a shuttle every other impulse. Transfers between the two bays by (J1.59) are not possible.

Seeking Weapons: The light cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

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Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6.* Known names: *Timval, Rimval.* 

#### CARNIVON WAR CRUISER AND VARIANTS

(R19.21) WAR CRUISER LEADER (CWL): An improvement not just over the light cruiser leader (R19.19), but also significantly better than the war cruiser it was derived from. The ship was intended to control battlegroups (S8.28) within larger fleets, but also to lead independent squadrons of war cruisers and conduct secondary operations as a leader in its own right. Its armament was nearly identical to that of a heavy cruiser and its power systems gave it similar offensive capabilities. The slightly better shielding gave it somewhat more survivability than other Carnivon war cruiser hulls. War cruiser leaders seldom actually carried flag officers unless there was a shortage of other command vessels, but were usually commanded by the senior and most experienced officers available.

The war cruiser leader is a variant of the war cruiser (R19.22).

Seeking Weapons: The war cruiser leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The DERFACS refit was installed in Y169, but some ships did not have it at the start of that year; all had it by the end of that year. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Vortor*, *Valtor*, *Vektor*.

(R19.22) WAR CRUISER (CW): The Carnivons were increasingly dissatisfied with the capabilities of their light cruiser (R19.19) as the clouds of the General War gathered, and also saw a need for more ships than their existing shipyard facilities could provide. In Y162 an intense design competition was conducted to select new hull designs that could be produced faster. While the designs for the larger ships (dreadnoughts, heavy cruisers) were rejected as impracticable, several of the proposals were accepted. One of these, a replacement for the light cruiser, became the war cruiser. These ships were designed to allow their components to be built in any available vard space (i.e., hull sections could be build in yards that normally built frigate hulls) and then brought together in a single dock to be completed. It was an almost modular design, although not one easily modified for other missions, such as the Romulan SparrowHawk, after it had been assembled. While the construction system should have allowed the Carnivons to produce more war cruisers than any other empire, their supply system was plagued with inefficiencies resulting in a production rate no better than the Lyran war cruiser or Kzinti medium cruiser. As with the war cruisers of most empires, the Carnivon war cruiser hull was the basis of many variants during the General War and well into the Andromedan War.

This is a base hull. Variants include the war cruiser leader (R19.21), the war cruiser carrier (R19.23), escort war cruiser (R19.24), aegis war cruiser (R19.24A), bombardment war cruiser (R19.25), commando war cruiser (R19.26), war cruiser minesweeper (R19.27), war cruiser fast patrol ship tender (R19.28), war cruiser scout (R19.29), and light tactical transport (R19.30). The fast war cruiser (R19.31) is built on a drastically modified war cruiser hull.

Seeking Weapons: The war cruiser can control a number

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of seeking weapons equal to its sensor rating (F3.21).

Refits: The DERFACS refit was installed in Y169. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in *Module C6.* Known names: *Jantor, Levtor, Naltor, Revtor.* 

(R19.23) WAR CRUISER CARRIER (CWV): The need for additional carriers to provide drone and fighter defense to Carnivon fleets and task forces resulted in this design. The modular construction system used by the Carnivons enabled a section containing one large bay to be provided. The resulting ship had three hatches for its shuttle bay allowing a very quick launch and recovery rate. The design retained the full direct-fire weapons firepower of the war cruiser, but lost the death bolt racks and suffered a small reduction in power generation. It still remained, in its class, a formidable combatant in its own right. The carrier and its attendant escorts were often assigned to operate as patrol groups in the depths of space. The good firepower of a carrier group made encountering one an unpleasant experience for ships of opposing empires.

The war cruiser carrier is a variant of the war cruiser (R19.22).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), J11.13), and (J15.22).

Year	Escorts	Fighters
Y170-Y172	CWE, FFE	8xJK-2, 4xHY-1
Y173-Y174	CWE, DWE or CWE, FFE	8xJK-3, 4xHY-2
Y175	CWA, DWA or CWA, FFA	8xJK-3, 4xHY-2
Y176	CWA, DWA or CWA, FFA	8xJK-4, 4xHY-3
Y177	CWA, DWA	8xJK-4, 4xHY-3 or 6xDG-1 or 6xDG-1i
Y179+	CWA, DWA	8xJK-4, 4xHY-3 or 6xDG-2 or 6xDG-2i

This ship has one bay with three hatches and is a tunnel deck (J1.58). The bay can launch or land three shuttles every other impulse or launch or land one shuttle every impulse and launch or land two shuttles every other impulse.

Seeking Weapons: The war cruiser carrier can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Lumbav, Kambav, Jorbav.

(R19.24) ESCORT WAR CRUISER (CWE): As the Carnivons were planning their strike carrier (R19.15) they foresaw the need for escorts (perhaps from reports of what other empires were doing) to support and protect the ship and its fighters. They turned to their new war cruiser design for the heavy escorts, and were again aided by the modular construction system in that the needed ships were ready as the strike carriers were completed. The ship relied heavily on the ability of heel nippers to defeat the faster drones used by the Kzintis and to inflict significant damage on enemy fighters. The heel nippers also made it possible to force a Lyran ship attempting to sweep Carnivon fighters with its expanding sphere generator fields to turn away. The retention of the death bolt racks allowed some follow-up to attacks by the disruptor cannons of the carrier. Production proved sufficient (and the

relatively slow production of carriers) that enough of these ships could be provided to escort all carriers of size class 3 or larger early in the General War, even after losses of these ships.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two deck crews dedicated to its death bolt racks. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

The escort war cruiser is a variant of the war cruiser (R19.22).

Seeking Weapons: The escort war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The Y175 refit would have been installed in Y175 even if the ship was not upgraded to full aegis; this may have actually happened to a few ships of this type initially, but all had full aegis by the end of Y175. The mech-link refit would probably have been installed if any escort war cruisers had not been upgraded to aegis war cruisers, but would not have been universal.

SSD and counters are in *Module C6.* Known names: *Antoren, Contoren.* 

(R19.24A) AEGIS WAR CRUISER (CWA): In Y175 all surviving escort war cruisers were fitted with full aegis (D13.0) and all new production escort cruisers included full aegis from that point. The ships were redesignated "aegis war cruisers."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two deck crews dedicated to its death bolt racks. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

The aegis war cruiser is a variant of the war cruiser (R19.22).

Seeking Weapons: The aegis war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21) and has full aegis (D13.0). See also (J15.332).

Refits: The upgrade from the escort war cruiser included the Y175 refit. The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort war cruiser SSD (R19.24) in *Module C6;* use the escort war cruiser counters in *Module C6.* 

Known names: Antoren, Contoren.

(R19.25) WAR BOMBARDMENT CRUISER (CWB): The Carnvions found that faster death bolts created a more flexible use of their death bolt cruisers (R19.17), but the hull was too difficult to produce in large numbers and was needed for other missions. They turned to their war cruiser design to provide their star fleet with more bombardment ships. Once more the modular construction system resulted in a quick adaptation of the basic design. The phaser-1s were down graded to phaser-2s as the ship was to avoid direct combat itself and simply provide death bolt fire support. The ships

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were operationally used in the same manner as death bolt cruisers and substituted for them.

The seeking weapon control rating of this was increased in order to better support its bombardment mission, but the Carnivons largely expected other ships to assume guidance of death bolts launched by this ship to free up its own control channels for additional launches. The Y175 refit increased the initial storage of death bolts both on the death bolt racks themselves and in ready storage.

The bombardment war cruiser is a variant of the war cruiser (R19.22).

Bombardment: This ship has two hundred spaces of spare death bolts stored in its cargo boxes. Death bolts require one deck crew action (J4.817) to be moved from cargo storage to the reload storage of a given death bolt rack. The death bolt racks themselves are reloaded normally as any other death bolt rack.

Seeking Weapons: The bombardment war cruiser can control a number of seeking weapons equal to double its sensor rating (F3.212).

Refits: The Y175 refit was installed in Y175. The mechlink refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Ponbel, Vonbel, Ronbel.* 

(R19.26) COMMANDO WAR CRUISER (CWG): The Carnivons perceived a need for a larger commando ship capable of achieving fleet speeds as the General War progressed and turned to their war cruiser design, the commando frigate (R19.50) no longer being considered suitable. The Carnivon commando war cruiser was intended to supplement and support landing operations conducted by other Carnivon ships, not to conduct independent raiding operations. The phasers of the war cruiser were reduced to phaser-2s for defensive purposes. The Carnivons often used these ships, usually supported by destroyers or frigates, for strikes on poorly defended colonies. The ship normally carried a full battalion of Carnivon Marines with supporting equipment.

The commando war cruiser is a variant of the war cruiser (R19.22).

Landing Force: The 35 boarding parties (D7.0) include two commando teams (D15.84) and six heavy weapons squads (D15.81). There are four ground combat vehicles (D15.82). This was a battalion (R19.M1) and is included in the ship's BPV.

Shuttles: Two ground assault shuttles (R1.F4), one heavy transport shuttle (R1.F5), and two admin shuttles [(J2.0)/(R1.F1)]; these shuttles are included in the ship's BPV.

Seeking Weapons: The commando war cruiser can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Gronvik, Lonvik, Abavik.

(R19.27) WAR CRUISER MINESWEEPER (CWM): Finding the clearing of gaps in defended minefields beyond the capabilities of their minehunter frigates (R19.51), the Carnivons made changes to hull sections in some war cruisers under construction to create this design. The Carnivons found death bolts inefficient weapons for sweeping mines due to their excessive warheads compared to the damage needed to destroy a mine and relied largely on phasers. As such the tractor array of the war cruiser minesweeper was extensive. Two shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The war cruiser minesweeper is a variant of the war cruiser (R19.22).

This ship is a true minesweeper (M2.45); see also (M8.0).

Seeking Weapons: The war cruiser minesweeper can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* 

Known names: Mizok, Milor, Modor.

(R19.28) WAR CRUISER FAST PATROL SHIP TENDER (CWP): The introduction of interceptors by the Carnivon fleet soon led to a specification being issued for ships to support their operations. By the time fast patrol ships had supplanted the interceptors the Carnivons were operating several different ships to carry them into battle and support fleet operations. The war cruiser PF tender can be regarded as one of the more successful of these since its size left it with enough power to operate its special sensors in support of a task force's operations if it were not operating independently as a raider. It retained enough firepower to defend itself if it were attacked while waiting for its flotilla to return, or even to accompany its flotilla into an assault. The changes to some of the hull sections that would be combined to produce a war cruiser PF tender were fairly extensive, but the modular construction system served the Carnivons well by allowing them to quickly redirect production to this new design. The ships came more into their own after Y195 when they were used to hunt for Andromedan rapid transit network nodes and, if they could not destroy the node themselves, were able to stand off the Andromedans, preventing them from evacuating the base, until reinforcements could arrive.

The war cruiser fast patrol ship tender is a variant of the war cruiser (R19.22).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "drone" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Seeking Weapons: The war cruiser fast patrol ship tender can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: None. SSD and counter are in *Module C6*. Known names: *Kadafak*, *Latorak*.

(R19.29) WAR CRUISER SCOUT (CWS): This was a straightforward conversion of the war cruiser (R19.23) requiring only a few small changes to some of the modular sections under construction. It was not unusual for a ship to begin construction as a war cruiser scout and be completed as a standard war cruiser because the special sensor components were not delivered in time. In such cases the Carnivons simply applied the special sensors to the next war cruiser in the construction queue. Ships of this type were carefully managed by the Carnivon fleet command and generally only allocated to the most critical operations, whether defensive or offensive in nature. Even so, the ships were sometimes found where they did not belong, supporting smaller forces or even having to defend themselves from an unanticipated attack while en route elsewhere (this was, of course, an event that sometimes affected the scouts of any empire).

The war cruiser scout is a variant of the war cruiser (R19.22).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Seeking Weapons: The war cruiser scout can control a number of seeking weapons equal to its sensor rating (F3.21). See also (F3.213).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*. Known names: *Tokomak*, *Rogomak*.

(R19.30) LIGHT TACTICAL TRANSPORT (LTT): As with most empires, the Carnivons found their need for tugs outstripping their ability to produce them and keep them in operation. They adopted the same solution as other empires, creating a light tug version of their war cruiser. Unfortunately, the internal structure had to be heavily reinforced to support docking to pods and moving them at high warp speeds. This resulted in most of the advantages of the modular construction system being lost on these ships. Each one had to be built almost from the keel up (some sections were still produced through the modular construction system, but the main body of the hull could not be). Being smaller and cheaper (in material terms if not in comparable construction time with other war cruiser variants) these ships were more frequently hazarded in direct support of combat operations, leading to heavier losses. As with most light tactical transport designs the ship included internal cargo bays, although the amount of cargo carried was relatively small.

Like all war cruiser tugs, the movement cost and Turn Mode vary with the pods carried. The movement cost of the light tactical transport with one pod is 1.00 energy points per hex. The movement cost of the light tactical transport with a double-weight pod is 1.33 energy points per hex; see Annex #3A. This ship cannot carry a triple-weight pod such as the space control pod (R19.69).

The light tactical transport is a variant of the war cruiser (R19.22).

Seeking Weapons: The light tactical transport can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Comodon, Quanodon.

CARNIVON FAST WAR CRUISER

(R19.31) FAST WAR CRUISER (CWF): The Carnivons perceived a need for more raiding ships in Y173, but could not really increase the number of fast cruisers (R19.18) or light dreadnoughts (R19.9). The shipyards able to produce those hulls were already overtaxed trying to produce other variants of them. The Carnivons turned to their war cruiser design in hopes that the ship's modular construction would allow more raiders to be created quickly. Unfortunately, they were only half right. While the hulls of fast war cruisers could be created quickly, the fast war cruiser design suffered from the same problem as the larger fast warships: the engines were difficult to produce. The result was that the Carnivons had five fast war cruiser hulls available by Y175, but only three of them were operational. The other two were languishing in the shipyards waiting for engines that never arrived, because new fast engines were diverted to replace the engines of the three operational ships as they were damaged or worn out. Worse, the three ships that were operational proved to have relatively limited operational ranges and were used, as were the fast war cruisers of most

other empires, primarily to intercept enemy raiders rather than to conduct raids on their own.

The fourth fast war cruiser was finally made operational in Y179, but only because one of the other existing three had been destroyed and this resulted in engines being made available. The fifth ship was not made operational until after the General War ended, in the lull before the Andromedan War began. During the Andromedan War the Carnivons would have five ships of this class nominally operational (a sixth having been built), but in general one or two were waiting for replacement engines at various times. Only two ships of this class survived the Andromedan War.

This ship is a variant of the war cruiser (R19.22), but the changes were sufficiently extreme that it is considered a new class.

Seeking Weapons: The fast war cruiser can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Swiftclaw, Fastpaw, Lightning, Alacrity, Apodakon.

#### CARNIVON DESTROYER AND VARIANT

(R19.32) DESTROYER LEADER (DDL): The Carnivons frequently operated separate squadrons of small ships to control areas not deemed critical. The destroyer leader was introduced as a supplement to the command cruiser (R19.13) and light cruiser leader (R19.19). It would be able to assume command of an area where the larger ships were not available and coordinate the operations of the destroyers, frigates, and other small ships. The ship was an improvement over the standard destroyer having somewhat better weapons and superior shielding. Between Y130 and the start of the General War eight ships of this class were built, but four had been lost. The remaining four ships operated mostly in the interior of Carnivon space, but it was not unusual to find them commanding the escort of a convoy moving closer to the front lines. Records indicate that no new ships of this class were produced during the General War, and the four existing ships were all destroyed by one means or another prior to Y181.

The destroyer leader is a variant of the destroyer (R19.33).

Seeking Weapons: The destroyer leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed if any ships had survived to Y182, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Telkor, Pankor, Melkor, Dalkor.* 

(R19.33) DESTROYER (DD): The destroyer was conceived as a light patrol ship and a battle consort to support cruisers. It had relatively good shielding for its epoch and an excellent power curve. Despite this, losses of these ships were severe over the years because they were often the first to respond to incursions. On occasion destroyers would find themselves facing off with Orion cruisers, where they were severely outmatched. Records show that 20 ships of this class were built between Y122 and Y165, but only eight were in service at the start of the General War. Two ships of this class survived at least until Y184, but after that time the records become unclear. In any case, by Y170 the ships were mostly

## **CARNIVON HORDES — R19**

relegated to securing the Carnivon home territory and rarely appeared in the combat zones.

This is a base hull. Variants include the destroyer leader (R19.32).

Seeking Weapons: The destroyer can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Har, Kor, Ler, Bok, Dar, Fel, Gor, Pum.

#### **CARNIVON HEAVY WAR DESTROYER**

(R19.34) HEAVY WAR DESTROYER (HDW): This was a multi-mission ship intended to quickly change mission profiles as needs emerged. As with most such ships of the class across Alpha Octant, most of these ships were given an initial configuration and never changed it during their active service. Several of the ships were converted to the scout/fast patrol ship tender mission during the Andromedan conflict and proved reasonably effective in hunting down rapid transit nodes.

As with all heavy war destroyers, the ship carries a pair of fighters for additional firepower and is treated as a "casual carrier" (J4.62) for determining supplies, but there are ready racks (J4.89) for the fighters.

This ship is a variant of the war destroyer (R19.36) but the changes were sufficiently extreme that it is considered a new class. The unique center warp engine made this perhaps the most easily recognizable ship in Carnivon service. There are no variants as any ship of this class might be operating in any variant mode at one time or another and then be switched to another mode; see (G33.0).

Carrier: This ship is a true carrier if it has eight size-1 or four size-2 fighters; see (J4.75), (J4.93), (J11.13), and (J15.22). This ship is a casual carrier (J4.62) if it has seven or fewer size-1 fighters or three or fewer size-2 fighters.

 	<u> </u>	
Year	Escorts	Fighters
Y180+	At least one (G33.42), but if operating heavy fighters escorts are not required	Varies, at least 8 size-1 or 4 size-2 fighters

This ship has two shuttle bays. Transfers between the bays by (J1.59) are not possible normally. Any non-weapon options configured as shuttles become part of the left side shuttle bay and use that bay's hatch. If the APR\* options are configured as shuttles, they become part of the right side shuttle bay and use that bay's hatch. If the weapon options are configured as shuttles, they connect the left and right shuttle bays into one continuous bay that operates as a tunnel deck (J1.58).

Seeking Weapons: The heavy war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21). It may have full aegis (D13.0) installed if configured as an escort (G33.43); see also (J15.332).

SSD and counters are in Module C6. Known names: Flitik, Gornik, Halyan, Terkik.

#### **CARNIVON WAR DESTROYER AND VARIANTS**

(R19.35) WAR DESTROYER LEADER (DWL): The Carnivon war destroyer leader was a powerful combatant for its size class mainly due to its excess power. It was not unusual to find ships of this type patrolling alone, but as with the leaders of other empires there was never a squadron composed of such ships, or of such ships and destroyer or frigate leaders. It is believed that 20% of all war destroyers were completed to this design.

The war destroyer leader is a variant of the war destroyer (R19.36).

Seeking Weapons: The war destroyer leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The Y175 refit was installed in Y175. The mechlink refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Woknik, Latnik, Raznik, Tornik, Valnik, Botnik.

(R19.36) WAR DESTROYER (DW): Like the larger war cruiser (R19.22), the Carnivon war destroyer was built in many different and yards and the sections brought together to be combined into one ship. This made it relatively easy to build variants, but the ships were not otherwise modular. The Carnivon war destroyer was a relatively unmaneuverable ship when compared to the Klingon F5 or Lyran war destroyers, but was a match for the Lyran destroyer or Kzinti war destroyer. The phaser battery of this ship was only slightly better than that of the Carnivon destroyer, but the better power curve compensated for this.

This is a base hull. Variants include the war destroyer leader (R19.35), mobile carrier (R19.37), escort war destroyer (R19.38), aegis war destroyer (R19.38A), war destroyer scout (R19.39), war destroyer minesweeper (R19.40), commando war destroyer (R19.41), war destroyer fast patrol ship tender (R19.42), and war destroyer theater transport (R19.43). The heavy war destroyer (R19.32) is built on a drastically modified war destroyer hull and regarded as a new class.

Seeking Weapons: The war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The Y175 refit was installed in Y175. The mechlink refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Tervak, Vakral, Woltor, Xenkor, Zanduz, Arvtan, Bonkot, Cadnil, Darmak, Fortak, Galvis.

(R19.37) MOBILE CARRIER (DWV): The Carnivons found themselves facing more and more fighters and drones. Even the Lyrans and Orions were deploying drone-launching fighters. The production rates of large carriers could not keep pace with the needs of increasing defenses against the waves of drones the fighters could launch. In Y173 the Carnivons began producing a carrier version of their war destroyer to provide supplemental drone defense for task forces where a larger carrier was not available. The construction system of their war destroyer enabled them to retain the basic firepower of the design while adding a small squadron of eight fighters to the ship.

Mobile carrier groups also took over much of the patrolling within Carnivon space, and escort duties for convoys in threatened zones, mostly supplementing police forces but sometimes the group would be the sole escorts for a small but critical convoy. Sometimes a mobile carrier group would be the only available carrier force of a reserve battle squadron responding to an enemy incursion, and in such cases they were much better than nothing at all. Mobile carriers were always low on the priority for escorts and often had to use escort frigates rather than their authorized escort war destroyer, even during the Andromedan War.

The mobile carrier is a variant of the war destroyer (R19.36).

## **STAR FLEET BATTLES**

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y174	FFE	6xJK-3, 2xHY-2
Y175	DWA or FFA	6xJK-3, 2xHY-2
Y176	DWA or FFA	6xJK-4, 2xHY-3
Y177	DWA or FFA	6xJK-4, 2xHY-3 or 4xDG-1 or 4xDG-1i
Y179+	DWA or FFA	6xJK-4, 2xHY-3 or 4xDG-2 or 4xDG-2i

Seeking Weapons: The mobile carrier can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Peladim, Trazdon, Miktoran.

(R19.38) ESCORT WAR DESTROYER (DWE): By Y169 the Carnivons were already becoming dissatisfied with the performance of their escort frigates (R19.47) in large actions and determined to upgrade their escort groups with this war destroyer variant. Conceived as an intermediate escort for the large carriers the escort war destroyer was produced in considerable numbers. The emphasis of the design was drone defense, and for this reason the fixed firing arcs of the heel nippers were offset to give maximum coverage. Some took the place of escort war cruisers in cases where losses left insufficient numbers of those available and the carrier group was needed.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two deck crews dedicated to its death bolt rack. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

The escort war destroyer is a variant of the war destroyer (R19.36).

Seeking Weapons: The escort war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The Y175 refit would have been installed in Y175 even if the ship were not upgraded to full aegis; this may have actually happened to a few ships of this type initially, but all had full aegis by the end of Y175. The mech-link refit would probably have been installed if any escort war destroyers had not been upgraded to aegis war destroyers, but would not have been universal.

SSD and counters are in Module C6.

Known names: Gardog, Wachag, Teldog, Valdog, Melchag.

(R19.38A) AEGIS WAR DESTROYER (DWA): In Y175 all surviving escort war destroyers were fitted with full aegis (D13.0) and all new production escort war destroyers included full aegis from that point. The ships were redesignated "aegis war destroyers."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two

deck crews dedicated to its death bolt rack. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

The aegis war destroyer is a variant of the war destroyer (R19.36).

Seeking Weapons: The aegis war destroyer can control a number of seeking weapons equal to its sensor rating (F3.21) and has full aegis (D13.0). See also (J15.332).

Refits: The upgrade from the escort war destroyer included the Y175 refit. The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort war destroyer SSD (R19.38) in *Module C6;* use the escort war destroyer counters in *Module C6.* 

Known names: *Gardog*, *Wachag*, *Teldog*, *Valdog*, *Melchag*.

(R19.39) WAR DESTROYER SCOUT (DWS): As with most empires the Carnivons found they needed more scouts than they could divert war cruiser hulls to provide and created this variation of their war destroyer. The conversion was simple and straightforward and easily installed in the appropriate parts of the hull section modules under construction. Ships of this type often supported task forces when a war cruiser scout was not available. Like most war destroyer scouts this Carnivon version was often used to plug gaps in the strategic sensor network or provide supplementary coverage in areas where enemy activity was believed to be on the increase.

The war destroyer scout is a variant of the war destroyer (R19.36).

Scout: It can use all scout functions (G24.0). Special sensors #1 and #2 are destroyed by "torpedo" damage points while special sensors #3 and #4 are destroyed by "phaser" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Seeking Weapons: The war destroyer scout can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The Y175 refit was installed in Y175. The mechlink refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*. Known names: *Farsky*, *Farview*, *Farhunt*.

(R19.40) WAR DESTROYER MINESWEEPER (DWM): Finding the clearing of gaps in defended minefields beyond the capabilities of their minehunter frigates (R19.51), the Carnivons made changes to hull sections in some war destroyers under construction to create this design. The Carnivons found death bolts inefficient weapons for sweeping mines due to their excessive warheads compared to the damage needed to destroy a mine and relied largely on phasers. As such the tractor array of the war destroyer minesweeper was extensive for its size. As the ship was not intended for direct combat, the phaser-1s and disruptor cannons were downgraded to phaser-2s which could generate enough damage (used in pairs and often fired as phaser-3s) to destroy a large mine. They were believed to be adequate for the ship to defend itself as part of a task force. The ship was not intended to be used to breach minefields around major defensive structures such as starbases (R1.1). but was thought adequate to breach a field surrounding a battle station (R1.2) or smaller defensive structure. By the middle of the General War the upgraded defenses of such bases saw the war destroyer minesweeper relegated to even smaller bases, such as mobile bases (R1.24). By late in the General War most ships of this type were most commonly found repairing existing minefields rather than participating in assaults on defended locations. However, even during the Andromedan War they were sometimes pressed into action to breach a heavily defended minefield because they were the only minesweeper available.

Both shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The war destroyer minesweeper is a variant of the war destroyer (R19.36).

This ship is a true minesweeper (M2.45), see also (M8.0).

Seeking Weapons: The war destroyer minesweeper can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The Y175 refit was installed in Y175. The mechlink refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Finmel, Tormel, Pelmel.* 

(R19.41) COMMANDO WAR DESTROYER (DWG): The Carnivons produced several war destroyers to this design to supplement and support their commando war cruisers (R19.26) and to support operations in less critical areas. The ships were also frequently used to move replacement personnel between planets and bases. The ship was not intended to participate directly in combat, relying on supporting ships to "clear the way" by driving off defending enemy ships and eliminating planetary defense bases. For that reason its weaponry was largely intended simply for selfdefense, and primarily against drones. As with the plans of many a military dreamer, reality often saw the ships forced to press their way forward and land their troops while the battle in space was still raging. More than one ship of this type was heavily damaged or destroyed as a result.

The commando war destroyer is a variant of the war destroyer (R19.36).

Landing Force: The 35 boarding parties (D7.0) include two commando teams (D15.84) and six heavy weapons squads (D15.81). There are four ground combat vehicles (D15.82). This was a battalion (R19.M1) and is included in the ship's BPV.

Shuttles: Two ground assault shuttles (R1.F4), one heavy transport shuttle (R1.F5), and two admin shuttles [(J2.0)/(R1.F1)]; these shuttles are included in the ship's BPV.

Seeking Weapons: The commando war destroyer can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Gronvan, Grador, Galanok.

(R19.42) WAR DESTROYER FAST PATROL SHIP TENDER (DWP): The introduction of interceptors by the Carnivon fleet soon led to a specification being issues for ships to support their operations. By the time fast patrol ships had supplanted the interceptors the Carnivons were operating several different ships to carry them into battle and support fleet operations. The war destroyer PF tender can be regarded as one of the less successful of these since its size left it with inadequate power to operate its special sensors in support of a task force's operations if it were not operating independently as a raider. It is arguable that the design did not even retain enough firepower to defend itself if it was attacked while waiting for its flotilla to return. It did have impressive (for its size) facilities to support a flotilla. Several of these ships were lost after Y195 when they were used to

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hunt for Andromedan rapid transit network nodes and were unable to stand off the Andromedans until reinforcements could arrive.

Ships of this class often acted as scouts in smaller combat operations where they did not belong and had inadequate power reserves to be effective, but were the only available ship.

The war destroyer fast patrol ship tender is a variant of the war destroyer (R19.36).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "drone" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Seeking Weapons: The war destroyer fast patrol ship tender can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: None.

SSD and counter are in Module C6.

Known names: Goporik, Perenak, Toporak, Lankorv.

(R19.43) WAR DESTROYER STRATEGIC TRANSPORT (DWT): The war destroyer design was modified to create this strategic transport to supplement the tugs and frigate transports. It was more survivable than the frigate transport (R19.53) if only because of its size and better shielding.

The SSD provides the data for both single-weight and double-weight pods, but any pods carried by this ship are inactive and every box in such a pod is treated as a "cargo" damage point. This war destroyer strategic transport can carry one pod, which can be double-weight. This ship cannot carry a triple-weight pod such as the space control pod (R19.69).

Like all tugs, the movement cost and Turn Mode vary with the pod carried. The movement cost of the war destroyer strategic transport with a single-weight pod is 0.75 energy points per hex; with a double-weight pod it is 1.0 energy points per hex; see Annex #3A. Note that other war destroyer variants cannot carry pods.

The war destroyer strategic transport is a variant of the war destroyer (R19.36).

Seeking Weapons: The war destroyer strategic transport can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*.

Known names: Vakton, Vakmor, Vakleb.

#### **CARNIVON FRIGATE AND VARIANTS**

(R19.44) FRIGATE LEADER (FFL): An improved version of the basic frigate with superior weapons making it a deadly duelist in its size class. It was the smallest ship in Carnivon service, prior to advanced technology, to be fitted with phaser-1s. Ships of this type were often found patrolling alone rather than leading a squadron of frigates. It was not uncommon for these ships to be sent on patrol in isolated areas while a destroyer would be used to lead two frigates in a task force.

The installation of the plus refit added two APRs to this ship which greatly improved its performance, but it was, as with all frigates, too small to have an impact in large battles, although in its own weight class it was a competent ship.

The frigate leader is a variant of the frigate (R19.45).

Seeking Weapons: The frigate leader can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but

#### would not have been universal.

SSD and counter are in *Module C6.* Known names: *Fontar, Kontar, Meltar, Vadtar.* 

**(R19.45) FRIGATE (FF):** Typical of the small ship for small missions employed by many empires, the Carnivon frigate had barely enough systems to be able to operate independently of larger ships (although it would need to call up the nearest cruiser if it ran into anything significant). It was somewhat power deficient, but the plus refit installed just before the General War addressed this issue by installing a pair of APRs which increased its capabilities.

Frigates remained in production at least through the end of the Andromedan War to help fill out the numbers of ships needed and the ship was the basis for many pre-General War variants which also served during that war, and beyond.

This is a base hull. Variants include the frigate leader (R19.44), escort carrier (R19.46), escort frigate (R19.47), aegis frigate (R19.47A), frigate scout (R19.48), minehunter frigate (R19.49), commando frigate (R19.50), fast carrier resupply ship (R19.51), theater transport frigate (R19.52), and police flagship (R19.53).

Seeking Weapons: The frigate can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counters are in Module C6.

Known names: Abnok, Betok, Davok, Falok, Gorak, Jolok, Korak, Latak, Mobak, Nopok, Potik, Ridik, Sovek.

(R19.46) ESCORT CARRIER (FFV): The Carnivon frigate did not adapt to the role of being a carrier very well. Areas used to install the APR of the plus refit had to be given over to room for the fighter bays, leaving the ship somewhat deficient in power. For this reason the ship never operated assault fighters, and only rarely operated heavy fighters at all. (Even the DG-1i and DG-2i required power to rearm disruptor cannons, and recharging the freezers was difficult for this ship.) The design entered squadron service in Y170 and was initially used in the convoy escort role in response to the appearance of carriers operated by Orion pirates earlier. As with most small carriers, the need for attrition units saw some of these pressed into service in battles where they were too small to survive (although some managed to). It was not unusual to find a ship of this type (with or without its attendant escort) with no fighters, having been ordered to transfer them to a larger carrier. [Even the commander of a mobile carrier (R19.37) could steal an escort carrier's fighters, and escort.]

Due to its small size and ease of production, the escort carrier would have been the most numerous carrier in Carnivon service at any one time, but that distinction actually went to the police carrier (R19.55). Ships of this class were still in service in Y205, albeit by that time only as (inadequate) supplements to local defense forces.

The escort carrier is a variant of the frigate (R19.45).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y170-Y172	FFE	6xJK-2
Y173-Y174	FFE	6xJK-3
Y175	FFA	6xJK-3
Y176	FFA	6xJK-4
Y177	FFA	6xJK-4 or
		3xDG-1or
		3xDG-1i

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Seeking Weapons: The escort carrier can control a number of seeking weapons equal half to its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Talikaj, Tanigog, Taporak.

(R19.47) ESCORT FRIGATE (FFE): Conceived as a light carrier escort, their small size and ease of production saw them assigned to virtually every carrier at one time or another. They, understandably, sustained the highest loss rate among the carrier escorts, but continued in production and service to the end of the Andromedan War. These ships would maneuver aggressively to place their heel nippers and phasers between enemy drones and fighters and the carrier they were assigned to protect as it recovered the fighters. Ships of this class were often present as an "extra escort" in carrier groups where they were not normally assigned (even an escort carrier might on occasion have an extra escort frigate, but this is not reflected in the escort tables as it was not an "official" organization). While larger escorts were needed in the succeeding years of war, the escort frigate [as the aegis frigate (R19.47A)] continued in production simply because it was easy and cheap to build, and thus very expendable.

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two deck crews dedicated to its death bolt rack. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

The escort frigate is a variant of the frigate (R19.45).

Seeking Weapons: The escort frigate can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.4). See also (J15.332).

Refits: The Y175 refit would have been installed in Y175 even if the ship was not upgraded to full aegis; this may have actually happened to a few ships of this type initially, but all had full aegis by the end of Y175. The mech-link refit would probably have been installed if any escort frigates had not been upgraded to aegis frigates, but would not have been universal.

SSD and counters are in *Module C6*. Known names: *Epinor*, *Dalinor*, *Parakor*.

**(R19.47A) AEGIS FRIGATE (FFA):** In Y175 all surviving escort frigates were fitted with full aegis (D13.0) and all new production escort frigates included full aegis from that point. The ships were redesignated "aegis frigates."

This ship has two ready racks (J4.89) and deck crews (J4.81) to support the fighters from the carrier it is escorting. The deck crews are not in addition to the deck crews provided by (J4.814), but replace them, representing their being retrained to service and arm fighters. This ship also has two deck crews dedicated to its death bolt rack. The deck crews can be transferred from duty in one system to another, e.g., one or both of the death bolt rack deck crews could be ordered to the shuttle bay to help rearm fighters. Note that this ship is not a carrier and cannot use Commander's Option Points to purchase additional deck crews (J4.816).

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The aegis frigate is a variant of the frigate (R19.45).

Seeking Weapons: The aegis frigate can control a number of seeking weapons equal to its sensor rating (F3.21) and has limited aegis (D13.0). See also (J15.332).

Refits: The upgrade from the escort frigate included the Y175 refit. The mech-link refit would probably have been installed, but would not have been universal.

SSD is combined with the escort frigate SSD (R19.47) in Module C6; use the escort frigate counters in Module C6. Known names: Epinor, Dalinor, Parakor.

(R19.48) FRIGATE SCOUT (FFS): A modified frigate designed to provide electronic warfare support to Carnivon task forces, it was the first "tactical scout" to enter service with the fleet. (The survey cruiser actually entered service before this class, but was not intended for use under combat conditions.) It was the primary mobile provider of electronic warfare support for years. While its small size made it vulnerable, especially if it were attempting to jam a target with offensive electronic warfare, it could survive heavy fighting only by staying out of effective weapons range, which required diverting power to speed and degraded the use of its special sensors. This may have delayed the Carnivions from realizing how important electronic warfare would become in the General War. Its place in the battle line was gradually taken over by larger scouts during the General War with more power and special sensors. However, ships of this class remained in service, and in production, all through the General War and into the Andromedan War because there was always more need for scouts than were available.

The frigate scout is a variant of the frigate (R19.45).

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "drone" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Seeking Weapons: The frigate scout can control a number of seeking weapons equal to its sensor rating (F3.21). See also (F3.213).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6*. Known names: *Batak*, *Dorak*, *Falek*.

(R19.49) MINEHUNTER FRIGATE (FFM): As minefields spread across the Alpha Octant in the Y150s, the Carnivons eventually found themselves with a need to breach them in order to attack the bases of their enemies. The Carnivons initially tried to handle the situation by simply equipping regular warships with minesweeping shuttles (M8.3), but eventually realized a dedicated ship was needed. In Y160 they turned to their frigate design to create a minesweeper. Their combat experience indicated that while there were advantages to using seeking weapons to sweep mines, their death bolts were significant overkill, and so they opted to increase the numbers of phasers and tractors. Combat experience soon showed the frigate hull was simply too small to breach a defended minefield, and larger ships were converted to the role. However, minehunter frigates remained in service to patch the minefields of Carnivon bases when a minelaying freighter was not available and to sweep areas where enemy forces had left "nuisance mines" when the local police flagship was otherwise engaged.

Both shuttles are minesweeping shuttles (R1.F2)/(M8.3) (included in BPV).

The minehunter frigate is a variant of the frigate (R19.45).

This ship is a true minesweeper (M2.45); see also (M8.0).

Seeking Weapons: The minehunter frigate can control a

number of seeking weapons equal to its sensor rating (F3.21).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Talik*, *Vorta*, *Aurton*.

(R19.50) COMMANDO FRIGATE (FFG): The Carnivon commando frigate was originally conceived as a simple transport, intended to move personnel and small cargoes between bases and planets and not as an assault ship. Records are unclear when a ship of the type was first used in an attack on a defended planet, but it appears to have happened very shortly after the ships entered service. Whether this was an accident or intentional is not known. Within Carnivon space the ships continued to fulfill their originally intended mission of personnel transport, but might still be diverted to the assault role if a pirate base were discovered or if a Carnivon colony needed to have invaders removed. While the assault role was largely taken over by larger commando ships during the General War, ships of this type remained in service for the transportation role and would sometimes be diverted again to the commando mission.

The commando frigate is a variant of the frigate (R19.45).

Landing Force: The 28 boarding parties (D7.0) include two commando teams (D15.84) and five heavy weapons squads (D15.81). There are two ground combat vehicles (D15.82). This was roughly 82% of a battalion (R19.M1) and is included in the ship's BPV.

Shuttles: Two ground assault shuttles (R1.F4) and two admin shuttles [(J2.0)/(R1.F1)]; these shuttles are included in the ship's BPV.

Seeking Weapons: The commando frigate can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Gotlen, Gelnen, Gripal.

(R19.51) FAST CARRIER RESUPPLY SHIP (FCR): A heavily modified frigate designed to deliver replacement fighters, personnel, and stores to carrier groups so that they could continue operating rather than withdrawing back to a base or a secure area to be resupplied by a convoy. There were never enough of these ships to keep all of the Carnivon carrier groups in operation. Their use as replacement escorts, even if not done too frequently, only exacerbated the situation when one was badly damaged, or destroyed.

The fast carrier resupply ship added a ready rack (J4.89) and limited aegis system (D13.4) for its mission of resupplying carrier groups with new replacement fighters, pilots, and anti-drones. The limited aegis system allowed the fast carrier resupply ship to operate as an escort while resupplying the carrier. This ability led to some of these ships being pressed into service as temporary escorts when a carrier was missing one.

The fast carrier resupply ship is a variant of the frigate (R19.45).

Seeking Weapons: The fast carrier resupply ship can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Brom, Bern, Bito, Burm.

(R19.52) THEATER TRANSPORT FRIGATE (FFT): Much of the movement of logistics in any empire is accomplished through the use of freighters. Critical cargoes, which must be delivered quickly, are often moved by Armed Priority Transports or Free Traders. Large bulk cargoes that cannot wait for the arrival of a freighter to be loaded are often hauled by theater transports. These latter include the various combat pods used by the tugs of the empire. They are too important to be used for less than important missions, making them targets on their lonely travels (when they cannot find a convoy or warship going the same way) for pirates and raiders. The Carnivon theater transport frigate was typical of the general class of theater transports.

The SSD provides the data for both single-weight and double-weight pods, but any pods carried by this ship are inactive and every box in such a pod is treated as a "cargo" damage point. This theater transport can carry one pod, which can be double-weight. This ship cannot carry a triple-weight pod such as the space control pod (R19.69).

Like all tugs, the movement cost and Turn Mode vary with the pod carried. The movement cost of the theater transport frigate with a single-weight pod is 0.67 energy points per hex, with a double-weight pod it is 1.0 energy points per hex; see Annex #3A. Note that other frigate variants cannot carry pods.

The theater transport frigate is a variant of the frigate (R19.45).

Seeking Weapons: The theater transport frigate can control a number of seeking weapons equal to half its sensor rating (F3.211).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Razbok, Radnok, Ravlok.

(R19.53) POLICE FLAGSHIP (FLG): Created as a jack of all trades ship to support the operations of the police forces within Carnivon space. This ship was a near complete set of all the vital missions that could be performed.

It could sweep a rogue minefield.

It could patch up a damaged freighter (or other ship) so that it could make it to port (or hold out until more rescue forces could arrive).

It could deliver critical supplies.

It could control the operations of traffic over a wide area and provide at least some electronic warfare support to a convoy or police squadron.

It could bring to bear the muscle of a landing force to resolve a local dispute.

It included highly trained investigative teams to get to the bottom of local crimes.

The one thing if could not do was fight its own battles against anything more powerful than an armed small freighter; for that it relied on being able to call up any local police ships.

This ship is a true minesweeper (M2.45); see also (M8.0).

The police flagship is a variant of the frigate (R19.45).

Landing Force: The 17 boarding parties (D7.0) include two commando teams (D15.84), two heavy weapons squads (D15.81), and two ground combat vehicles (D15.82). This was roughly two reinforced companies of Marines (R19.M1) and is included in the ship's BPV.

Shuttles: One ground assault shuttle (R1.F4), one heavy transport shuttle (R1.F5), one minesweeping shuttle (R1.F2) [an exception to (M8.12)], and four admin shuttles [(J2.0)/(R1.F1)]; these shuttles are included in the ship's BPV.

This ship is authorized to purchase a multi-role shuttle (J8.0) as an exception to (J8.511).

Scout: It can use all scout functions (G24.0). The special sensor is destroyed by "drone" damage points. When purchased as part of a battle force use the ship's combat BPV, not its economic BPV under (G24.35).

Seeking Weapons: The police flagship can control a number of seeking weapons equal to half its sensor rating (F3.211). See also (F3.213).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in Module C6.

Known names: Gedlik, Gortak, Gulvak.

#### **CARNIVON POLICE CORVETTE AND VARIANT**

(R19.54) POLICE CORVETTE (POL): As with most empires, the Carnivons had a huge volume of space to patrol and only so many funds in order to build the fleet to do so. The result of the conflict of these two needs saw a large number of very small ships built to maintain a presence, and many of these were controlled by "local" governments as "police forces" rather than "naval forces." This prevented the local naval commanders from stripping all possible ships from an area without first coordinating and getting the permission of those protecting the local populations. The Carnivon police corvette was produced in great numbers, typical of the police ships of most empires and possible due to its small size (making it both cheap and easy to build). It benefited from using the same engines as the frigate, making it a relatively lively ship, even if its weapons would not impress a single Light Raider. However, its speed and relatively high maneuverability enabled ships of this class to hold off Light Raiders until help arrived, and to pursue those Light Raiders in hopes of finding their bases.

This is a base hull. Variants include the police carrier (R19.55).

This ship is nimble (C11.0).

Seeking Weapons: The police corvette can control a number of seeking weapons equal to its sensor rating (F3.211).

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. These ships were too small to be fitted with the mech-link refit.

SSD and counters are in *Module C6.* Known names: *Gor, Tor, Dav, Fuf, Vel.* 

(R19.55) POLICE CARRIER (PLV): The police carrier was the second Carnivon carrier to enter service in any numbers. This was driven by the need to defend convoys from the faster drones being employed by the Kzintis and some Orion ships. The police always had a lower priority than the Carnivon Navy, and these ships were the last in line to receive any available fighters. Often the fighters they did receive were castoffs from the Navy.

Carnivon police carriers operated largely as normal police ships with an embarked half squadron of fighters. They lacked some of the finer points of police ships (emergency stores to succor colonies in trouble were dispensed with in the design to make room for the fighters), but were otherwise fully functional. While the ships often operated in conjunction with another police ship as an informal escort, it was just that: informal. Escorts were almost never officially assigned.

These were the most numerous carrier in Carnivon service, but the escort carrier was a close second (if only because the fleet had a larger budget and controlled more yard capacity). Ships of this class remained in service well into the Andromedan War, but were clearly obsolescent by then.

The police carrier is a variant of the police corvette (R19.54).

This ship is nimble (C11.0).

Carrier: This ship is a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Year	Escorts	Fighters
Y169-Y171	Pol or None	6xJK-1
Y172-Y174	Pol or None	6xJK-2
Y175-Y177	Pol or None	6xJK-3
Y178-Y180	Pol or None	6xJK-3 or 3xDG-1 or 3xDG-1i
Y181+	Pol or None	6xJK-4 or 3xDG-2 or 3xDG-2i

Seeking Weapons: The police carrier can control a number of seeking weapons equal to its sensor rating (F3.21).

Refits: These ships were too small to be fitted with the mech-link refit.

SSD and counter are in *Module C6.* Known names: *Valt, Vorn, Vint, Varr.* 

#### **CARNIVON TUG**

(R19.56) FLEET TUG (TG): The Carnivons continued to use their earlier tug (YR19.11) for some time, but found it increasingly inadequate. In Y130 they designed a new tug based on their heavy cruiser. The heavy cruiser hull was chosen rather than upgrading the earlier tugs because of the Carnivons' experiences with the efficiency of the tugs operated by their enemies.

The Carnivon fleet tug proved a solid design, retaining the full firepower of the heavy cruiser and more than 90% of its power generation capabilities while otherwise being a fully functional tug. As the Carnivons were already envisioning its use as a battle tug, the ship retained the phaser-1s of the base design rather than downgrading them to phaser-2s as was done on most support ships.

The tug can carry one pod on its centerline or two pods side by side. If two pods are carried, both must be the same weight, i.e., it cannot carry one double-weight pod and one single-weight pod at the same time.

No interbay shuttle transfers (J1.59) are possible between pods, or between the pods and the shuttle bay of the tug.

Like all tugs, the movement cost and Turn Mode vary with the pods carried. The movement cost of the tug with two pods or one double-weight pod is 1.5 energy points per hex, the movement cost of the tug with three pod weights is 2.0 energy points per hex; see Annex #3A.

The fleet tug is a variant of the heavy cruiser (R19.14).

Seeking Weapons: The fleet tug can control a number of seeking weapons equal to its sensor rating (F3.21). This ability may be increased by various pods.

Refits: The plus refit was installed beginning in Y166 and was universal by Y170. The Y175 refit was installed in Y175. The mech-link refit would probably have been installed, but would not have been universal.

SSD and counter are in *Module C6.* Known names: *Norda, Ponda, Qanda, Rakda.* 

## CARNIVON HORDES - R19

## **R19 — CARNIVON HORDES**

## **STAR FLEET BATTLES**

#### **CARNIVON PODS**

A variety of pods were created for the fleet tug. Note that Carnivon Early Years pods remained in service until approximately Y162 when the last of them was retired. The pods presented here were new builds [beginning with the cargo pod (R19.57)] designed to optimize the value of the fleet tug (R19.56). Carnivon early tugs (YR19.11) themselves remained in service until at least Y154 but could only carry one of the below listed pods at a time, and only on the centerline.

Pods never had official names.

Pod counters for separated pods are in Module C6.

(R19.57) CARGO POD (P-C): Cargo pods are simply cargo boxes; there is no crew or other function. When detached, any damage points scored on the pod are considered to be cargo damage points.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #1 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.58) SELF-DEFENSE POD (P-SD): Pods of this type increased the firepower available to defend against attack. The rear arc mounted heel nippers were intended to fend off an ESG ram attack from behind or otherwise keep an enemy ship from getting to point-blank range of a tug running for cover.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #1 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.59) REPAIR POD (P-R): These are typical of the repair pods used by most empires. While there was not enough repair capability to overhaul a damaged ship, it allowed the tug to patch up such a ship enough that it could make its way back to a better-equipped repair facility. A tug in direct support of a major combat operation was usually fitted with at least one pod of this type if it were not intended to participate in the battle itself. After Y170 the tug in question would most often be a light tactical transport, as it was more expendable and freed up the larger tug for logistical support.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #1 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.60) TROOP TRANSPORT POD (P-T): An improvement over the earlier troop pods in that it had integral shields and phaser-3s for self-defense, and more cargo volume to support ground operations even if this was at the expense of a shuttle by comparison. This pod was conceived as being able to reach a planet by itself once the enemy's defenses had been eliminated. In practice, it seldom landed on planets during combat operations and simply used its transporters and shuttles in conjunction with the tug's and those of other supporting ships to land its ground forces.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Operation: The shields of this pod are combined with the shields of the tug while it is attached. The pod's own sensor, scanner, and damage control tracks are inoperable (damage points may be scored on them) while the pod is attached to a tug. This pod is capable of independent operation as a sublight ship in its own right.

Landing: Can land on planets using the gravity landing system (P2.432) (other pods cannot).

Landing Force: The 35 boarding parties (D7.0) include two commando teams (D15.84) and six heavy weapons squads (D15.81). There are four ground combat vehicles (D15.82). This is a Marine battalion (R19.M1) and is included in the pod's BPV.

Shuttles: Two ground assault shuttles; these shuttles are included in the pod's BPV. No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

SSD is on Carnivon pods sheet #1 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.61) CARRIER POD (P-V): When the Carnivons determined that they would need fighters to fend off the faster drones and fighters being deployed by the Kzintis, they also realized that they were behind the power curve. The Kzintis were well ahead in both fighter production and carrier construction. In order to plug the gap until enough carriers could be built (something that would eventually be accomplished by producing numbers of smaller carriers) they produced carrier pods so that their tugs could at least temporarily take over the role. This pod is actually a redesign and extensive rebuild of the earlier "hangar pod" (R19.70). While intended as only a temporary stopgap measure, the Carnivons would use these pods again and again in the decades that followed. The flag facilities were often used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored. A single pod increases the command rating of the tug by one, e.g., from six to seven in the case of a light tactical transport. A second pod does not further increase a tug's command rating.

Two of these pods turned a fleet tug (R19.56) into a strike carrier equivalent carrying a full squadron of fighters. A light tactical transport (R19.30) would become a light carrier with one of these pods. The design included additional APRs to help with rearming the assault fighters.

Carrier: This pod makes the tug or light tactical transport that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Mines cannot be laid from fighter bays (M2.113). Note that the tug will have its own shuttle bay giving the tug and pod(s) combination multiple bays. An additional pod might have its own shuttle bay.

When two pods were carried by a fleet tug, the escorts and fighters were:

Year	Escorts	Fighters
Y168-Y169	CWE, FFE	12xJK-1
Y170-Y172	CWE, DWE, FFE or CWE, 2xFFE	8xJK-2, 4xHY-1
Y173-Y174	CWE, DWE, FFE or CWE, 2xFFE	8xJK-3, 4xHY-2
Y175	CWA, DWA, FFA or CWA, 2xDWA	8xJK-3, 4xHY-2
Y176	CWA, DWA, FFA or CWA, 2xDWA	8xJK-4, 4xHY-3
Y177	CWA, DWA, FFA or CWA, 2xDWA	8xJK-4, 4xHY-3 or 6xDG-1 or 6xDG-1i
Y179	CWA, DWA, FFA or CWA, 2xDWA	8xJK-4, 4xHY-3 or 6xDG-2 or 6xDG-2i
Y180+	CWA, 2xDWA	8xJK-4, 4xHY-3 or 6xDG-2 or 6xDG-2i

When carried by a light tactical transport<sup>†</sup> or a single pod is carried by a tug, the escorts and fighters were:

Year	Escorts	Fighters
Y168-Y169	FFE	6xJK-1
Y170-Y172	DWE, FFE or 2xFFE	4xJK-2, 2xHY-1
Y173-Y174	DWE, FFE or 2xFFE	4xJK-3, 2xHY-2
Y175	DWA, FFA or 2xFFA	4xJK-3, 2xHY-2
Y176	DWA, FFA or 2xFFA	4xJK-4, 2xHY-3
Y177	DWA, FFA or 2xFFA	4xJK-4, 2xHY-3 or 3xDG-1 or 3xDG-1i
Y179	DWA, FFA or 2xFFA	4xJK-4, 2xHY-3 or 3xDG-2 or 3xDG-2i
Y180+	2xDWA or DWA, FFA	4xJK-4, 2xHY-3 or 3xDG-2 or 3xDG-2i

†LTVs (light tactical transport with a carrier pod) were always last in line for escorts and would often have to make do with two escort frigates (R19.47)/aegis frigates (R19.47A) due to a shortage of other escorts.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Operation: The shields of this pod are combined with the shields of the tug while it is attached. No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

The SSD is on Carnivon pods sheet #2 SSD in *Module C6*; counters for detached pods are in *Module C6*.

(R19.62) BATTLE POD (P-B): This pod provided additional weapons and personnel making a tug or light tactical transport a more difficult opponent. In such case it was not unusual for the tug to be the largest ship present and for it to act as the command ship for the force. The flag facilities were often used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored. A single pod increases the command rating of the tug by one, e.g., from six to seven in the case of a light tactical transport. A second battle pod increases a tug's command rating by an additional point.

The pods were never equipped with DERFACS, but as they were not capable of independent operation this would have been a waste of resources. The pod's disruptor cannons used the fire control systems of the tug to which it is attached (as did the pod's death bolt rack) and thus could access the tug's DERFACS if it had been installed. The pod's disruptor cannons had a maximum range of 400,000 kilometers (40 hexes), but did not increase the range of any disruptor cannons on the tug.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Operation: The shields of this pod are combined with the shields of the tug while it is attached.

Refits: The Y175 refit was installed in Y175.

SSD is on Carnivon pods sheet #2 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.63) HEAVY CARRIER POD (P-VA): The Carnivons found themselves increasingly pressed by the drone throw weight of Kzinti carriers and battle groups and were hampered by the limited number of fighter groups they could deploy to keep from being overwhelmed. In Y174 they

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designed this pod to turn their tug into a heavy carrier with two full squadrons of fighters. A light tactical transport would become a carrier with one of these pods. The design included additional APRs to help with rearming the assault fighters.

The flag facilities were often used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored. A single pod increases the command rating of the tug by one, e.g., from six to seven in the case of a light tactical transport. A second pod does not further increase a tug's command rating.

Carrier: This pod makes the tug or light tactical transport that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22).

Note that the tug will have its own shuttle bay giving the tug and pod(s) combination multiple bays. An additional pod might have its own shuttle bay.

When two pods are carried by a fleet tug, the escorts and fighters were:

-	Year	Escorts	Fighters
	Y175	CWA, DWA, FFA or CWA, 2xDWA	16xJK-3, 8xHY-2
	Y176	CWA, DWA, FFA or CWA, 2xDWA	16xJK-4, 8xHY-3
	Y177	CWA, DWA, FFA or CWA, 2xDWA	16xJK-4, 8xHY-3 or 8xJK-4, 4xHY-3, 6xDG-1 or 8xJK-4, 4xHY-3, 6xDG-1i
	Y179	CWA, DWA, FFA or CWA, 2xDWA	16xJK-4, 8xHY-3 or 8xJK-4, 4xHY-3, 6xDG-2 or 8xJK-4, 4xHY-3, 6xDG-2i
	Y180+	CWA, 2xDWA	16xJK-4, 8xHY-3 or 8xJK-4, 4xHY-3, 6xDG-2 or 8xJK-4, 4xHY-3, 6xDG-2i

When a single pod is carried by a light tactical transport or a single pod is carried by a tug, the escorts and fighters were:

Year	Escorts	Fighters
Y175	CWA, DWA, FFA or CWA, 2xDWA or 2xFFA	8xJK-3, 4xHY-2
Y176	CWA, DWA, FFA or CWA, 2xDWA or 2xFFA	8xJK-4, 4xHY-3
Y177	CWA, DWA, FFA or CWA, 2xDWA or 2xFFA	8xJK-4, 4xHY-3 or 6xDG-1 or 6xDG-1i
Y179	CWA, DWA, FFA or CWA, 2xDWA or DWA, FFA	8xJK-4, 4xHY-3 or 6xDG-2 or 6xDG-2i
Y180+	CWA, 2xDWA or DWA, FFA	8xJK-4, 4xHY-3 or 6xDG-2 or 6xDG-2i

†LTVAs (light tactical transport with a heavy carrier pod) were always last in line for escorts and would often have to make do with two escort frigates (R19.47)/aegis frigates (R19.47A) due to a shortage of other escorts.

Weight: This is a double-weight pod with a towing cost of 0.3300.

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Operation: The shields of this pod are combined with the shields of the tug while it is attached. No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

The SSD is on Carnivon pods sheet #3 SSD in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.64) SCOUT POD (P-SC): The Carnivons deployed scout pods in Y169. The pods were not originally intended to be used in pairs. Rather a tug with a single pod would be sent to supplement a base or other scanning system that was (whether temporarily or permanently) "off the air." Arguably this was not a good mission for a tug, as it would not be performing other logistical missions while tied down scanning a sector until a new base (or other asset) could be provided. Combat experience at the start of the General War soon revealed that electronic warfare was far more important than it had been previously, and the Carnivons found themselves short of large scouts and their scout frigate woefully inadequate to support fleet operations. This led them to deploy tugs as heavy scouts until a sufficient supply of war cruiser and war destroyer scouts could be produced. In the end, there were never enough large scouts, and well into the Andromedan War tugs would still be pressed into service as large scouts in critical areas.

The flag facilities were often used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored. A single pod increases the command rating of the tug by one, e.g., from six to seven in the case of a light tactical transport. A second pod does not further increase a tug's command rating.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "phaser" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #4 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.65) DEATH BOLT PODS (P-DB): The availability of faster death bolts beginning in Y165 led the Carnivons to design these pods in order to turn a tug into a significant bomardment platform. The fleet tug (R19.56) with two of these pods could sustain an almost continuous launch rate of four death bolts (three from one pod and one from its own death bolt racks) continuously until its copious reloads were exhausted. The use of the pods was actually fairly rare as tugs had many other tasks to accomplish, and were most commonly deployed in defensive, rather than offensive, operations.

The flag facilities were usually used by the most senior officer present (which was rarely the commander of the tug itself), often a flag officer from the base where the pods had been stored. A single pod increases the command rating of the tug by one, e.g., from six to seven in the case of a light tactical transport. A second pod does not further increase a tug's command rating.

Bombardment: This pod has two hundred spaces of spare death bolts stored in its cargo boxes. Death bolts require one deck crew action (J4.817) to be moved from cargo storage to the reload storage of a given death bolt rack, whether on the rack is on the tug, on the pod, or on another pod attached to the tug. The death bolt racks themselves are reloaded normally as any other death bolt rack.

Seeking Weapons: The presence of one pod increases the seeking weapon control rating of the tug by three as long as the pod has one death bolt rack operational. Two such pods would increase the tug's seeking weapon control rating

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by six. These pods cannot increase a tug's seeking weapon control rating to more than double its sensor rating.

Weight: This is a single-weight pod with a towing cost of 0.2500.

Operation: The shields of this pod are combined with the shields of the tug while it is attached.

Refits: The Y175 refit was installed in Y175.

SSD is on Carnivon pods sheet #4 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.66) FAST PATROL SHIP TRANSPORT POD (P-PT): The Carnivons found they needed to replace fast patrol ships faster than they had assumed, and often there was not time to transfer a fast patrol ship transported as cargo and then assemble it for operations before the base receiving it was attacked again, or before the assembled fast patrol ship could be sent forward to link up with a tender that needed replacements. Some of this was handled by simply taking fast patrol ships from ships with lower priorities (to include casual fast patrol ships), but this left gaps in the patrol defenses. Inevitably, the Carnivons came to the same conclusion as other empires and deployed pods designed to deliver fully assembled, if not yet operational, fast patrol ships and replacement crews to the areas where they were most needed. The fast patrol ships carried by this pod will never have booster packs (these would be fitted by the receiving tender), and will only have one crew unit [placing them under the restrictions of (G9.42) as per (K1.311)]; it cannot carry more crew units until it is "serviced." To be serviced the fast patrol ship must dock to a fast patrol ship tender and have one repair point allocated to it by the repair systems of the tender, i.e., a unit which has a "P" in its notes column on the Master Ship Chart. Once a fast patrol ship is launched from this pod, it cannot return to it.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #4 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.67) HEAVY FIGHTER FCR POD (P-HT): When heavy fighters went into widespread service, the Carnivons noted that they could not be carried in their existing fast carrier resupply ships (R19.51) and used these special pods to transport replacement heavy fighters to those carriers that operated them. These pods can carry heavy fighters but cannot operate, land, refuel, or rearm them. The one shuttle bay was used to "warm up" replacement heavy fighters, which could only launch once, and could not land. The bay did have ready racks and could fully arm the heavy fighters before sending them on their way to their carriers (these are marked "H" for heavy fighter). This type of pod can carry standard fighters (under the same restrictions) but cannot arm them via ready racks as the racks are for heavy fighters; they will have to use (J4.8962) and (J4.892). The shuttle bay includes heavy transport shuttles (R1.F5) to facilitate cargo transfer. No interbay shuttle transfers (J1.59) are possible between pods or between the pods and the shuttle bay of the tug.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #5 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.68) FAST PATROL SHIP TENDER POD (P-PF): A pair of pods of this type enabled a tug to operate a full flotilla of fast patrol ships. The large repair systems allowed the tug to perform repairs on casual fast patrol ships of the ships it was operating with. The special sensors allowed the tug to locate distant targets its fast patrol ships could attack without itself coming under attack. (This did not always work out.) If even

one pod of this type is carried, the ship is considered a "true fast patrol ship tender" and cannot operate heavy fighters from a carrier pod.

The repair systems on this pod can only be used to repair fast patrol ships (K2.611).

PF Tender: This pod turns the tug to which it is docked into a true PF tender (K2.0), and such a ship cannot operate heavy fighters (J10.0) on any carrier pods it may be operating.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "phaser" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #5 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.69) SPACE CONTROL SHIP POD (P-SCS): The Carnivons created this pod (records indicate that only one such pod was in service at any one time) to temporarily increase the number of "space control ships" they could have in action. It could only be carried by a tug, the need to have multiple docking points prevented its employment on a light tactical transport, and strategic and theater transports could not carry it. Because of the high value of the combination, escorts comparable to those of a space control ship were normally assigned.

While there are no flag facilities, this pod increases the command rating of the tug by one, i.e., from an eight to a nine.

Operation: The shields of this pod are combined with the shields of the tug while it is attached.

Scout: It can use all scout functions (G24.0). Special sensors are destroyed by "torpedo" damage points. See (G24.35) when purchasing this unit as part of a battle force.

Carrier: This pod makes the tug that is carrying it a true carrier; see (J4.75), (J4.93), (J11.13), and (J15.22). No interbay shuttle transfers (J1.59) are possible between the bays of this pod or between the pod's bays and the shuttle bays of the tug.

PF Tender: This pod turns the tug to which it is docked into a true PF tender (K2.0), and such a ship cannot operate heavy fighters (J10.0).

Mines cannot be laid from fighter bays (M2.113). Note that the tug will have its own shuttle bay.

When carried by a fleet tug the escorts and fighters were:

Y183+ CWA, 2xDWA 8xJK-4, 4xHY-3	Year	Escorts	Fighters
	Y183+	CWA, 2xDWA	8xJK-4, 4xHY-3

Weight: This is a triple-weight pod with a towing cost of 0.6777.

SSD is on Carnivon pods sheet #6 in *Module C6;* counters for detached pods are in *Module C6.* 

(R19.70) HANGAR POD (P-H): Pods of this type were actually fairly common across all empires. They formed the basis for the earlier carrier pods (not the later heavy carrier pods). They served two functions prior to the deployment of fighters.

First, they allowed a tug to deliver relatively large cargo shipments to colonies in relatively restricted areas (where the terrain was too rough to allow the landing of an entire pod, or too narrow, such as a small island colony or a colony in a restricted valley). They were also more efficient to deliver cargo to isolated domed colonies or research stations where there was not enough population to be worth landing an entire cargo pod.

Second, they were often used to support ground operations, the shuttle bay being used for ground assault

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shuttles (R1.F4) or heavy assault shuttles (R1.F11) and the cargo bays loaded with supplies to support the operation.

No interbay shuttle transfers (J1.59) are possible between pods, or between the pods and the shuttle bay of the tug.

Weight: This is a single-weight pod with a towing cost of 0.2500.

SSD is on Carnivon pods sheet #6 in *Module C6;* counters for detached pods are in *Module C6.* 

#### (R19.F) CARNIVON FIGHTERS

Counters for Carnivon fighters are found in *Module C6;* these can be supplemented with generic fighter counters found in *Module J.* 

#### (R19.F0) GENERAL CARNIVON FIGHTER RULES:

(R19.F01) ORGANIZATION: Carnivon carrier SSDs show the standard mixes of fighters that they normally operated, but historically the Carnivons were far more flexible in their arrangements. Players may replace some or all of the assault fighters on a given carrier with superiority fighters (and appropriate ready racks), or replace some or all of the superiority fighters with assault fighters (and appropriate ready racks). There is no change in the BPV of the carrier and its escorts for doing so; however escorts will never have reload facilities for assault fighters. Unless the players agree in advance not to reveal what mix of fighters the carrier is carrying, the non-Carnivon player must be advised of any changes.

**(R19.F02)** SEEKING WEAPONS: Carnivon fighters and heavy fighters, even if equipped with seeking weapon control pods (J11.35), have no intrinsic ability to control seeking weapons. Carnivon bombers can control a number of seeking weapons equal to the number of death bolts they can carry and can accept control of seeking weapons from other units.

(R19.F1) JACKAL-1 SUPERIORITY (JK-1): The Jackal-1 was the first Carnivon fighter intended to supplement the defenses of fixed installations. It was small, slow, and fragile, but in mass their combined anti-drones (E5.0) and phasers could make it difficult for Kzinti drones to reach a target, and they could be deadly in a dogfight and were certainly effective against shuttles trying to deliver (or extract) enemy ground forces. It was armed with a single phaser-3 in addition to a four shot anti-drone system (can fire a maximum of one antidrone per impulse) and had the usual fighter rails (J11.111). Deck crews reload the anti-drones at the same cost in deck crew actions as loading a type-VI drone on a drone rail [1/2 deck crew action per anti-drone (J4.87)]. This fighter saw only limited deployment on carriers, if only because the Jackal-2 (R19.F2) appeared so soon after the Carnivons began to use carriers. Shortages of Jackal-2s and Jackal-3s saw some Jackal-1s used on carriers at least as late as Y173. From Y173 the Jackal-1 was gradually withdrawn from service; the last squadron equipped with them formally retired them in Y178. There are, however, persistent reports of some Jackal-1s being found in isolated planetary defense units at least as late as Y182.

These fighters initially did not have chaff packs; these were installed in Y168, no change in BPV. This fighter type was never equipped with a mega pack.

**Jackal-1E:** This was the electronic warfare variant of two-seat Jackal-1 (J4.43) which entered service in Y172. This fighter did not have anti-drones, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

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Jackal-1Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Jackal-1 superiority fighters is included on the Carnivon superiority fighters page of *Module C6*.

(R19.F2) JACKAL-2 SUPERIORITY (JK-2): The Jackal-2 entered widespread service in Y170, but did not fully replace the Jackal-1 (R19.F1) on carriers until Y173. It was the primary front-line fighter by Y172. It was not much of an improvement over Jackal-1 except that it was faster, more resistant to damage, and more maneuverable. As with the Jackal-1, its anti-drones (E5.0) (can fire a maximum of one anti-drone per impulse) are reloaded by deck crews under (J4.87). This fighter saw wide deployment on carriers, but Jackal-3s (R19.F3) began replacing them in Y172 (early prototypes). Jackal-2s remained available for duty until Y179 when the last of them were withdrawn from service except for use in schools as trainers. The last fighters of this type were formally retired in Y181, although there are some unconfirmed reports of some of these being seen in action as late as Y183 in isolated areas.

These fighters always had chaff packs. This fighter type was never equipped with a mega pack.

**Jackal-2E:** This was the electronic warfare variant of two-seat Jackal-2 (J4.43) which entered service in Y172. This fighter did not have an anti-drone system, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Jackal-2Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Jackal-2 superiority fighters is included on the Carnivon superiority fighters page of *Module C6*.

(R19.F3) JACKAL-3 SUPERIORITY (JK-3): The Jackal-3 was a significant improvement over the Jackal-2, particularly when comparing the Jackal-2 to the Jackal-1. Not only was the fighter faster, significantly tougher, and more maneuverable, but the anti-drone system's (E5.0) ammunition was increased by 50%. As with the Jackal-1, its anti-drones (E5.0) (can fire a maximum of one anti-drone per impulse) are reloaded by deck crews under (J4.87). This fighter saw wide deployment on carriers, but Jackal-4s (R19.F4) began replacing them in Y175 (early prototypes). Jackal-3s remained available for duty until Y182 when the last of them were withdrawn from service except for use in schools as trainers. The last fighters of this type were formally retired in Y184, although there are some unconfirmed reports of some of these being seen in action as late as Y185 in isolated areas.

This fighter type always had one chaff pack, but was never equipped with a mega pack.

**Jackal-3E:** This was the electronic warfare variant of two-seat Jackal-3 (J4.43) which entered service simultaneously with the basic Jackal-3. This fighter did not have an anti-drone system, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Jackal-3Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Jackal-3 superiority fighters is included on the Carnivon superiority fighters page of *Module C6*.

(R19.F4) JACKAL-4 SUPERIORITY (JK-4) This was the single most common fighter in Carnivon service if only because it was the final fighter type and remained in service through the end of the Andromedan War and beyond. It was, faster and more heavily armed than the previous fighters

having two phaser-3s in addition to the six-shot anti-drone system (E5.0) (can fire a maximum of one anti-drone per impulse) are reloaded by deck crews under (J4.87). Jackal-4s entered widespread service in Y176 and supplanted all previous size-1 superiority fighters in front-line service on carriers by Y178. They remained in service until at least Y205, and by Y185 had even replaced the earlier fighters in the training schools.

A mega pack was developed for this fighter adding a third phaser-3 (J16.244).

**Jackal-4E:** This was the electronic warfare variant of two-seat Jackal-4 (J4.43) which entered service in Y172. This fighter did not have anti-drones, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Jackal-4Es always had two chaff packs, and when fitted with a mega pack gained two additional pod rails (J16.245).

A squadron of 12 Jackal-4 superiority fighters is included on the Carnivon superiority fighters page of *Module C6*. Fighters of this type are found on most carriers and other Carnivon SSDs that have fighters in *Module C6*.

(R19.F5) HYENA-1 ASSAULT FIGHTER (HY-1): The Hyena-1 was introduced in Y170, at the same time as the Jackal-2 (R19.F2) (prototypes were in service earlier). It was built for one purpose: to get close enough to deliver its disruptor cannon charge. The Hyena-1 had one disruptor cannon holding one charge that was loaded onto it in the same manner as a photon charge on a photon-armed fighter (J4.852). The disruptor cannon had a maximum range of 10 hexes. The freezer holds two charges, meaning no power is needed to arm a Hyena-1 the second time. Hyena-1s remained in production until Y175 when they were withdrawn from service on carriers. At least some remained in use as part of planetary defenses and as trainers in fighter schools as late as Y177, but all had been retired by Y178.

Hyena-1s usually only operated in "pure" squadrons when part of planetary defenses, or operating from a starbase (R1.1-19). Carriers with eight or more fighters normally operated two or more Hyena-1s to provide some ship assault capability as part of their embarked squadrons.

This fighter type always had one chaff pack, but was never equipped with a mega pack.

**Hyena-1E:** Electronic warfare variant of two-seat Hyena-1 (J4.43) which entered service in Y172. This fighter did not have a disruptor cannon, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Hyena-1Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Hyena-1 assault fighters is included on the Carnivon assault fighters page of *Module C6*.

(R19.F6) HYENA-2 ASSAULT FIGHTER (HY-2): A significantly improved assault fighter compared to the Hyena-1 (R19.F5), the Hyena-2 could carry two charges for its disruptor cannon and was faster and more maneuverable. The Hyena-2 entered service at the same time as the Jackal-3 (R19.F3) in Y173 (some prototypes saw service in prior years). The fighter can fire one charge for its disruptor cannon in any given turn, and not within a quarter turn of firing the disruptor cannon on a previous turn. The disruptor cannon had a maximum range of 10 hexes.

The Hyena-2's disruptor cannon is loaded in the same manner as a photon charge on a photon-armed fighter (J4.852). The freezer holds two charges, meaning that if the Hyena-2 is fully loaded, the freezer will be empty and will

have to be rearmed before a fighter can be rearmed. Hyena-2s remained in production until Y179 when they were withdrawn from service on carriers. At least some remained in use as part of planetary defenses and as trainers in fighter schools as late as Y182, but all had been retired by Y183.

Hyena-2s usually only operated in "pure" squadrons when part of planetary defenses, or operating from a starbase (R1.1-19). Carriers with eight or more fighters normally operated two or more Hyena-2s to provide some ship assault capability as part of their embarked squadrons.

This fighter type always had one chaff pack, but was never equipped with a mega pack.

**Hyena-2E:** This was the electronic warfare variant of two-seat Hyena-2 (J4.43) which entered service simultaneously with the standard HY-2. This fighter did not have a disruptor cannon, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Hyena-2Es always had one chaff pack, but they were never fitted with mega packs.

A squadron of 12 Hyena-2 assault fighters is included on the Carnivon assault fighters page of *Module C6*.

(R19.F7) HYENA-3 ASSAULT FIGHTER (HY-3): The final Carnivon assault fighter, it was faster and far better armed than the previous assault fighters having two phaser-3s and two small rails that could be armed with ant-drones to better enable the fighters to fight their way through enemy drone and fighter defenses. The anti-drones could only be fired into the forward weapons arc of the fighter. Like the Hyena-2, the Hyena-3 has a single disruptor cannon but can carry two charges. The fighter can fire one charge for its disruptor cannon in any given turn, and not within a quarter turn of firing the disruptor cannon on a previous turn. The disruptor cannon had a maximum range of 10 hexes. The fighter can only fire one anti-drone per impulse. The Hyena-3 entered service at the same time as the Jackal-4 (R19.F4) in Y176 (some prototypes saw service in prior years), and remained in service at least through Y205.

The Hyena-3's disruptor cannon is loaded in the same manner as a photon charge on a photon-armed fighter (J4.852). The freezer holds two charges, meaning that if the Hyena-3 is fully loaded, the freezer will be empty and will have to be rearmed before a fighter can be rearmed. The anti-drone rails (E5.0) are reloaded by deck crews under (J4.87). Hyena-3s remained in production through the end of the Andromedan War.

Hyena-3s usually only operated in "pure" squadrons when part of planetary defenses, or operating from a starbase (R1.1-19). Carriers with eight or more fighters normally operated two or more Hyena-3s to provide some ship assault capability as part of their embarked squadrons.

This fighter type always had two chaff packs. A mega pack was developed for this fighter adding a third charge for its disruptor cannon (J16.242).

**Hyena-3E:** This was the electronic warfare variant of two-seat Hyena-3 (J4.43) which entered service simultaneously with the standard Hyena-3. This fighter did not have a disruptor cannon, but did have two built-in electronic warfare pods and could lend electronic warfare to fighters of its squadron (J4.46), including that from pods [(J4.9)/(J11.2)] carried on its pod rails (J11.111).

Hyena-3Es always had one chaff pack, and when fitted with a mega pack gained two additional pod rails (J16.245).

A squadron of 12 Hyena-3 assault fighter-3s is included on the Carnivon Assault Fighters page of *Module C6*. Assault fighters of this type are found on most carriers that normally operated assault fighters.

## **CARNIVON HORDES – R19**

(R19.F8) DINGO-1 HEAVY FIGHTER (DG-1): The heavy fighter appeared in Y177 (protoypes were probably in service earlier). It had relatively heavy phaser armament and carried two disruptor cannons each with two charges. The fighter can fire one charge from one or both (one charge each) of the disruptor cannons in a given turn at the same or different targets, on the same or different impulses. The disruptor cannons had a maximum range of 10 hexes. Its phasers can also be fired independently on the same or different impulses of a turn. No non-anti-drone weapon can be fired a second time within a quarter turn of its being fired on a previous turn. It also had a six-shot anti-drone system (E5.0) and can fire one anti-drone per impulse. The quick appearance of the Dingo-2 (R19.F10) the following year quickly rendered the Dingo-1 obsolescent, and they were withdrawn from service by Y180, the last being retired from school systems by Y182.

The Dingo-1's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed heavy fighter (J4.852). The freezer holds two charges for each disruptor cannon, meaning that if the Dingo-1 is fully loaded, the freezer will be empty and will have to be rearmed before a fighter can be rearmed. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

Dingo-1s always had two chaff packs and as with all heavy fighters included a built-in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. No mega pack was developed for this fighter.

A squadron of six Dingo-1 heavy fighters is included on the Carnivon heavy fighters page of *Module C6*.

(R19.F9) DINGO-1i HEAVY INTERCEPTOR FIGHTER (DG-1i): An interceptor variant of the Dingo-1 (R19.F8) which entered service the same year. The design gave up the disruptor cannons for improved phaser armament and a second anti-drone system. A squadron of these interceptors was an unpleasant experience for any Kzinti or Lyran fighter squadron, but their slightly slower speed meant they could not pursue squadrons of faster fighters that slipped past them, and kept them from venturing too far from that which they were to defend.

Its phasers can be fired independently on the same or different impulses of a turn, but cannot be fired a second time within a quarter turn of being fired on a previous turn. Each six-shot anti-drone system (E5.0) and can fire one anti-drone per impulse. The quick appearance of the Dingo-2i (R19.F11) the following year quickly rendered the Dingo-1i obsolescent, and they were withdrawn from service by Y180, the last being retired from school systems by Y182.

Dingo-1is always had two chaff packs and as with all heavy fighters included a built in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. No mega pack was developed for this fighter.

A squadron of six Dingo-1i heavy fighters is included on the Carnivon heavy fighters page of *Module C6*.

**(R19.F10) DINGO-2 FAST HEAVY FIGHTER (DG-2):** In Y178 improved engines for heavy fighters were developed and the firing arc of the rear phaser-3 was installed (made possible by space provided by other improvements) resulting in the Dingo-2. This fighter remained in service through the end of the General War and into the Andromedan War. It was finally withdrawn from service in Y207.

The fighter can fire one charge from one or both (one charge each) of the disruptor cannons in a given turn at the same or different targets, on the same or different impulses. The disruptor cannons had a maximum range of 10 hexes. Its phasers can also be fired independently on the same or different impulses of a turn. No non-anti-drone weapon can be fired a second time within a quarter turn of its being fired

## **R19 – CARNIVON HORDES**

## **STAR FLEET BATTLES**

on a previous turn. It also had a six-shot anti-drone system (E5.0) and can fire one anti-drone per impulse.

The Dingo-2's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed heavy fighter (J4.852). The freezer holds two charges for each disruptor cannon, meaning that if the Dingo-2 is fully loaded, the freezer will be empty and will have to be rearmed before a fighter can be rearmed. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

Dingo-2s always had two chaff packs and as with all heavy fighters included a built in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. A mega pack was developed for this fighter adding a third disruptor cannon charge to each of its disruptor cannons (J16.242). The added charges cannot be fired on the same turn, or within a quarter turn, of the fighter's normal charges. A charge provided by the mega pack could be fired at the same time (assuming the disruptor cannon had already fired its normal charges) as a charge or charges from the other disruptor cannon.

A squadron of six Dingo-2 heavy fighters is included on the Carnivon heavy fighters page of *Module C6*.

(R19.F11) DINGO-2i FAST HEAVY INTERCEPTOR FIGHTER (DG-2i): This was an interceptor variant of the Dingo-2 (R19.F10) which entered service the same year. The design was no better armed than the Dingo-1i, but the weapons arcs of the phasers were significantly improved making it a difficult target to approach. A squadron of Dingo-1is were already an unpleasant experience for any Kzinti or Lyran fighter squadron, but the Dingo-2i could not be outrun or avoided.

The Dingo-2i's phasers can be fired independently on the same or different impulses of a turn, but cannot be fired a second time within a quarter turn of being fired on a previous turn. Each six-shot anti-drone system (E5.0) and can fire one anti-drone per impulse. These fighters were withdraw from service in Y189 as ineffective against the Andromedans. If not for the Andromedan War, they would probably have remained in service through Y205.

Dingo-2is always had two chaff packs and as with all heavy fighters included a built in electronic warfare pod; see (R1.F7A) for electronic warfare fighters. A mega pack was developed for this fighter, but the only weapon it added was an additional phaser-3 firing in the FA arc (J16.244).

A squadron of six Dingo-2i heavy fighters is included on the Carnivon heavy fighters page of *Module C6*.

(R19.F12) BEAR-1 MEDIUM BOMBER (BR-1): This was the first bomber deployed by the Carnivons to supplement planetary defense. The design used the engines from the existing heavy freight shuttle (R1.F13) on a heavily modified frame. It had three disruptor cannons each carrying two charges with a maximum range of 10 hexes. It could fire one charge per disruptor cannon per turn, but not within a quarter turn of a given disruptor cannon firing on a previous turn. It was also the smallest unit that could be fitted with a death bolt, and carried two of these. It could launch one death bolt in a given turn, and not within a quarter turn of launching a death bolt on a previous turn. The original design entered service in Y168 and remained in service in secondary sectors and rear areas until at least Y177.

The Bear-1's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed bomber (J4.852). The freezer holds two charges for each disruptor cannon, meaning that if the Bear-1 is fully loaded, the freezer will be empty and will have to be rearmed before a bomber can be rearmed. Death bolts can only be loaded onto the bomber from ready racks designed for that specific bomber, i.e., a Bear-1 cannot have death bolts loaded on it from a rack designed for a Bear-2 (R19.F13). Even with a ready rack, it takes three deck crew actions (J4.817) to load a single death bolt; two deck crews (maximum) can combine to load one death bolt. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

These bombers always had a chaff pack. This bomber type was never equipped with a mega pack. An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers, which cannot be used before Y172.

A squadron of six Bear-1 medium bombers is included on the Carnivon bombers page of *Module C6*.

(R19.F13) BEAR-2 MEDIUM BOMBER (BR-2): The Carnivons placed this improved medium bomber into service in Y173. The design used improved engines to increase the bomber's speed and slightly improved the firing arcs of the forward phaser-2 and of the rear defensive phaser. It had three disruptor cannons each carrying two charges with a maximum range of 10 hexes. It could fire one charge per disruptor cannon per turn, but not within a guarter turn of a given disruptor cannon firing on a previous turn. It was also the smallest unit that could be fitted with a death bolt, and carried two of these. It could launch both death bolts in a given turn provided both were launched at the same target and on the same impulse. Otherwise the second death bolt could not be launched within a guarter turn of launching the first death bolt on a previous turn. The original design entered service in Y173 and remained in service in secondary sectors and rear areas until at least Y179.

The Bear-2's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed bomber (J4.852). The freezer holds two charges for each disruptor cannon, meaning that if the Bear-2 is fully loaded, the freezer will be empty and will have to be rearmed before a bomber can be rearmed. Death bolts can only be loaded onto the bomber from ready racks designed for that specific bomber, i.e., a Bear-2 cannot have death bolts loaded on it from a rack designed for a Bear-1 (R19.F12). Even with a ready rack, it takes three deck crew actions (J4.817) to load a single death bolt; two deck crews (maximum) can combine to load one death bolt. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

These bombers always had a chaff pack. This bombertype was never equipped with a mega pack. An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers, which cannot be used before Y172.

A squadron of six Bear-2 medium bombers is included on the Carnivon bombers page of *Module C6*.

(R19.F14) BEAR-3 MEDIUM BOMBER (BR-3): The Carnivons placed this final medium bomber into service in Y178. Improved engines increased the bomber's speed once more and the firing arcs of the forward phaser-2 and of the rear defensive phaser were again improved. It had three disruptor cannons each carrying two charges with a maximum range of 10 hexes. It could fire one charge per disruptor cannon per turn, but not within a quarter turn of a given disruptor cannon firing on a previous turn. It was also the smallest unit that could be fitted with a death bolt, and carried two of these. It could launch both death bolts in a given turn at the same or different targets, in the same or different impulses. The original design entered service in Y178 and remained in service through the end of the Andromedan War in Y205.

The Bear-3's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed bomber (J4.852). The freezer holds two charges for each disruptor

cannon, meaning that if the Bear-3 is fully loaded, the freezer will be empty and will have to be rearmed before a bomber can be rearmed. Death bolts can only be loaded onto the bomber from ready racks designed for that specific bomber, i.e., a Bear-3 cannot have death bolts loaded on it from a rack designed for a Bear-1 (R19.F12). Even with a ready rack, it takes three deck crew actions (J4.817) to load a single death bolt; two deck crews (maximum) can combine to load one death bolt. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

These bombers always had two chaff packs. An electronic warfare pod was included in the design; see (R1.F7A) for electronic warfare bombers, which cannot be used before Y172. This bomber type was equipped with a mega pack, but the only effect was to double the bomber's speed and slightly increase its durability (J16.249).

A squadron of six Bear-3 medium bombers is included on the Carnivon bombers page of *Module C6*.

(R19.F15) KODIAK HEAVY BOMBER (KO): Loosely based on the frame of the very heavy freight shuttle (R1.F14) the Kodiak entered service in Y179 after a long and difficult development period. The Kodiak had four disruptor cannons each carrying two charges with a maximum range of 10 hexes. It could fire one charge per disruptor cannon per turn, but not within a guarter turn of a given disruptor cannon firing on a previous turn. It was also fitted with death bolts, and carried four of these. It could launch two death bolts in a given turn at the same or different targets, in the same or different impulses, but could not launch the second pair of death bolts within a guarter turn of launching two death bolts on a previous turn. (It could launch one death bolt on Impulse #25, a second on Impulse #32, and a third on Impulse #1 of the following turn, but could not then launch the fourth until Impulse #8.) The original design entered service in Y179 and remained in service through the end of the Andromedan War in Y205.

The Kodiak's disruptor cannons are loaded in the same manner as a photon charge on a photon-armed bomber (J4.852). The freezer holds two charges for each disruptor cannon, meaning that if the Kodiak is fully loaded, the freezer will be empty and will have to be rearmed before a bomber can be rearmed. Death bolts can only be loaded onto the bomber from ready racks designed for that specific bomber, i.e., a Kodiak cannot have death bolts loaded on it from a rack designed for a Bear-1 (R19.F12). Even with a ready rack, it takes three deck crew actions (J4.817) to load a single death bolt; two deck crews (maximum) can combine to load one death bolt. The anti-drone system (E5.0) is reloaded by deck crews under (J4.87).

Two electronic warfare pods were included in the design; see (R1.F7A) for electronic warfare bombers. This bomber always had two chaff packs. This bomber type was sometimes equipped with a mega pack, but the only effect was to double the bomber's speed and slightly increase its durability (J16.249).

A squadron of six Kodiak heavy bombers is included on the Carnivon bombers page of *Module C6*.

#### (R18.F) CARNIVON GROUND FORCES

#### (R19.M1) CARNIVON MARINES BATTALION ORGANIZATION

HQ element (1 Squad)

4 Line Companies, each:

6 Squads, 1 Heavy Weapons Squad

1 Special Company

2 Squads, 2 Heavy Weapons Squads, 2 Commando Squads

The special company was always provided whenever a battalion was embarked (especially on the diminutive commando frigate), as it allowed the commander to influence the action. As with the battalions of other empires, task organization was not unknown and Carnivon battalions might have additional troops assigned for a particular mission, to include specialist troops such as combat engineers.

#### (R19.M2) CARNIVON COMMANDOS AND PRIME TEAMS

The Carnivons organized hunter packs (consisting of six commandos) and a smaller number of strike hunter packs (more or less equal to prime teams) which included a commander, scout, combat engineer, heavy weapons expert, sniper, and medic. All members of strike hunter packs were trained as commandos and the leader was promoted within the team from a skill position and retained his original skill, meaning that the team had two experts in that field (although the new member would be of a lower qualification). Because strike hunter packs were closely integrated and had bonds stronger than brotherhood, it was difficult and unusual to attach a specialist for a given mission, but this did happen. strike hunter packs that were short one member often remained so for long periods (because of the difficulty of integrating new members) but a strike hunter pack missing two members would be pulled out of operations for a month or two in order to integrate replacements. Every important ship had a strike hunter pack; about a third of ships would be able to get ordinary hunter (commando) packs. Most strike hunter packs were given time off every few months during which they attended training to improve their skills or add new skills. hunter packs which displayed exemplary performance were sent (intact) to Strike Hunter School to learn the skills needed for the higher designation, and most new strike hunter packs came from this source. It was rare to create an entirely new strike hunter pack from six random replacements. Sometimes, a Carnivon horde would specifically recruit individuals with skills to be trained from the start as strike hunters, but this was rare. Very rarely, strike hunter packs might receive a permanent seventh member. being a scientist or other specialist who had full commando skills; these could be designated prime hunter teams by the players. This happened only in the case of a pack that had taken casualties while distinguishing itself and was pulled back to the training school to absorb replacements (including the new seventh member). It is known that the Red Dog Horde actually created a prime hunter team from carefully selected recruits and trained it as such from scratch.

#### (R19.PF) CARNIVON FAST PATROL SHIPS

Gunboats, also known as fast patrol ships, PFs, and (incorrectly) as "pseudo-fighters," came into service across the galaxy during Y178-Y182. Originally invented by the Lyrans (R11.PF0), the technology (for the special engines that made them possible) was quickly copied by almost everyone.

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Gunboats have tremendous firepower for their size, but are cheap to build. Their range is short (they operate mostly from bases and special "tenders"). They increase the firepower of a fleet without increasing the fleet's size (which is limited by the command abilities of the flagship).

Generic Carnivon gunboat (PF) counters are in *Module C6*.

(R19.PF0) INTERCEPTOR (INT): The standard conjectural interceptor type.

Variants include:

Interceptor-F fighter-conveyor (K3.8)

Interceptor-S scout (K3.75)

An interceptor squadron SSD is in *Module C6*; use the generic Carnivon gunboat counters in *Module C6*.

(R19.PF1) GUNBOAT (PF): Equivalent to the fast patrol ships of other empires. Standard versions include:

Gunboat-C cargo (R1.PF1) Gunboat-F fighter Conveyor (R1.PF5) Gunboat-G ground Assault (R1.PF3) Gunboat-L leader (R1.PF6) Gunboat-S scout (R1.PF2) Gunboat-M mine warfare (R1.PF4) Gunboat-Q survey (R1.PF8) Gunboat-R recovery (R1.PF9) Gunboat-WB workboat (R1.PF7) See (R1.PF1)-(R1.PF9) for rules on standard versions.

The leader and scout are on the Carnivon fast patrol ship flotilla SSD in *Module C6*; the others are on the Carnivon fast patrol ships variants page of the *Module C6* SSD book. All Carnivon fast patrol ship counters are designated "PF" to facilitate their use.

A gunboat flotilla SSD is provided in *Module 6*. SSDs for most gunboats and gunboat variants are in *Module C6*. One SSD shows a standard flotilla; another shows a variant flotilla of gunboat-P phaser-armed fast patrol ships.

**(R19.PF2) GUNBOAT-P (PFP):** Initially designed as an escort, it was produced in large numbers and found its way to the casual mech-links of various ships. A leader version was produced and flotillas composed entirely of gunboat-Ps saw service (usually with a scout). There is a leader version.

An SSD of this flotilla is provided in *Module C6*.

(R19.PF3) GUNBOAT-H (PFH): This was a relatively rare variant replacing the disruptor cannon with a heel nipper. Tactically this boat was intended to help break up an enemy formation and make its component parts more vulnerable to mass assault by the rest of the flotilla. One, sometimes two, gunboats in the flotilla would be replaced by this variant.

An SSD is provided on the *Module C6* PF variants page.

(R1.PF1-19) GUNBOAT-C (PFC): This was the standard cargo PF variant, see (R1.PF1) in *Module K.* 

An SSD is provided on the *Module C6* PF variants page.

(R1.PF2-19) GUNBOAT-S (PFS): This was the standard scout PF variant, see (R1.PF2) in *Module K*.

An SSD is provided on the Gunboat PF flotilla page and the gunboat-P PF flotilla page in *Module C6*.

(R1.PF3-19) GUNBOAT-G (PFG): This was the standard ground assault PF variant, see (R1.PF3) in *Module K*. An SSD is provided on the *Module C6* PF variants page.

(R1.PF4-19) GUNBOAT-M (PFM): The Carnivon mine warfare fast patrol ship was marginal at best and far too small

# STAR FLEET BATTLES

for the task of breaching a minefield with even minor forces defending it; see (R1.PF4) in *Module K*.

This ship is a true minesweeper (M2.45); see also (M8.0).

An SSD is provided on the *Module C6* PF variants page.

(R1.PF5-19) GUNBOAT-F (PFF): This was the standard fighter-conveyor PF variant. The Carnivons only used these to resupply carriers with fighters or to help deliver ground assault shuttles as part of raids. The gunboat's systems were unable to maintain the weapon charges of the fighters (no assault fighter being carried by a gunboat-F can have any disruptor cannon charges loaded) making their use for distant fighter strikes impractical. It should be noted that gunboat-Fs in some cases were used to carry fighters to casual fighter bases (J13.0), where the fighters would then be armed and sent on their way. Further, sometimes gunboat-Fs transporting fighters (or other shuttle types) would come under attack and would have to launch the fighters to at least add their phasers to their defense. See (R1.PF5) in *Module K*.

An SSD is provided on the *Module C6* PF variants page.

**(R1.PF6-19) GUNBOAT-L (PFL):** This was the standard leader type and a phaser-armed variant are included on the appropriate flotilla pages in *Module C6*. See (R1.PF6) in *Module K*.

(R1.PF7-19) GUNBOAT-WB (WB): The Carnivons produced workboats to provide more mobility to those looking for rich strikes of the various minerals needed to fuel their war machine, particularly the rare materials needed to make advanced technology work. It is otherwise a standard variant of the general type, that is to say workboats. See (R1.PF7) in *Module R11*.

SSD is on the PF variants page of *Module C6*. Use any PF counter.

(R1.PF8-19) GUNBOAT-Q (PFQ): This was an example of the general type. The Carnivons used these in the same manner as other empires. See (R1.PF8) in *Module R12*.

SSD is on the PF variants page of *Module C6*. Use any PF counter.

(R1.PF9-19) GUNBOAT-R (PFR): Losses among gunboats were always high, and more than one escape pod was not rescued because it could not be picked up under fire or a gunboat could not be repaired fast enough to return to the battle scene to rescue it. Recovery fast patrol ships were a solution to the problem. While not a perfect one, the savings in the lives of crews who did not have to be replaced and the prevention of the abandoning of gunboats otherwise too badly damage to return to their base more than paid for this variant. See (R1.PF9) in *Module R12*.

An SSD is on the PF variants page of *Module C6*. Use any PF counter.

(K5.2) WEAPON SPECIFICATION CHART EXTRACT

#### **CARNIVON FAST PATROL SHIP DAMAGE ALLOCATION** For purposes of damage allocation (K5.2)

For purposes of damage allocation (K5.2)

Weapon-A is disruptor cannon (also transporter on leader).

Weapon-B is phaser-3 (tractor on leader). Weapon-C is phaser-2 (also shuttle on leader).

END OF SECTION (R19.0) MODULE C6

#### (SJ4.0) GET OUT OF HERE 000 0.0 0 200 20 00000000 0 00 0.80 00 3000 2000 2000 2000 0 2.0 2000 0 20 3000 0 20 3D Ď Dog 0 0 3 0 0:0 8D Ö 3D 0 0000

#### (Y167)

by Greg Gutfeld, New York

A Paravian raid mothership slipped into an asteroid field to hide and await the return of the raiders it was supporting. This particular asteroid field was in a desolate system, with no planets suitable for colonization, so the chance of discovery was very small. After entering the field and moving deep into it, the ship's sensors detected trails left by shuttles. Intensive scans showed no signs that any larger warp trails had passed through in the recent past, but a number of shuttles were soon sighted moving among some nearby asteroid clusters.

Studying their movements, the mothership's commander soon realized that his ship had stumbled onto a mining operation. There were, however, no large ships around, not even freighters. The shuttles were, however, obviously placing material into two cargo pods.

The mothership's commander concluded that the miners were obviously loading the pods with the ores they were collecting, and given the location of the mining effort in the desolate system, the ores must be extremely valuable. It was clear that eventually a ship would arrive to pick up one or both of the pods, perhaps dropping off additional pods to be filled as they were emptied of supplies to support the miners.

Aware of when the raid he was supporting was due to return, the mothership commander decided to attack the mining operation and steal the cargo pods. While his officers counseled against doing so, the commander could not resist the urge to go on one more raid himself, something denied him since his selection to command the mothership. He ordered the remaining supplies in two of his cargo pods transferred to the other two pods, then dropped the two empty pods reasoning the value of the two pods he was about to capture would more than make up for the lost pods.

Preparations made, he ordered another sweep for any sign of a ship moving within the asteroid field or approaching from outside it. The mothership then moved in, scattering the shuttles.

The commander's analysis of the situation was correct as far as it went. The miners were indeed filling the cargo pods he had found with valuable ores and were working on a trading contract. The pods would indeed be picked up by a freighter, but the commander had not really considered what kind of base the mining shuttles might be operating from. He had detected no sign of a base or larger unit supporting the shuttles.

The Jindarians were not amused.

(SJ4.1) NUMBER OF PLAYERS: 2; the Paravian player and the Jindarian player.

#### (SJ4.2) INITIAL SETUP

**TERRAIN:** The map is an asteroid field (P3.11).

**PARAVIAN:** Raid Mothership *Cloud Lancer* with two cargo pods on its centerline, in hex 2219 of map B, heading A, Speed Zero, WS-III. See (SJ4.45).

JINDARIAN: Heavy shipyard cruiser Galatax with 6xMeteorite-

## ALTERNATIVE HISTORY SCENARIOS

H2 bombers in an asteroid hex within three hexes of hex 0713 of map B, light cruiser *Rockblaster* in an asteroid hex within three hexes of hex 3305 of map B, both ships heading at the option of the Jindarian player, Speed Zero, WS-III. See (SJ4.46).

**NEUTRAL:** There are two cargo pods in hex 2219 of map B, one facing in direction A, one facing in direction C. See (SJ4.47).

(SJ4.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

#### (SJ4.4) SPECIAL RULES

(SJ4.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The map consists of two maps; the xx30 edge of map A abuts the xx01 edge of B. The Paravian units can only disengage from xx01 edge of map A. The Jindarian units can disengage in any direction. Units which disengage in unauthorized areas are considered destroyed.

(SJ4.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs. Mega packs are not available.

**(SJ4.421)** MRS shuttles may be purchased [up to the limits in (J8.5)] under (SJ4.431).

(SJ4.422) There are no fighters in the basic version scenario [there are bombers (SJ4.46)]. In a variant in which fighters are present and the year is changed to Y172 or later, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters.

(SJ4.423) There are no PFs in the basic version of this scenario. PFs might be added in a variation or as a balance factor even though the year does not normally allow their use.

#### (SJ4.43) COMMANDER'S OPTION ITEMS

**(SJ4.431)** Each ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV with one restriction: no additional boarding parties of any type may be purchased, nor may any boarding parties be converted. See (S3.2) for details and exceptions.

**(SJ4.432)** The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "medium," i.e., Speed 20.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ4.433) Prime teams (G32.0) are not available in this scenario.

**(SJ4.44)** REFITS: No refits of any kind are installed on any ships involved in the basic version of this scenario. In a variation using ships of different empires, refits available to those ships might be installed or left off, perhaps as a balance factor.

**(SJ4.45)** PARAVIAN: The *Cloud Lancer* executed an emergency deceleration, coming to a full stop on Impulse #32 of Turn #0 and is under acceleration limits (C8.4) at the start of the scenario. This was done in order to capture the pods in the hex. The *Cloud Lancer* fired its phasers at various Jindarian shuttles and asteroids during its run in to the pods and while at WS-III it begins the scenario with its phaser capacitors empty in an exception to (S4.13).

(SJ4.46) JINDARIAN: All but one prospecting shuttle on the *Rockblaster* were operating outside the ship when the *Cloud Lancer* attacked. It has only one prospecting shuttle, four admin shuttles and a heavy transport shuttle aboard. The other prospecting shuttles were destroyed by the *Cloud Lancer*. The

## **ALTERNATIVE HISTORY SCENARIOS**

*Galatax* has an external bomber base (R16.FB2) with six Meteorite-H2 bombers. The bombers may not be launched before Impulse #1 of Turn #1 in an exception to (S4.13). The Jindarian player may select any allowed options for the unlabeled boxes on the *Rockblaster* except special sensors or barracks.

(SJ4.47) PODS: The pods are neutral and may be picked up by either side, including being docked to the *Cloud Lancer* as normal pods. The Jindarian player cannot fire on the pods to keep them out of the Paravian's hands as the Jindarians have a contract for the pods to be used in trade with a local business interest, which may have been Orion pirates. Note that the Paravian ship must pick up both of the pods or neither of them since it cannot operate with a pod under only one wing.

(SJ4.5) VICTORY CONDITIONS: If the *Cloud Lancer* disengages by exiting from the xx01 edge of map A crippled with both cargo pods the Paravian player wins a marginal victory (S2.3). The Paravian victory level is raised by one level:

if the Cloud Lancer is not crippled,

by one for each of the cargo pods it carries off with it, not counting the two cargo pods it begins the scenario with,

by one for destroying a Jindarian ship,

by two if a Jindarian ship is captured and successfully exited off of the map.

Lower the Paravian victory by one level for each of the original cargo pods lost.

The Paravian player suffers a crushing defeat if the Jindarians destroy the *Cloud Lancer*, and a devastating defeat if they capture the *Cloud Lancer*.

The Jindarian player wins a decisive victory if the *Cloud Lancer* is destroyed, and an astounding victory if the *Cloud Lancer* is captured. The Jindarian victory is reduced one level for each Jindarian ship destroyed, and by two levels for each Jindarian ship captured and disengaged off of the map at the end of the scenario.

(SJ4.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

**(SJ4.61)** Replace the *Cloud Lancer* with a Klingon B10T. In this option the B10T will not have any cargo pods docked. The B10T is, however, much more heavily armed and will be a more difficult fight for the Jindarians. It will still begin the scenario under the (SJ4.45) restrictions.

(SJ4.62) Allow both sides reinforcement. Before Energy Allocation on Turn #3 place a Paravian CA in hex 0101 of map A, heading C and a Jindarian LCS in hex 4201, heading E, both ships are Speed Max, WS-III. These ships have no direct effect on the victory conditions, i.e., if either is destroyed or captured the victory levels are not modified.

**(SJ4.63)** For a smaller and faster scenario, replace the raid mothership with a tug (with no pods at start). Replace the heavy shipyard cruiser with a light shipyard cruiser with no bombers.

(SJ4.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ4.71) Change the Jindarian light cruiser to a heavy cruiser. (SJ4.72) Replace one of the cargo pods that starts on the *Cloud Lancer* with a battle pod, or both of them with self-defense pods. (SJ4.73) Add one or two fast patrol ships or interceptors on casual mech-links to one side.

#### (SJ4.8) TACTICS

**PARAVIAN:** You can dock to both of the cargo pods (using tactical maneuvers to align with the second one), but if you do, you will be facing in the wrong direction to run when you are able to start moving. That is how you get the big victory. The bombers have enough combined firepower to drop a shield and

do some damage, so do not try to just ignore them. If you can get up to speed, you can leave all of them in your wake, but getting that second pod will give them time to get between you and your exit direction. Still, if you can engage one ship at a time, you might manage a board to capture attempt, but remember that while your boarding parties are away, theirs may board you.

JINDARIAN: Your forces are spread out and slower than the Paravian when he gets up to speed. You need to plan your intercept carefully with both your own and his acceleration rates. You need to pin him against a map edge and hit him with everything you have. If you can get your ship together, you might consider a boarding attempt, but you will need all of your boarding parties and the militia to succeed.

**HISTORICAL OUTCOME:** The *Cloud Lancer* was heavily damaged, but escaped with both of the cargo pods.

## (SJ5.0) WITHDRAWAL UNDER FIRE



(Y177)

by Bill Schulz, New York

The Paravians were evacuating their troops from the Gorn colony world of Geron when a Gorn task force slipped through the fighting at the front and intervened.

(SJ5.1) NUMBER OF PLAYERS: 2; the Paravian player and the Gorn player.

#### (SJ5.2) INITIAL SETUP

TERRAIN: Class M (P2.21) planet in hex 2215 of map A.

- **GORN:** BC *Penticon*, HDD+ *Talonax*, BDD+ *Skegos*, enter anywhere along the xx30 edge of the map B, heading A, B, or F, Speed Max, WS-III. The ships may all enter from a single hex or one ship in each of three different hexes, or any variation.
- **PARAVIAN:** CAa *Storm Rider*, DW *Rain Song*, DW *Rain Singer*, set up after the Gorn player indicates the hex or hexes through which his ships will enter map B, in any hex of the xx01 edge of map B. The ships may all be placed in a single hex or one ship in each of three different hexes, or any variation.
  - F-TH *Dirt Smasher*, F-TL *Ground Hater*, F-TL *Ground Rage*, F-TS *Soil Spoiler*, F-TS-*Soil Smasher*, and F-TS *Soil Burner* set up one ship each in a hex adjacent to the planet in hex 2215 of map A, all in standard radius-1 clockwise orbits (P8.0), WS-III. See (SJ5.45). 550

(SJ5.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

#### (SJ5.4) SPECIAL RULES

(SJ5.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The map consists of two maps; the xx30 edge of map A abuts the xx01 edge

## **STAR FLEET BATTLES**

of B. The Paravian units can only disengage from xx01 edge of map A. The Gorn units can only disengage from the xx30 edge of map B. Units which disengage in unauthorized areas are considered destroyed.

(SJ5.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs. Mega packs are not available.

(SJ5.421) MRS shuttles may be purchased [up to the limits in (J8.5)] under (SJ5.431).

(SJ5.422) There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters. (SJ5.423) There are no PFs in this scenario.

(SJ5.43) COMMANDER'S OPTION ITEMS

**(SJ5.431)** Each ship except the Paravian troop ships on map A, can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. See (S3.2) for details and exceptions.

(SJ5.432) The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "medium," i.e., Speed 20.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

**(SJ5.433)** If players wish to use the optional rules for prime teams (G32.0), the Gorn BC and the Paravian CA each normally carry one such team.

(SJ5.44) REFITS are as given in (SJ5.2).

**(SJ5.45)** EVACUATION: Each hexside of the planet has 200 Paravian ground combat boarding parties. These ground combat boarding parties cannot be used for offensive boarding actions, to include hit-and-run raids. They can defend the ship they are on if it is boarded, but cannot be assigned as guards, except under (G28.343), and must be placed in barracks boxes. These boarding parties must be brought up from the planet's surface. While all are counted as boarding parties, their number also includes various support troops and administrators.

**(SJ5.451)** As this is an evacuation, each Paravian troop ship can carry double its normal allowed complement of boarding parties. A barracks box can hold 20 rescued boarding parties. The Paravian player should number the barracks boxes on the troop ships and keep track of the number of boarding parties in each one in the event they are destroyed (G28.33).

(SJ5.452) All troop ships in this scenario begin with no boarding parties of their own aboard (so getting some

aboard to defend them from Gorn boarding parties is probably a good idea).

(SJ5.453) Troops may be evacuated from the planet by transporter or shuttle, but only troops leaving the map aboard a ship (whether a troopship or a Paravian warship) count for victory purposes. (SJ5.454) Half of boarding parties killed in barracks boxes still count as



## **ALTERNATIVE HISTORY SCENARIOS**

rescued under (G9.23) unless the ship is destroyed.

(SJ5.5) VICTORY CONDITIONS: Victory is based solely on the number of Paravian boarding parties on the planet successfully moved off the map on a Paravian ship.

Number	Paravian	Gorn
Saved	Victory Level	Victory Level
1,050+	Astounding Victory	Devastating Defeat
950-1,049	Decisive Victory	Crushing Defeat
850-949	Substantial Victory	Brutal Defeat
750-849	Tactical Victory	Tactical Defeat
650-749	Marginal Victory	Marginal Defeat
550-649	Draw	Draw
450-549	Marginal Defeat	Marginal Victory
350-449	Tactical Defeat	Tactical Victory
250-349	Brutal Defeat	Substantial Victory
200-249	Crushing Defeat	Decisive Victory
199 or less	Devastating Defeat	Astounding Victory

(SJ5.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ5.61) Reverse the roles, replacing the Paravian force with a Gorn BC and two BDDs, and the Gorn force with a Paravian CA, CW, and DW.

(SJ5.62) Add a war destroyer scout to each side.

**(SJ5.63)** For a smaller and faster battle, reduce the number of boarding parties to be rescued to 360 (60 on each hexside of the planet) and use only the three small troop freighters. Delete the Paravian heavy cruiser and the Gorn battlecruiser. The victory levels run from 59, 88, 117, 146, 175, 204, 233, 262, 291, 220, to 249+.

(SJ5.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ5.71) Change the Paravian CA to a CC.

(SJ5.72) Replace the Gorn BDD with an HDD.

(SJ5.73) Delete a refit from one or more ships.

#### (SJ5.8) TACTICS

**GORN:** Get past the Paravian ships and hit the troop transports as quickly as you can. The big ones will be harder to kill, but may take more boarding parties down with them.

**PARAVIAN:** Keep the Gorns away from the troop ships and use their transporters and shuttles to bring up the troops as quickly as you can; see (G8.33) and (G9.142). Once a troop ship is loaded, you will need to decide if it should stick around to use its transporters to help beam people to the other ships, or leave. Break orbit immediately, but stay close to the planet to operate your transporters. By getting under way at once you will be able to accelerate towards the map edge all the sooner and faster. If a ship is going down, keep (D21.3) in mind.

**HISTORICAL OUTCOME:** The heroic sacrifice of the three Paravian ships allowed all but one of the troopships to escape with 856 boarding parties. (The *Soil Burner* was destroyed.) The three Gorn ships suffered some damage, and the captain of the *Penticon* (the task force commander) was relieved of command for failure to push the issue and allowing himself to be distracted by the glory of destroying Paravian ships over stopping the evacuation.

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## **ALTERNATIVE HISTORY SCENARIOS**

## **STAR FLEET BATTLES**

## (SJ6.0) MARAUDERS AND RAIDERS



#### (Y175)

by Andy Levy, Television

War is difficult enough when there are two sides, but there can be more than two sides in a given conflict. Prior to the arrival of the Andromedans, the most frequent third party in a war in the Alpha Octant was the Orion pirates. As might be expected, the Orions tended to avoid combat zones, where there were generally more warships than in the regions further from the fighting. Thus, short of mercenary squadrons, there were relatively few "conflicts of interest" between the Orions and the empires. There were always the exceptions.

A case in point occurred in Y175 when an Orion captain learned that a particular convoy was going to be carrying items of great interest. The convoy would be well away from the fighting front, and within his ship's area of operations. The escort was going to be weak, not because ships were not available, but because the Gorns were hoping that the convoy would go unnoticed.

What the Orion did not know was that Paravian intelligence had also gotten wind of the convoy, and had decided that it was important enough to risk a raid by a fast cruiser.

The Gorn convoy commander, on the other hand, was hoping to avoid any trouble. When he detected the approach of the Orion ship, he turned towards the front and called for help (there were more warships in that direction than elsewhere). His expression when the ship detected approaching from the front proved to be Paravian can only be imagined.

(SJ6.1) NUMBER OF PLAYERS: 3; the Paravian player, the Orion player, and the Gorn player.

#### (SJ6.2) INITIAL SETUP

- **PARAVIAN:** CF *Storm Killer*, set up anywhere along the xx01 map edge, heading C, D, or E, Speed Max, WS-III.
- **ORION:** BR *Seven of Clubs*, set up anywhere along the xx30 map edge, heading A, B, or F, Speed Max, WS-III.
- **GORN:** F-L with ducktail *F#106*, F-S with LASH skid *F#99*, F-S with type-2 self-defense skid *F#128*, FF+ *Killer*, and FF+ *Masher*, set up anywhere within two hexes of hex 2215, heading A, Speed 10, WS-III.

(SJ6.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #10.

#### (SJ6.4) SPECIAL RULES

**(SJ6.41)** MAP: Use a floating map. The Paravian units can only disengage in directions A, B, or F. The Orion units can only disengage in directions C, D, or E. The Gorn units can disengage in any direction. Units which disengage in unauthorized directions or areas are considered destroyed.

(SJ6.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs. Mega packs are not available.

(SJ6.421) MRS shuttles may be purchased [up to the limits in (J8.5)] under (SJ6.431).

(SJ6.422) There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters. (SJ6.423) There are no PFs in this scenario.

#### (SJ6.43) COMMANDER'S OPTION ITEMS

**(SJ6.431)** Each ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. See (S3.2) for details and exceptions.

**(SJ6.432)** The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "medium," i.e., Speed 20.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ6.433) Prime teams (G32.0) are not available.

(SJ6.44) REFITS are as given in (SJ6.2).

(SJ6.45) FIRING AT THE GORNS: The Orion and Paravian ships can only fire at the Gorn ships if some conditions are met.

(SJ6.451) The Orion ship captain is also a Gorn. The Paravian captain will seek to destroy his ship first and cannot fire on any ship in the Gorn convoy until the Orion ship has been destroyed or has disengaged, or is more than 20 hexes from the convoy. The Paravian ship can fire at plasma torpedoes launched by the Gorns or any shuttle he believes on his own discretion might be a suicide shuttle.

**(SJ6.452)** The Orion ship is here for the loot in the freighter with the self-defense skid. He can fire on the convoy any time he wishes, but must keep in mind that the Paravian ship will try to attack him first, thus he cannot fire on the Gorn convoy if the Paravian ship is within 10 hexes of his ship.

**(SJ6.46)** DISENGAGEMENT: At the end of Turn #10 if the Paravian and Orion ships have not disengaged, arriving Gorn reinforcements will destroy them.

**(SJ6.47)** OPTION MOUNTS: Historically the Battle Raider had a plasma-S torpedo and a phaser-1 in its three nose option mounts and plasma-F torpedoes in its wing option mounts.

(SJ6.48) GORN ESCAPE: Any Gorn ship that is more than 25 hexes from the Paravian and Orion ships may declare it has disengaged and be removed from the map.

#### (SJ6.5) VICTORY CONDITIONS:

PARAVIAN: If the freighter with the self-defense skid is destroyed and the *Storm Killer* successfully disengages, the Paravian player has won irrespective of any other outcomes.

ORION: If the freighter with the self-defense skid is captured and moved to where it and the *Seven of Clubs* are more than 20 hexes from any other Gorn ship, the Orion has won.

GORN: If neither the Paravian or the Orion accomplish their victory objectives, you have won, even if you lost all of your ships.

(SJ6.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ6.61) Move the action to the other side of the Alpha Octant by replacing the Paravian CF with a Carnivon CF. The Orion BR's option mounts will be two disruptor-30s with DERFACS and one UIM module, one phaser-1, and type-C drone racks in the wing options. The convoy will have two Kzinti police corvettes rather than Gorn frigates.

(SJ6.62) While historically the Paravians and Orions knew which ship had the cargo that was the object of their missions, they

might not have. Require each player to gather at least 10 points of lab information on a given freighter to determine if it is the one. The Gorn player should randomly select one by drawing one counter from three counters numbered 1 to 3 from a cup and after looking at it placing it face down on the table so that the other players can examine it when they have the information. A "one" is the small freighter with self-defense skid. A "two" is the small freighter with the LASH skid. A "three" is the large freighter. Once a player has the information needed on a freighter the Gorn player tells him privately if it is the right freighter or not, keeping the information secret from the third player.

(SJ6.63) For a smaller battle, delete one of the Gorn frigates, downgrade the Paravian CF to a CWF and the Orion BR to a CR (Plasma-S and two plasma-Fs).

(SJ6.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ6.71) Change the large freighter to a large *armed* freighter (phaser).

(SJ6.72) Increase or decrease the number of turns.

(SJ6.73) Delete or add additional skids to the Gorn ships.

#### (SJ6.8) TACTICS

**PARAVIAN:** Do not dilly-dally; press in and make that Orion either stand and fight or leave. Then deal with the convoy. Remember, you only have to destroy one freighter and get out of Dodge.

**ORION:** Hit the Paravian and make him leave, then grab the freighter in a tractor and run, dealing with any escort that gives chase.

**GORN:** Stay closed up and keep moving. If you see a weak or down shield, put some direct fire into it. Hold your plasma-Fs as a final deterrent to a closing opponent.

**HISTORICAL OUTCOME:** The Paravian and Orion ships tangled with each other, occasionally separating long enough for one or the other to hurl fire at the convoy. For its part, the convoy took every opportunity it could to try to hit a badly damaged or down shield on one combatant or the other, but not to drive either off. The detected arrival of additional Gorn ships finally prompted the two raiders to disengage, much to the relief of the Gorns.



#### (Y155)

by Jedidiah Bila, New York

in Y155 a Paravian task force suffered a serious reverse while raiding into Inter-Stellar Concordium space. The task force split up as it made its way back to bases and planets in home space for repair and resupply.

As two of the ships were approaching the minor colony world of Winddream, they were shocked as an Inter-Stellar Concordium force drove in to raid the planet.

Short on supplies themselves, the two ships had no choice but to move to the rescue.

## **ALTERNATIVE HISTORY SCENARIOS**

(SJ7.1) NUMBER OF PLAYERS: 2; the Paravian player and the Inter-Stellar Concordium player.

#### (SJ7.2) INITIAL SETUP

TERRAIN: Class M planet (P2.21) in hex 2215.

- **PARAVIAN:** DD *Fire Sword* and DD *Fire Wing*, both within two hexes of hex 3230, heading F, Speed Max, WS-III. See (SJ7.45). Three quantum wave torpedo defense satellites under player control (R1.15D) one each in hexes 2214, 2116, and 2316 in radius-1 clockwise orbit.
- ISC: DD *Demrok*, FF *Farkel*, and FF *Frandel*, all in hex 0130, heading B, Speed Max, WS-III.

(SJ7.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #8.

#### (SJ7.4) SPECIAL RULES

**(SJ7.41)** MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Paravian units can only disengage from the xx01 map edge. The Inter-Stellar Concordium units can only disengage from xx30 map edge. Units which disengage in unauthorized areas are considered destroyed.

(SJ7.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs. Mega packs are not available.

**(SJ7.421)** No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, they may be purchased [up to the limits in (J8.5)] under (SJ7.431).

(SJ7.422) There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters. (SJ7.423) There are no PFs in this scenario.

#### (SJ7.43) COMMANDER'S OPTION ITEMS

(SJ7.431) Each Inter-Stellar Concordium ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. Each Paravian ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 5% of its combat BPV. See (S3.2) for details and exceptions.

(SJ7.432) The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, drone speeds will depend on the year selected for the scenario.

(SJ7.433) Prime teams (G32.0) are not available in this scenario.

(SJ7.44) REFITS: No ship involved in this action has been refitted in any way.

(SJ7.45) PARAVIAN SHIPS: The Paravian ships are returning from an unsuccessful raid. They are limited in available Commander's Options (SJ7.43) and cannot move faster than Speed 17 for the duration of the scenario. Remove a total of six boarding parties from the ships; the Paravian player can choose which six and all may be from one ship or divided between the two ships. The few available Commanders Option Points might replace these. One of the ships has only one shuttle. Each ship can only repair one box (note that shields are composed of "boxes") during the scenario by any means.

(SJ7.5) VICTORY CONDITIONS: The Inter-Stellar Concordium wins if they score 30 points of damage on each hexside of the planet and disengage before the end of Turn #8. Any Inter-Stellar Concordium ship that does not disengage before the end of Turn #8 is considered destroyed by arriving Paravian reinforcements.

## **ALTERNATIVE HISTORY SCENARIOS**

The Paravian player wins if one Inter-Stellar Concordium ship is destroyed, irrespective of the fate of the planet.

Note that it is possible for both sides to win, or for both sides to lose. There is no "draw."

(SJ7.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ7.61) Replace the Inter-Stellar Concordium ships with a Gorn Confederation force of a destroyer and two frigates, none of which have been refitted.

**(SJ7.62)** The Inter-Stellar Concordium is here to destroy specific facilities on the planet's surface. If 10 points of lab information is gathered on a given hexside, the Inter-Stellar Concordium can use precise fire to target the installation. Only 10 points of damage need be scored on such a hexside to accomplish the task.

**(SJ7.63)** For a larger battle, add a Paravian light cruiser to the Paravian force and a second destroyer to the Inter-Stellar Concordium force. The Paravian light cruiser suffers from all of the limitations in (SL7.45) in addition to those suffered by the destroyers, i.e., the light cruiser by itself is short six boarding parties in addition to the six boarding parties missing from the two destroyers.

(SJ7.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ7.71) Change one of the Inter-Stellar Concordium frigates to a frigate leader.

(SJ7.72) Replace the Inter-Stellar Concordium destroyer with frigate leader.

(SJ7.73) Delete or add a frigate to the Inter-Stellar Concordium force.

#### (SJ7.8) TACTICS

**PARAVIAN:** Protect the planet. Make the Inter-Stellar Concordium waste their torpedoes on your ships rather than launching them at the planet. Get to the planet and stand between it and the aggressors. Keep a wall of quantum wave torpedoes going at them so they do not have time to think.

**INTER-STELLAR CONCORDIUM:** The quantum wave torpedoes of the defense satellites would be a nuisance by themselves, but add in the phaser-1s of those destroyers and then you can expect some real harm. You do not have time to devote to killing the destroyers when you know at least one of them is going to have two wild weasels. So keep your focus on the planet and try to hit what they are covering on your way out.



## HISTORICAL OUT-

**COME:** The addition of the quantum wave torpedo launchers of the two Paravian destroyers enabled the defenses of the planet to drive off the I n t e r - S t e I I a r Concordium ships with minimal damage.

## STAR FLEET BATTLES (SJ8.0) MARAUDERS AND SNAKES



(Y190)

by Elizabeth MacDonald, New York

Not all worlds within a given empire are part of that empire. Often there are planets in systems where no one has had time to do a survey yet. There are thousands of unexplored systems, and even more planets, inside every empire.

The planet of Peron was one such case. Located in what at another time would have become Inter-Stellar Concordium space, it was on the far end of the Paravian empire and marked for future exploration. Then in Y190 signals were detected coming from the planet, signals indicating that the planet might have been a base for the "Lizard Kings." Who knew what technological wonders one might find?

In Y190 a Paravian ship, the nearest one available, arrived to establish dominion over the planet, only to find an Andromedan vessel bent on the same task.

**(SJ8.1) NUMBER OF PLAYERS:** 2; the Paravian player and the Andromedan player. The defense satellites operate under automatic rules (R1.15D) and are not controlled by either player. Ground-based defenses use the same automatic control rules as the defense satellites.

#### (SJ8.2) INITIAL SETUP

TERRAIN: Class M (P2.21) planet in hex 2215.

PARAVIAN: CCa *Storm King*, sets up in hex 0101, heading C, Speed Max, WS-III.

ANDROMEDAN: Python *Amadeus* sets up in hex 3201, heading E, Speed Max, WS-III.

DEFENSES: These include two layers:

- DEFENSE SATELLITES: Five plasma-F defense satellites in standard orbit: three at radius-1 in hexes 2214, 2116, and 22316; two at radius-2 in hexes 2213 and 2217. Defense satellites are always at WS-III.
- GROUND BASES: There are six ground-based phaser-4s, one on each hexside of the planet. See (SJ8.47).

(SJ8.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #7.

#### (SJ8.4) SPECIAL RULES

**(SJ8.41)** MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. Any ship can disengage by leaving the map in any direction.

(SJ8.42) SHUTTLES AND PFs: All shuttles and PFs have warp booster packs, and all shuttles are advanced types. Mega packs are not available.

**(SJ8.421)** MRS shuttles may be purchased [up to the limits in (J8.5)] under (SJ8.431).

**(SJ8.422)** There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters.

## ALTERNATIVE HISTORY SCENARIOS

(SJ8.423) There are no PFs in this scenario. (SJ8.43) COMMANDER'S OPTION ITEMS

(SJ8.431) The following ships have the following special equipment in lieu of purchasing Commander's Option Items:

The Python has 10 additional boarding parties, two heavy weapons squads, two commando squads, has converted two boarding parties to heavy weapons squads, and has two T-bombs.

The Storm King has four T-bombs.

**(SJ8.432)** The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "fast," i.e., Speed 32.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ8.433) Prime teams (G32.0) are not available in this scenario.

(SJ8.44) REFITS are as listed in (SJ8.2).

**(SJ8.45)** TERRAIN: The planet Peron is a water world, perhaps due to fluctuations of its sun having melted the polar ice. There is literally only one landmass, and that landmass, while covered in vegetation and with native fauna with little genetic diversity, is extremely rugged. It is not possible to land anything larger than a shuttle. The landmass is located on hexside 2215/2216. There is one ground combat location (D15.1) with three control stations (D15.11).

(SJ8.46) DEFENSE SATELLITES: The players will have to cooperate in the operations of the defense satellites under (R1.15D). The defense satellites will treat the player's ships as a single opposing "side." Whenever the instructions for the operations of the defense satellites indicate a given satellite should engage a ship, but both ships are available as targets, roll a die with odd indicating it will fire/launch at the Paravian ship and even indicating it will fire/launch at the Andromedan ship.

(SJ8.47) GROUND BASES: These ground bases cannot fire until Turn #8 (it takes time for them to rise up through the depths of the planet's oceans). From Turn #8 on they operate under the rules of (R1.15D) and (SJ8.45) as if they were defense satellites (except they will not orbit). They cannot be fired on by any means prior to Turn #8, but from Turn #8 on they can be engaged normally. These stations are fully automated and have no crews, but cannot be boarded by any means, not even by ground assault.

(SJ8.5) VICTORY CONDITIONS: If at the end of Turn #7 one player has control of all three control stations of the Ground Combat Location, that player has won the scenario as he will be able to access a hidden control room and shut down the ground bases. If no player has control of all three control stations, both have lost the scenario and must withdraw.

(SJ8.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ8.61) Replace the Paravian ship with an appropriate cruiser of the same approximate BPV from another empire.

(SJ8.62) Continue the scenario after Turn #7 with the ground bases firing on the ships as well. The scenario ends when one player has uncontested control of the ground combat location, i.e., the other player has withdrawn all of his forces either off the planet or into the remote areas, or they have all been destroyed. (SJ8.63) For a larger scenario, add a second Python to the Andromedans and a heavy cruiser to the Paravians.

(SJ8.64) Use different defense systems, e..g., ground-based defense photons or drone defense satellites, etc.

(SJ8.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ8.71) Change the command cruiser to a heavy cruiser.

**(SJ8.72)** Replace the command cruiser with a heavy battlecruiser.

(SJ8.73) Allow one side to purchase commander's options above what he is limited to.

#### (SJ8.8) TACTICS

**PARAVIAN:** You have an edge in transporters, but getting to the planet first can mean running through a lot of plasma torpedoes and taking a lot of damage. However, you do not have a lot of time to try to finesse things. You are going to have to accept some damage to get to the planet to land troops. You need to land as many as you can before you need to open the range and catch your breath. Try to keep a wall of quantum wave torpedoes between you and the Andromedan.

**ANDROMEDAN:** See if you can get your good buddy the Paravian to take more than his fair share of plasma torpedoes and remember you can beam down troops without lowering a shield. So try to be in position to hit his shield when he lowers it to beam down his boarding parties. Your panels can absorb a certain amount of damage without harm, but there is not a lot of time to play panel games.

**HISTORICAL OUTCOME:** In the end, the greater number of transporters aboard the *Storm King* enabled it to take command of the landmass. The ship was heavily damaged. The *Amadeus* withdrew after one last firing pass. Unfortunately, the *Storm King's* scientists soon discovered that prolonged exposure to the instability of the system's sun was causing the technology to "meltdown" (one of the reasons the systems had started sending the signals detected), and nothing of it was recoverable.

# (SJ9.0) A THROWING OF STONES



#### (Y181)

by Shawn Hantke, Star Fleet

The asteroid ring of the Zuvala system had been mined by the Carnivons for 20 years. During that time they shared the field with elements of a Jindarian caravan. The asteroid field was fairly rich, with enough for all. At least both sides had adopted that attitude. (The Carnivons, like virtually every other Alpha Octant empire, had learned the hard way not mess with a caravan already dug into an asteroid field, and had not been able to move decisively against the caravan when it arrived.)

Just why the Jindarians, whose various caravans were known more often than not to drive out the local miners when they moved in, chose to coexist peacefully is not known.

In Y181, however, peaceful coexistence began to come to a close as rumors of an exceptionally rich strike on a particularly large asteroid the size of a small moon spread.

(SJ9.1) NUMBER OF PLAYERS: 2; the Carnivon player and the Jindarian player.

## **ALTERNATIVE HISTORY SCENARIOS**

#### (SJ9.2) INITIAL SETUP

TERRÁIN: The map is an asteroid field (P3.11).

#### Small moon (P2.23) in hex 2215.

- SHUTTLES: Once the asteroid field is set up, each player takes turns placing one shuttle in each asteroid cluster until every cluster has two shuttles in it. See (SJ9.46).
- **CARNIVON:** On Turn #3 six Carnivon JK-4 fighters will enter the map anywhere along the 01xx map edge, heading B or C, Speed Max.
  - On Turn #6 six Carnivon KOM bombers will enter the map anywhere along the 01xx map edge, heading B or C, Speed Max.
  - On Turn #7 two Carnivon security skiffs will enter the map anywhere along the 01xx map edge, heading B or C, Speed Max, WS-III.
- JINDARIAN: On Turn #2 six Jindarian Meteor-3 fighters enter the map anywhere along the 42xx map edge.
  - On Turn #7 six Meteor-H heavy fighters enter the map anywhere along the 42xx map edge.
  - On Turn #8 six Meteorite-HB2M heavy bombers enter the map anywhere along the 42xx map edge.
  - On Turn #9 two Jindarian Fireball Interceptors enter the map anywhere along the 42xx map edge.

(SJ9.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #13.

#### (SJ9.4) SPECIAL RULES

**(SJ9.41)** MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Carnivon units can only disengage from 01xx edge of the map. The Jindarian units can only disengage from 42xx edge of the map. Units which disengage in unauthorized areas are considered destroyed.

(SJ9.42) SHUTTLES AND PFs: All shuttles and PFs have warp booster packs. All shuttles are advanced types. Mega packs are available.

**(SJ9.421)** No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, they may be purchased [up to the limits in (J8.5)] under (SJ9.431).

(SJ9.422) If using electronic warfare fighters, one bomber or heavy fighter can be configured as an electronic warfare unit (R1.F7A).

(SJ9.423) The two Fireball interceptors (XL5 and XL7) are standard combat types.

#### (SJ9.43) COMMANDER'S OPTION ITEMS

(SJ9.431) Commander's Options are not available in the basic version of this scenario.

(SJ9.432) The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "fast," i.e., Speed 32.

All death bolts are "fast," i.e., Speed 32.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ9.433) Prime teams (G32.0) are not available in this scenario.

(SJ9.44) REFITS do not apply to any of the units involved in this scenario except that all shuttles are advanced types (J17.0). (SJ9.45) SHUTTLES: After the shuttles are placed, each player alternates selecting a shuttle as belonging to "his" side. All shuttles are prospecting shuttles, and all have their prospecting cannon armed at the start of the scenario. Each shuttle will begin the scenario with the facing in which the player placed it on

## **STAR FLEET BATTLES**

the map. All shuttles begin the scenario at Speed 1.

(SJ9.5) VICTORY CONDITIONS: Whichever player has the most shuttles landed on the moon in hex 2215 at the end of the scenario wins. For this purpose a crippled shuttle counts as half a shuttle. Bombers, skiffs, fighters, and interceptors do not count as shuttles.

(SJ9.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

**(SJ9.61)** A third player could be added, perhaps representing an Orion interest also operating in peaceful coexistence in the field. Add an additional shuttle to each asteroid cluster. In this case the first player's reinforcements arrive between hexes 1501 and 2801 with a heading of D. The second player's reinforcements still arrive from the 42xx map edge, and the third player's reinforcements will arrive between 1530 and 2830: six class-4 fighters on Turn #3, six medium bombers with mega packs on Turn #5, and two interceptors on Turn #8.

**(SJ9.62)** For a smaller scenario, have each player place only one shuttle in a given asteroid cluster, and if a player places a shuttle in a given cluster, the other cannot place one there. The players will still choose which of the placed shuttles are theirs, one at a time, before the scenario begins.

**(SJ9.63)** For a larger scenario, extend the time to Turn #20 and on Turn #14 two frigates arrive on each side. Historically, when things escalated to this point the leadership of the two sides managed to agree to a cease-fire and a joint exploration of the moon, which turned out to be utterly worthless.

(SJ9.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ9.71) Change add or delete mega packs from some of the units on side.

**(SJ9.72)** Downgrade the fighters or bombers on one side to an earlier version.

(SJ9.73) Delete or add a fighter or bomber from any group of arriving forces.

#### (SJ9.8) TACTICS

**BOTH:** Get to the moon, occupy it, and kill off as many of your opponent's shuttles as you can before he can get them to the moon. Use your non-prospecting shuttle assets to cover your prospecting shuttles and destroy his. What more need be said?

#### HISTORICAL OUTCOME:

The brief, violent, bloody melee left a reservoir of mistrust that eventually led to several recurrences and revenge killings and saw the asteroid field divided into zones where it was death for members of the other species to tread. A decade later the Jindarians left, and it is not known if the animosity was the cause, or if it was simply in their opinion time to move on.



## ALTERNATIVE HISTORY SCENARIOS

## (SJ10.0) CASTING AGAINST TYPE



#### (Y183)

by Charles Chapel, Star Fleet

The Lyran Star Empire adopted carriers as a means of dealing with both the swarms of faster drones the Kzintis were launching at them (which enabled the Kzintis in fleet battles to overwhelm the expanding sphere generators of even a dreadnought) and the faster and more heavily armed Hydran Stingers. Tactically, the Lyran fighters would launch drones to reduce Kzinti drone swarms into more manageable clusters, or to force Hydran fighters to expend firepower on the drones rather than on Lyran ships.

The Carnivon Hordes had a similar problem, albeit restricted to the Kzintis and some Orion pirates and responded in a similar fashion. Not being allied to the Klingons, the Carnivons went their own way in the development of fighters to help defend their ships from the faster drones being developed.

Both sides having deployed carriers and their attendant fighters, it was inevitable that clashes between carrier groups would occur, but as neither empire was noted for their employment of carriers, such clashes were regarded by analysts as "casting against type."

(SJ10.1) NUMBER OF PLAYERS: 2; the Carnivon player and the Lyran player.

#### (SJ10.2) INITIAL SETUP

- **CARNIVON:** DWV (5xJK-4, 2xHY-3) *Miktoran*, DWA *Melchag*, and FFA *Parakor*, all within two hexes of hex 4002, heading E, Speed Max, WS-III.
- LYRAN: DWVBm (8xZ-YB) *Moonraker*, DWAB+ *Torrent*, 1xBobcat+, all within two hexes of hex 0328, heading B, Speed Max, WS-III.

(SJ10.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #13.

#### (SJ10.4) SPECIAL RULES

(SJ10.41) MAP: Use a floating map. The Carnivon units can only disengage in directions A or B. The Lyran units can only disengage in directions D or E. Units which disengage in unauthorized directions are considered destroyed.

(SJ10.42) SHUTTLES AND PFs: All shuttles and PFs have warp booster packs. All shuttles are advanced types. Mega packs are available only as a balance option.

(SJ10.421) MRS shuttles may be purchased [up to the limits in (J8.5)] under (SJ10.431).

(SJ10.422) If using electronic warfare fighters, one of the JK-4s on the *Parakor* is a JK-4E and one of the Z-YBs on the *Moonraker* is a Z-YE. If not using electronic warfare fighters, they are standard fighters of their respective types. (SJ10.423) The Lyran Bobcat is a standard Bobcat.

(SJ10.43) COMMANDER'S OPTION ITEMS

(SJ10.431) Each ship can purchase additional or special

equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. See (S3.2) for details and exceptions.

(SJ10.432) All drones and death bolts are "fast" (Speed 32). Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

**(SJ10.433)** No ship in this scenario normally carries a prime team (G32.0), but such teams are sometimes assigned to various ships. Players may experiment with prime teams, perhaps as a balance factor.

(SJ10.44) REFITS are as listed in (SJ10.2). The Carnivon DWA and FFA include the Y175 refit.

(SJ10.5) VICTORY CONDITIONS: Victory is determined by the status of the opposing mobile carrier. If the opposing mobile carrier is captured or destroyed, the player wins the scenario. If neither mobile carrier is captured or destroyed, the player who crippled the opposing mobile carrier has won. If the opposing mobile carrier has disengaged by any means, and the remaining player's mobile carrier has not disengaged, even if it is crippled, he has won. If neither mobile carrier has been captured, destroyed, disengaged, or crippled by the end of Turn #13, both players have lost. In the event that at the end of Turn #13 both players' mobile carriers are in the same condition, i.e., each player captured, destroyed, or crippled his opponent's mobile carrier, the scenario is a draw. The fate of the fighters, escorts, and the Lyran Bobcat are irrelevant to the victory conditions.

(SJ10.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ10.61) Replace the Lyran mobile carrier group and PF with a Kzinti mobile carrier group: DWV (8xTADS), AFF, and a Needle. (SJ10.62) Add a frigate scout to each side.

(SJ10.63) For a smaller battle, replace the mobile carrier groups with escort carrier groups.

(SJ10.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ10.71) Use an earlier fighter type for one side, e.g., Z-Ys rather than Z-YBs, or JK-3s and HY-2s.

(SJ10.72) Add mega packs to some of the fighters on one side. (SJ10.73) Replace the escort with a smaller escort.

#### (SJ10.8) TACTICS

**CARNIVON:** Your fighters are intended to stop drone strikes and allow your ships to hammer his. Take out his fighters and then close for the kill. Keep in mind that your death bolts are not likely to overwhelm his defenses, but a death bolt could take out some of his fighters with its spitfire option before immolating itself on one of his expanding spheres. He has too many expanding sphere generators for a death bolt to achieve a hit except as part of an overrun at point-blank range.

LYRAN: Do not forget that your escort has the capability of launching scatter-pack shuttles by using the reload drones for the fighters in its ready racks. Your fighters cannot accept control of seeking weapons they did not launch. The electronic warfare fighter (or a fighter with a seeking weapon control pod) can only accept control of drones launched by the fighters of its own squadron. It is possible to find yourself with more seeking weapons launch capability than you have channels to control them. The fighters can control as many drones as they can launch in a turn. So should close behind a swarm of drones launched the turn before, and then launch more drones to overwhelm the Carnivons.

## **ALTERNATIVE HISTORY SCENARIOS**

**HISTORICAL OUTCOME:** This action was typical of many carrier duels that occurred between the Carnivons and Lyrans during the course of the General War. In this case, a pair of death bolts launched at point-blank range struck the *Moonraker* and forced the Lyrans to disengage. The two opposing fighter groups were mauled and the escorts of both mobile carrier groups were heavily damaged.



#### (Y193)

by Loren Knight, Star Fleet

The asteroid ring of the Zuvala system was an exceptionally rich one. The Carnivons had shared it with the Jindarians for decades, but in Y191 the Jindarians suddenly departed. The Carnivons were quick to move into the areas of the ring that had, since Y182, been the sole province of Jindarian operations. Many of the Jindarian mines on various asteroids were played out, but several were obviously going to continue to be productive. Asteroid #XY974-98 was a major exception. This asteroid was the size of a small moon, and there were extensive Jindarian works left in place. There were seams of the minerals and ores that were particularly needed to produce advanced technology systems.

The Carnivons were quick to place the mines of the asteroid back into operation, and placed a defense station to guard it. More defenses were clearly warranted, but this was the height of the Andromedan War, a war going badly for all of the empires of the Alpha Octant and there were not many resources available outside of the core regions of the empire.

The Andromedans made a move to seize the mines in Y193, and the Carnivons scrambled what ships were available to defend the mines.

(SJ11.1) NUMBER OF PLAYERS: 2; the Carnivon player and the Andromedan player.

#### (SJ11.2) INITIAL SETUP

**TERRAIN:** The entire map is an asteroid field (P3.11). There is a small moon (P2.23) in hex 2215.

- **CARNIVON:** CW *Jantor*, DW *Cadnil* (2xPF+ on mech-links), POL+ *Tor*, POL+ *Vel*, all with 10 hexes in direction B or C from hex 2215, heading E or F, Speed Max, WS-III. The PFs may begin the scenario docked to the *Cadnil* or deployed.
  - MINE: FGB-S (no fighters), GMS, GWS, Carnivon ground missile base [see (R1.28C-19) in *Module C6]*, all linked by a power grid (R1.28P) in hexside 2215/2214, WS-III.
- ANDROMEDAN: Missionary *Theresa*, Cobra *Bomat*, Cobra *Bomag*, Cobra *Bomar*, all with 10 hexes in direction E or F from hex 2215, heading B or C, Speed Max, WS-III. Cobras may begin the scenario aboard the *Theresa* or deployed, or one or two may be aboard the *Theresa* and one or two may be deployed.

## STAR FLEET BATTLES

(SJ11.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged or until the end of Turn #15.

#### (SJ11.4) SPECIAL RULES

**(SJ11.41)** MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Carnivon units can only disengage from the 42xx edge of the map. The Andromedan units can only disengage from 01xx edge of the map. Units which disengage in unauthorized directions or areas are considered destroyed.

**(SJ11.42)** SHUTTLES AND PFs: All shuttles and PFs have warp booster packs. All shuttles are advanced types. Mega packs are not available.

**(SJ11.421)** No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, they may be purchased [up to the limits in (J8.5)] under (SJ11.431).

**(SJ11.422)** There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters. Historically, the fighters of the fighter ground base had not been replaced.

(SJ11.423) The two PFs carried by the *Cadnil* are standard PFs, not variants.

#### (SJ11.43) COMMANDER'S OPTION ITEMS

**(SJ11.431)** Each ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. See (S3.2) for details and exceptions.

**(SJ11.432)** The empires that are involved in this scenario do not use drones. In a variation where a drone-armed empire is used, all drones are "fast," i.e., Speed 32.

All death bolts are "fast," i.e., Speed 32.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

**(SJ11.433)** Prime teams (G32.0) are not available in this scenario.

**(SJ11.44)** REFITS are as listed in (SJ11.2) except that all Carnivon ships have received the Y175 refit.

(SJ11.45) PURPOSE: The Andromedans are here to acquire some of the stockpiled metals from the mine and then destroy it. The Carnivons are not aware of the Andromedan's purpose.

(SJ11.451) The Carnivons cannot land crew units or boarding parties at the mine, or convert any crew units at the mine or on their ships to militia until the turn after the Andromedans land boarding parties.

**(SJ11.452)** The Andromedans can fire at the bases, but the Carnivon player cannot score any damage on the cargo boxes of the GMS unless those are the only boxes it has remaining.

**(SJ11.453)** Once the Andromedans capture the GMS, they can move stockpiled metals by transporter (G25.21) to the *Theresa*. A satellite ship transporter can move cargo from the GMS to the *Theresa's* cargo boxes by (G8.113).

(SJ11.46) ANDROMEDAN BOARDING PARTIES: The Andromedan boarding parties are expendable and do not have to be evacuated if the Andromedans need to retreat if they have filled the *Theresa's* cargo boxes with cargo from the GMS.

(SJ11.5) VICTORY CONDITIONS: The Carnivons win if the scenario ends and the Andromedans have not moved more than 90 points of metal from the GMS's cargo boxes to the *Theresa's* cargo boxes. For every 20 boxes less than 90 aboard the *Theresa* at the end of the scenario, the Carnivon victory level

(S2.3) is raised by one. If the Carnivons destroy the *Theresa* they win an astounding victory.

The Andromedans win if they have more than 90 points of metal on the *Theresa*. Every 20 points of metal above 90 aboard the *Theresa* raises the Andromedan victory level (S2.3) by one for. Destroyed cargo boxes on the *Theresa* do not count (any metal in them is lost when they are destroyed, and no metal can be stored in them unless they are repaired). If all of the ground bases are destroyed, the Andromedan victory level is also raised by one.

Except for the loss of the *Theresa* and the destruction of the ground bases, the loss of any given ship has no effect on the victory conditions.

(SJ11.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ11.61) Replace the Carnivons with a Tholian force of a CW, DD, two POLs, and two PFs on mech-links; the ground missile base will be a ground-based defense phaser-4.

(SJ11.62) For a larger scenario, add a Python to the Andromedan force and two additional war destroyers to the Carnivon force.

(SJ11.63) Add a war destroyer scout to the Carnivon force and an Anaconda to the Andromedan force.

(SJ11.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ11.71) Change one of the Carnivon police ships to a frigate. (SJ11.72) Replace the Missionary with an Infestor, but do not add additional satellite ships.

(SJ11.73) Delete the plus refit from one or both Carnivon police corvettes.

#### (SJ11.8) TACTICS

**CARNIVON**: The asteroids are not really your friends, as they will make it much too easy for the Andromedans to lure death bolts into suicide inside them. Given the slow launch rate of these weapons normally, this pretty much means they are weapons of distraction, and you cannot count on them to score significant damage, except perhaps as focused bursts. Keep in mind that the Missionary is a more significant scout, but is also the major Andromedan ship, so keeping it under death bolt fire will make it difficult for it to provide electronic warfare support to the Cobras. Keep the pressure on until the time runs out.

**ANDROMEDAN:** You are under real constraints. You need to keep the Carnivons away so that they do not interfere with your landing, and you need to destroy the ground bases, which is a diversion of your fire from the Carnivon ships. You are probably going to have to do something about the war cruiser early, as it is the ship that can really hurt you, but once it is out of the way the rest of the Carnivon ships should not be too much trouble. Try to keep some weapons unfired pending the Carnivons dropping a shield to beam reinforcements down to the planet. Make sure you identify any death bolts so you can be sure to destroy them. Try to lure them through asteroids, and remember that an armored death bolt can survive a T-bomb, so do not rely on your T-bombs as a guarantee against them.

**HISTORICAL OUTCOME:** The Andromedans destroyed the mine, but did not manage to capture any of the metal due to the stout resistance by the Carnvions. All the ships involved in this action, including the *Theresa*, were badly damaged, but only the Carnivon fast patrol ships were destroyed.

## **ALTERNATIVE HISTORY SCENARIOS**

## (SJ12.0) A LITTLE KNOWLEDGE



(Y154)

by Xander Fulton, Star Fleet

In Y154 the Carnivons learned of a planned linkup between an Orion pirate and his supplier. Such linkups were common (the Orion would off load stolen goods and pick up supplies so that he did not have to go to a hidden base) since most piracy operations resulted in little or no damage to the pirate ship. (In most cases a freighter had little option but accede to a pirate's demands rather than allowing itself to be shot to pieces for no practical gain.)

With enough advance knowledge, the Carnivons seized on the opportunity to ambush the pirate and the supplier (these were usually freighters themselves operating "lawfully" except when a little illicit behavior was warranted).

A little knowledge is, however, often a dangerous thing.

(SJ12.1) NUMBER OF PLAYERS: 2; the Carnivon player and the Orion player.

#### (SJ12.2) INITIAL SETUP

- **TERRAIN:** Uranus-size gas giant (P2.22) five hexes across centered in hex in hex 2215.
  - There is a ring (P2.223) two hexes from the gas giant and two hexes in thickness.
- **CARNIVON:** DDL *Dalkor*, DD *Pum*, FF *Mobak*, FF *Potik*, set up one ship each in the following ring hexes: 2210, 1713, 2713; set up one ship inside the atmosphere of the gas giant in atmospheric flight in hex 2213, all ships are facing at the player's option, Speed 0, WS-III.
  - Large (captured) freighter *Gladstone* in hex 2012, facing at the player's option, Speed 0, WS-0. See (SJ12.45).
- ORION: LR *Five-No* in hex 1207, heading C, Speed 5, WS-0. LR *Hekawi* in hex 1210, heading C, Speed 5, WS-II. CR *Eight of Clubs* in hex 3329, heading F, Speed 5, WS-I.

(SJ12.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

#### (SJ12.4) SPECIAL RULES

**(SJ12.41)** MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Carnivon units can disengage in any direction. The Orion units can disengage in any direction.

(SJ12.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs. Mega packs are not available.

(SJ12.421) No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, they may be purchased [up to the limits in (J8.5)] under (SJ12.431).

(SJ12.422) There are no fighters in this scenario. In a variant in which fighters are present and the year allows their use, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters)

## **ALTERNATIVE HISTORY SCENARIOS**

for electronic warfare fighters.

(SJ12.423) There are no PFs in this scenario.

(SJ12.43) COMMANDER'S OPTION ITEMS

**(SJ12.431)** Each Carnivon ship except the freighter can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, etc.) up to 20% of its combat BPV, except that no additional boarding parties may be purchased. Each Orion ship can purchase additional or special equipment as Commander's Option Items (e.g., Tbombs, extra, etc.) up to 8% of its combat BPV. See (S3.2) for details and exceptions.

(SJ12.432) All drones are "slow," i.e., Speed 8 or moderate, i.e., Speed 12 Type-II or type-V drones. All death bolts are Speed 12.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ12.433) Prime teams (G32.0) are not available in this scenario.

**(SJ12.44)** REFITS: At the time of this incident, no refits had been installed on any of the involved ships.

(SJ12.45) FREIGHTER: The Gladstone had arrived earlier in order to be in position to resupply the Orion ships. The Carnivons have seized the ship. The ship has supplies needed by the Orion ships, but the Carnivons cannot fire on it unless the Orions have captured it, and the Carnivons have not had time to unlock its self-destruct system (what with eating all those steaks in the freezer). There are four crew units of Carnivons aboard this ship at the start of the scenario, one of which is two boarding parties. These must be drawn from one or more of the Carnivon ships. The freighter's normal crew are prisoners on one of the Carnivon ships and can be ignored. The Orions must recapture the freighter, as they need the supplies on it to reach a friendly base. (SJ12.46) SCENARIO START: The scenario is beginning at the point where the Orions discovered the ruse when the freighter failed to answer a coded security signal. The varied weapons status of the Orion ships reflects the attitudes of their captains, i.e., some are more cautious than others when approaching the rendezvous.

(SJ12.47) ORION OPTION MOUNTS: Historically the *Five-No* had disruptor-22s in all three of its option mounts, the *Hekawi* had a disruptor-15 in its option mount A and type-A drone racks (no reloads) in its wing option mounts, and the *Eight of Clubs* had phaser-1s in all of its option mounts.

(SJ12.5) VICTORY CONDITIONS: The Orions win if they can recapture the freighter and escape with it off the map. Their victory level (S2.13) is increased by one for each Orion ship which also successfully exits the map, and by one for each Carnivon ship destroyed. If they fail to rescue the *Gladstone*, they lose the scenario.

The Carnivons win if the Orions fail to exit the freighter off of the map. The Carnivon victory level is increased by one for each Orion ship destroyed (two for each one captured), and reduced by one for each Carnivon ship destroyed.

(SJ12.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ12.61) Replace the Carnivons with a Lyran force of two destroyers and two frigates.

(SJ12.62) Allow the Orion player to secretly select his own option mounts before the scenario begins.

(SJ12.63) For a smaller battle, delete the Orion Light Raiders and both Carnivon frigates.

## **STAR FLEET BATTLES**

(SJ12.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ12.71) Change the Carnivon destroyer leader to a destroyer. (SJ12.72) Replace the Carnivon destroyer with a frigate, or upgrade a frigate to a destroyer.

(SJ12.73) Add the plus refit to one or more of the Orion ships.

#### (SJ12.8) TACTICS

**ORION:** You are going to have to bust through the Carnivon ships and get troops on the *Gladstone*. Then you are going to have to keep the Carnivons away from it until it can get up to speed (with its acceleration rate!) and get off the map. At that point, just run. Your ships will probably be damaged and there is no glory for a pirate.

**CARNIVON:** You know he has to go for the freighter, but if you pour your Marines on to it he will just take your ships and then take the freighter anyway. Concentrate on the Raider Cruiser first, as it is the biggest threat. Wear them down one by one and victory should be yours.

HISTORICAL OUTCOME: The Carnivons expected to ambush a single Light Raider and were surprised when three pirate ships were detected approaching their ambush. One of the startled junior officers prematurely activated the fire control of the *Mobak*. giving the game away. The Carnivons were further startled when the pirates bore in, unaware of their supply status. The pirate ships desperately needed the supplies on the Gladstone because the Carnivon police in an unrelated operation had located the pirate base that had been supporting their operations, and it was in the process of being abandoned while other "supply" ships were changing their routes. The resulting action was brief, and bloody. More than half of the Carnivon Marines died trying to hold, and later recapture the Gladstone. But the Eight of Clubs successfully disengaged with it, although the Five-No and Hekawi were both destroyed. Of the four Carnivon ships only the Pum was not crippled.



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## ALTERNATIVE HISTORY SCENARIOS

## (SJ13.0) THEY CAME LIKE THUNDER



#### (Y163)

In Y163 the Carnivons assembled three bombardment cruisers to support a series of planned reprisals on Kzinti border bases. (There were far more Kzinti raids than there were Carnivon raids, and the Carnivon raids were designed to curtail the frequency of Kzinti raids on Carnivon convoys.) The attacks were intended to harass the bases of Kzinti raiders. The bombardment ships were detected by the Kzintis. The Kzinti admiralty theorized that if the Carnivon bombardment ships were destroyed, or at least badly damaged, it would curtail Carnivon strikes on Kzinti bases for a while.

The bombardment ships were temporarily vulnerable as they were usually held too far back to be hit by a Kzinti raid. The Kzintis launched a number of attacks designed to disperse the local Carnivon ships, then sent a task force to hit the Carnivon bombardment ships.

(SJ13.1) NUMBER OF PLAYERS: 2; the Carnivon player and the Kzinti player.

#### (SJ13.2) INITIAL SETUP

TERRAIN: Class M planet (P2.21) in hex 2215.

- **CARNIVONS:** CB *Torkan* in hex 2214 facing C, CB *Lorkan* in hex 2316 facing E, CB *Vorkan* in hex 2116 facing F, all in standard clockwise orbit around the planet (P8.0), all are at WS-III, but have not started moving as they were beaming up crew from the planet during previous "turns" before the scenario actually started.
  - PLANETARY DEFENSES: Phaser defense satellites in hexes 2214, 2316, and 2116. Ground-based defense disruptor cannons in hexsides 2215/2214, 2215/2316, and 2215/2116. Planetary defenses are at WS-III.
- **KZINTI:** BC *Starthunder*, CL *Stormcloud*, DD *Hailstorm*, FF *Lightning*, and FF *Nimbus*, all enter the map anywhere along the 42xx map edge, heading E or F, Speed Max, WS-I. They can be any distance apart.

(SJ13.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, have disengaged, or until the end of Turn #10.

#### (SJ13.4) SPECIAL RULES

**(SJ13.41)** MAP: Use a floating map. The planet's location will need to be tracked as the ships will probably maneuver away from it. The Carnivon units can only disengage by distance in directions A or F. The Kzinti units can only disengage by acceleration in directions B or C. Units which disengage in unauthorized directions or areas are considered destroyed.

(SJ13.42) SHUTTLES AND PFs: All shuttles and PFs have warp booster packs. Mega packs are not available.

(SJ13.421) MĀS shuttles may be purchased [up to the limits in (J8.5)] under (SJ13.431).

(SJ13.422) There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one electronic warfare fighter for each squadron of eight or more fighters) for electronic warfare fighters. (SJ13.423) There are no PFs in this scenario.

#### (SJ13.43) COMMANDER'S OPTION ITEMS

**(SJ13.431)** Each ship can purchase additional or special equipment as Commander's Option Items (e.g., T-bombs, extra Marines, etc.) up to 20% of its combat BPV. See (S3.2) for details and exceptions.

(SJ13.432) All drones are "slow," i.e., Speed 8 or "moderate," i.e., Speed 12. All of the Carnivon death bolts are "moderate" speed 12.

Each drone-armed ship can purchase special drones up to the historical percentages appropriate to that empire as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SJ13.433) If players wish to use the optional rules for prime teams (G32.0), the *Starthunder* will normally carry one such team while the Carnivons can be given 25 additional Commander's Option Points to distribute among his forces as desired or to purchase additional units.

(SJ13.44) REFITS: No refits had been installed on any of the ships involved in this action.

(SJ13.5) VICTORY CONDITIONS: The Kzintis win if one or more Carnivon death bolt cruisers is destroyed. The Carnivons win if all three death bolt cruisers survive.

(SJ13.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SJ13.61) Replace the Kzinti force with a Lyran force of a CA, CL, DD, and two FFs.

(SJ13.62) Add a frigate scout to the Kzinti force and co-locate a small ground based warning station co-located with each ground-based defense disruptor cannon.

(SJ13.63) For a smaller battle, use three Carnivon war bombardment cruisers and delete the defense satellites and ground bases. Delete both Kzinti frigates.

(SJ13.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following: (SJ13.71) Change the Kzinti battlecruiser to a strike cruiser. (SJ13.72) Replace the Kzinti destroyer with a light cruiser. (SJ13.73) Add refits to one or more of the Kzinti ships.

#### (SJ13.8) TACTICS

**KZINTI:** Push in and hit them before they start moving. Keep hitting them. This is the only real chance you have to get drone hits, but you probably will not get those in the face of their wild weasels. Expect the death bolts to tie up your phasers, but at least if they use wild weasels they will not be moving and you can hit them again. So do not use all of your drone launch ability at one time.

**CARNIVON:** The thunder is their drones, and you are going to have to figure out how to survive two turns (#1 and #2) without being smashed. By then you should be able to start moving fast enough to evade them and run. The satellites and ground defenses will help some, and getting your death bolts in their faces should tie up some of their offensive firepower and enable you to survive to run.

HISTORICAL OUTCOME: The Kzinti raid was a failure. All three Carnivon ships escaped with some damage. The frustrated Kzintis turned their wrath on the planet before returning to Kzinti space.

by Andy Vancil, Star Fleet

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## ANNEXES

# *MODULE C6* ANNEXES

The Annexes in *Module C6* are, at the time of publication, the most complete version of the annexes applicable to the empires in *Module C6* available in any *SFB* product.

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## ANNEX #3: MASTER SHIP CHART

See separate file on Page 113. The Master Ship Chart, while technically "Annex #3," has never been considered part of "the annexes" as the term is commonly used.

#### ANNEX #3A: MOVEMENT COST AND TURN MODES FOR TUGS AND LTTs

TUG CLASS	0 PODS	1 POD	2 PODS	3 PODS
Carnivon DWT	0.50 B	0.75 D	1.00 D	-
Carnivon FFT	0.33 A	0.67 D	1.00 D	_
Carnivon LTT	0.67 B	1.00 C	1.33 D	_
Carnivon TG	1.00 C	1.00 C	1.50 D	2.00 E
Paravian DWT	0.50 B	0.75 D	1.00 D	_
Paravian FFT	0.33 B	0.67 D	1.00 D	_
Paravian LTT	0.67 B	1.00 C	1.33 D	-
Paravian RBB	2.00 D	2.00 D	2.00 D	2.00 D*
Paravian RMS	1.50 C	1.50 C	1.50 C	1.50 C
Paravian TG	1.00 B	1.00 B	1.50 D	2.00 E

\* This tug, Paravian RBB, can carry four pods or up to four "pod weights," and if doing so its movement cost remains 2.00 and its Turn Mode remains D.

NOTE: The number of pods is the total equivalent weight. Some pods are "double weight." No tug can carry three pods except the Paravian RBB and RMS, (some can only carry one), but many can carry three "pod weights." No tug can carry four pods except the Paravian RBB.

SPECIAL CASES:

Tugs which drop their warp engines are still tugs, i.e., they do not have to drop the pods they are carrying.

#### POD WEIGHTS

**Paravian:** Double Weight Pod: Heavy Carrier Pod [P-VA (R18.68), *Module C6*, towing cost; 0.3333].

**Paravian:** Triple Weight Pod: Space Control Ship Pod [P-SCS (R18.67), *Module C6*, towing cost; 0.6667].

**Paravian:** All other Paravian pods as of this printing are single weight pods with a towing cost of 0.2500.

**Carnivon:** Double Weight Pod: Heavy Carrier Pod [P-VA (R19.63), *Module C6*, towing cost; 0.3333].

**Carnivon:** Triple Weight Pod: Space Control Ship Pod [P-SCS (R19.69), *Module C6*, towing cost; 0.6667].

**Carnivon:** All other Paravian pods as of this printing are single weight pods with a towing cost of 0.2500.

## ANNEX #3B: MASTER PF CHART

See separate file on Page 119. The Master PF Chart, while technically "Annex #3B," has never been considered part of "the annexes" as the term is commonly used.

## ANNEX #4: MASTER FIGHTER CHART

See separate file on Page 120. The Master Fighter Chart, while technically "Annex #4," has never been considered part of "the annexes" as the term is commonly used.

#### NOTES ON ANNEX #4

Note that while the term "fighter" is used below, all fighters are shuttles, as are all bombers, and some of the units on the Master Fighter Chart are shuttles or bombers, but not fighters.

EMPIRE: The empire/nation that operates this fighter.

TYPE: The specific type of fighter.

SIZE: Whether the fighter occupies a single shuttle box, or requires two shuttle boxes. Fighters that are more than size two cannot be based on ships, exception, Jindarians (R16.FB), but only on ground bases specifically built for them. Some size 1 fighters and
some size 2 fighters are larger than others and can only be operated from carriers specifically built to operate them; these are marked with a "+". Previously, double sized fighters were marked with a triangle ( $\Delta$ ) as per (J10.31); this has been superceded by the size column and this symbol is no longer used.

SPEED: Maximum speed of this fighter.

- PHASER: The number, type, and firing arc of this fighter's phasers. All phasers are FA unless noted otherwise.
- DRONES: The number and type of drones (or plasma-Ds and plasma-Ks, or light rail guns) carried by this fighter; see (J4.21) for launching arcs; see (J4.24) for launch rates; see (J4.25) for drone control capabilities.
- DAMAGE: The number of damage points to destroy this fighter. Two-thirds of this number is the required damage to cripple it (J1.33). See (J16.23), (J15.342), and (J14.3).
- SPECIAL: Any unusual characteristics of this unit. Any directfire weapons with unspecified firing arcs have FA firing arcs. See (J4.21) for seeking weapons.
- BPV: The basic point value of this fighter. Under (J1.85) the economic BPV of the fighter is 50% of this amount. The BPV of a fighter does not include warp booster packs (J5.32), but the BPV of a carrier does (J4.753). So if the carrier is present, you essentially get WBP for free.
- YEAR: The year when this fighter type was first available in squadron service. Prototypes might have been in service up to three years earlier; limited numbers up to two years earlier.
- DFR: The dogfighting rating (J7.62) used in dogfights (J7.0). PROD: The module in which the fighter was first published.
- REF: The specific reference number for that fighter within the owning empire's general rules reference number.
- ☆ This fighter carries two chaff packs; all others carry one, except §.
- § This fighter has no chaff packs.
- ↔ Some drone rails on this fighter can be paired to carry a two-space drone; see fighter descriptions.
- EW pods listed here are built-in versions; additional pods can be carried externally. Some of the earliest EW fighters have no built-in pods but can carry them on their pod rails, reducing performance.

#### FIGHTER CLASSES (J4.48)

NOTE: The above system is not used to rate shuttles or bombers.

## ANNEXES

# **ANNEX #5: ABBREVIATIONS**

These are items that apply to Module C6 only.

Bear	Carnivon medium bomber, three models,
BMS	. Paravian battleship raid mothership,
	mothership variant of battleship.
BR-#	Carnivon Bear medium bomber.
СВ	Carnivon death bolt bombardment variant
	of heavy cruiser.
CLL	Light cruiser leader, leader variant of a
	light cruiser.
Crane	Shorthand for Paravian Thundercrane
	superiority fighter used on data tables.
CWB	Carnivon death bolt bombardment variant
	of war cruiser.
DB	SSD designation of death bolt rack.
DC	SSD designation of disruptor cannon.
Death Bolt	Carnivon drone analog
DG-1	Carnivon Dingo heavy fighter
DG-1i	Carnivon intercentor variant of Dingo-1
Da 11	heavy fighter
DG-2	Carnivon Dingo-2 fast heavy fighter
DG-2i	Carnivon intercentor variant of Dingo-2
DQ-21	fact beavy fighter
Dingo	Carnivon beaux fighter
Dirigo Disruptor Cannon	Primary armamont of the Carnivon
Disruptor Carinon.	
Duck	Shorthand for Paravian Thundorduck
Einch	Shorthand for Paravian Thunderfunch.
Ecoured Buret	Warhoad option of death holt
Condor	Shorthand for Daravian Thundargandar
	Shormanu lor Paravian Thundergander
Casaa	Charthand for Derevien Thundergeses
G005e	
ממוו	medium bomber used on data tables.
	Paravian Hummingbird fast patrol ship.
нвр	Paravian phaser-variant of Hummingbird
Lis al Nilana au	last patrol snip.
	Carnivon warp neid interruption device.
Hummingpira	Paravian fast patrol ship, various types
	Including C, F, G, L, M, P, Q, R, S, and
111/ #	WB.
HY-#	Carnivon Hyena assault lighter.
нуепа	Carnivon disruptor-cannon armed assault
	lighter, three models and electronic
	wanare vanants: -1, -1E, -2, -2E, 3,
lookol	dilu -3E. Comiyon gunoriarity fighter four modele
Јаскаг	Carnivon superiority ligner four models
	and electronic warrare variants: -1, -
KO	1E, -2, -2E, -3, -3E, -4, and -4E.
KU	Carnivon Koulak neavy bomber.
Kodiak	Carnivon neavy bomber.
P-DB	Carnivon death bolt bombardment pod.
Р-н	Carnivon nangar poo.
Quali	Shormand for Paravian Thunderquail
	superiority fighter used on data tables.
Quantum wave tor	Denimary weapon of the Paravians.
QWT	Quantum wave torpedo.
каven	Snormand for Paravian Thunderraven
DMO	superiority tighter used on data tables.
RMS	Paraivan raid mothership, variant of
Construct	areadnought.
Songbird	Paravian interceptor, types include F and
Omitting	J.
Spinne	wamead oblion of death polt.

Swan	Shorthand for Paravian Thunderswan
Swan-F	Shorthand for Paravian Thunderswan-F
Swan-Fl	Shorthand for Paravian Thunderswan-Fl
Swan-I	Shorthand for Paravian Thunderswan-I
тс	.Paravian Thundercrane superiority
TCE	.Paravian electronic warfare variant of
TD	Paravian Thunderduck assault fighter.
TDE	Paravian electronic warfare variant of Thunderduck assault fighter.
TF	.Paravian Thunderfinch superiority fighter.
TFE	Paravian electronic warfare variant of Thunderfinch superiority fighter.
TG-A	Thundergoose-A medium bomber
TG-B	Thundergoose-B medium bomber
TG-C	Thundergoose-C medium bomber
TG-H	Thundergander heavy bomber
Thundercrane	Paravian fourth superiority fighter
Thunderduck	Paravian assault fighter
Thunderfunck	Paravian first superiority fighter
Thundergandor	Paravian hoavy bombor
Thundergooso	Paravian modium hombor, throe variants
Thundergoose	-A, -B, and -C.
Thunderquail	.Paravian second superiority fighter.
Thunderraven	.Paravian third superiority fighter.
Thunderswan	.Paravian heavy fighter.
Thunderswan-F	.Paravian fast heavy fighter.
Thunderswan-FI	.Paravian fast interceptor heavy fighter.
Thunderswan-I	.Paravian interceptor heavy fighter.
TQ	.Paravian Thunderquail superiority fighter.
TQE	.Paravian electronic warfare variant of
	Thunderquail superiority fighter.
TR	Paravian Thunderraven superiority
	fighter.
TRE	.Paravian electronic warfare variant of
	Thunderraven superiority fighter.
TS	.Thunderswan heavy fighter.
TSF	.Thunderswan-F fast heavy fighter.
TSFI	.Thunderswan-F fast interceptor heavy
	fighter.
TSI	.Thunderswan interceptor heavy fighter.

## ANNEX #6: COMMANDER'S OPTIONS

#### ITEM OR FUNCTION.....VALUE

#### DRONES

Each extra death bolt .....1.5

#### DROGUES

Replace A-shuttle with DB seeking weapons drogue...10 Replace shuttle with DB seeking weapons drogue.....10 **NOTE:** There is no rebate for trading an advanced admin shuttle for a drogue.

## ANNEX #6A: OTHER OPTIONAL ITEMS AVAILABLE

The costs in this section do not increase the BPV of the ship/unit, but do count within the overall force total. These items are NOT Commander's Options, but "units" that can be purchased in a Patrol Scenario (S8.0) format.

#### ITEM OR FUNCTION...... VALUE

#### WEAPONS, FIRE CONTROL, MISC. ITEMS

Replace shuttle with DB seeking weapons drogue ....10 Replace A shuttle with DB seeking weapons drogue ...10

## ANNEX #7: DATA ON SHIPS

#### ANNEX #7A COLOR OF COUNTERS

EMPIRE	.SHIP	BACKGROUND
Carnivon	Yellow	Green
Paravian	Yellow	Red

#### ANNEX #7B: SHIPS ABLE TO LAND ON PLANETS

Various ships in the game can land on planets by various systems. See (P2.43) for details and instructions.

- GRAVITY: All units able to use the Gravity Landing System (P2.432) are noted as such with a "GL" in their notes column on the Master Ship Chart. If the unit does not have a "GL" note, it cannot land by this method. Note that shuttles, fighters, bombers, PFs, and interceptors and variants thereof cannot land by this method.
- AERODYNAMIC: All units able to use the Aerodynamic Landing System (P2.433) are noted as such with a "AL" in their notes column on the Master Ship Chart. If the unit does not have a "AL" note, it cannot land by this method. In addition to the preceding, the following units can land by this method:
  - All fighters EXCEPT Jindarian fighters. All bombers, EXCEPT Jindarian bombers. All mega fighters EXCEPT Jindarian mega fighters

ENGINE: All units able to use the Engine Landing System (P2.434) are noted as such with a "PL" in their notes column on the Master Ship Chart. If the unit does not have a "PL" note, it cannot land by this method. In addition to the preceding, the following units can land by this method:

- All shuttles including X-MRS, Stinger-X, bombers, mega fighters, sublight shuttles, sublight fighters, sublight bombers.
- BONUS: All units that can land under engine power and Federation saucers receive the 1-5 bonus for crash landing (P2.4311), these are all noted as such with a "LB" in their notes column on the Master Ship Chart. If the unit does not have a "LB" note, it does not receive this bonus. In addition to the preceding, the following also have the crash landing bonus:
  - All shuttles including X-MRS, Stinger-X, bombers, mega fighters, sublight shuttles, sublight fighters, sublight bombers.

#### ANNEX #7D: SYSTEMS DEFINED AS "WEAPONS"

ALWAYS: The following systems are always defined as weapons:

death bolt launchers, disruptor cannons, disruptors, heel nippers, quantum wave torper

quantum wave torpedoes,

**CONDITIONAL:** The systems listed below are considered weapons for purposes of the rule noted in addition to those above:

- (C6.547) Recovery from breakdown: DisDev, probe, web generator, snare.
- (D4.21) Damage Allocation: "Any Weapon": Any listed anywhere in Annex #7D, any shuttle (D4.324).
- (D7.55) Any item listed anywhere in Annex #7D *except* shuttles; see (D7.541).
- (G6.511) Mutiny: DisDev, probe, shuttlecraft, fighter, PFs.
- **SAFETY** Restrictions under (C13.8) include the following (and only the following): death bolt launchers, disruptor cannons, heel nippers,
  - quantum wave torpedoes,
- See (C13.82) for data on drones, anti-drones, mines, fighters, plasma racks, etc.

TACTICAL INTELLIGENCE: No additions since (D17.17).

#### ANNEX #7E: DAMAGE CONVERSION CHART

#### HIT FROM CHART...SCORED ON

Any Weapon ......See Annex #7D, item (D4.21), Dimensional Phase Device. Drone †.....Heel Nipper, Death Bolt. Torpedo †.....Disruptor Cannon, Quantum Wave Torpedo.

†.....Subject to Damage Priority Rule.

Special sensor hits may be scored on weapon hits which are scored on the type of weapon (torpedo, drone, phaser) which the special sensor replaced (G24.17). This varies from ship to ship; see the individual ship SSDs or their descriptions.

Some units may have special exceptions noted in their ship descriptions.

#### (D4.322) DAMAGE PRIORITY RULE UPDATE

- (D4.3222) TORPEDOES: For the purposes of this rule, the priority (for establishing the best type of torpedo) is: plasma-L, light kinetic wave generator, quantum wave torpedo, plasma-G, ion cannon, implosion-M, particle cannon, bioelectric bolts, disruptor cannon-40, disruptor-40, heavy hypercannon, disruptor cannon-30, disruptor-30, boson drill, anti-matter cannon, disruptor cannon-22, disruptor-22, energy howitzer, light hypercannon, plasma vortex launcher, disruptor cannon-15, plasma cannon, disruptor-15, quantum cannon, disruptor cannon-10, disruptor-10.
- (D4.3223) DRONES: For the purposes of this rule, the priority (for establishing the best type of weapon destroyed on drone hit) is: B-rack, light hypercannon, death bolt rack C-rack, plasma-P rack, E-rack, F-rack, class-I mass driver, A-rack, chaff thrower, short range cannon, heel nipper, starbase ADD.

Note: While weapons of a similar type are often shown on one line above, the priority for damage remains top to bottom and left to right. Do not assume that because hellbores and ESGs are on the same line that they are equal in damage priority.

#### **ANNEX #7F: NIMBLE UNITS**

The following units are considered to be nimble for the purposes of (C11.1):  $\label{eq:constraint}$ 

Carnivon police corvette, police carrier All interceptors and PFs including workboats; All shuttles and fighters (including those on a seeking course) including bombers and megafighters;

#### **ANNEX #7G: CARRIER INFORMATION**

PARAVIAN CARRIERS (R18.0)           BB         8         6         1         0         8           BBV         24         6         2         0         24           BCS         6         4         1         0         6           BCV         12         4         1         0         12           CVA         24         4         2         0         24           CVS         12         3         1         0         12           CVT4         24         2         3         0         24           CVTA‡         24         2         3         0         24           CVTA‡         12         2         0         12         2           CVT4         12         2         1         0         12         2           CVT4         12         2         1         0         8         FFV         6         2         1         0         8           FFV         6         2         1         0         6         12         12         12         12         12         12         12         12         12         12	PARAVIAN CARRIERS (R           BB         8         6         1           BBV         24         6         2           BCS         6         4         1           CVA         24         4         2           CVS         12         3         1           CVA         24         4         2           CVS         12         3         1           CVT‡         12         2         3           CVTA‡         24         2         3           CVTA‡         24         2         3           CVTA‡         12         2         1           DWV         8         2         1           DWV         8         2         1           HDW-V         12         2         1           LTV‡         6         2         2           PLV         6         1         1           P-SCS         12         0         2           SDS         12         4         1           TSC‡         12         2         3           CARNIVON CARRIERS (R           BB         8	8.0) 0 0 0 0 0 0 0 0 0 0 0 0 0	8 24 6 12 24 12 24 12 24 12 6 12 6 12 6 1
BB       8       6       1       0       8         BBV       24       6       2       0       24         BCS       6       4       1       0       6         BCV       12       4       1       0       12         CVA       24       4       2       0       24         CVS       12       3       1       0       12         CVT4       24       2       3       0       24         CVTA‡       24       2       3       0       24         CVTA‡       12       2       3       0       24         CVTL‡       6       2       1       0       12         CVTL‡       6       2       1       0       12         DWV       8       2       1       0       12         DWV       12       2       1       rule       12         LTV‡       6       2       2       0       12         DV       6       2       1       0       6         P-V       6       0       1       0       12         SDS	BB       8       6       1         BBV       24       6       2         BCS       6       4       1         CVA       24       4       2         CVA       24       4       2         CVA       24       4       2         CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVT‡       12       2       3         CVT4‡       24       2       3         CVT4‡       12       2       2         CVT↓       6       2       1         DWV       8       2       1         DWV       8       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       0       1         P-SCS       12       0       2         BB       8       4       2         SDS       12       4       2         SDS       12       4       2         CVA       24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 24 6 12 24 12 24 12 6 12 6 12 6 12 6 12
BBV       24       6       2       0       24         BCS       6       4       1       0       6         BCV       12       4       1       0       12         CVA       24       4       2       0       24         CVS       12       3       1       0       12         CVT‡       12       2       3       0       12         CVT4‡       24       2       3       0       12         CVTA‡       24       2       3       0       12         CVTA‡       12       2       0       12       12         CVTL‡       6       2       2       0       12         DWV       8       2       1       0       12         DWV       8       2       1       rule       12         LTV‡       6       2       2       0       12         DV       6       2       1       0       6         P-V       6       0       1       0       12         SCS       12       8       2       0       12         SDS	BBV       24       6       2         BCS       6       4       1         BCV       12       4       1         CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVT4‡       24       2       3         CVTA‡       24       2       3         CVTA‡       12       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV4‡       12       2       2         PLV       6       2       1         P-SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         SDS       12       4       2         CVA       24       6       <	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	24 6 12 24 12 24 12 6 12 6 2 12 6 2 12 6 12 6
BCS       6       4       1       0       6         BCV       12       4       1       0       12         CVA       24       4       2       0       24         CVS       12       3       1       0       12         CVT       12       2       3       0       12         CVTA‡       24       2       3       0       12         CVTA‡       24       2       3       0       12         CVTL‡       6       2       2       0       12         DWV       8       2       1       0       13         DWV       8       2       1       0       8         FFV       6       2       1       0       12         DWV       12       2       1       rule       12         LTV‡       6       2       0       12       12         PLV       6       2       1       0       6         P-V       6       0       1       0       12         SCS       12       8       2       0       12        BBV      <	BCS       6       4       1         BCV       12       4       1         CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVT4‡       24       2       3         CVTA‡       24       2       3         CVTA‡       12       2       1         CVTA‡       6       2       2         CVT↓       6       2       1         DWV       8       2       1         HDW       2       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV4‡       12       2       2         PLV       6       2       1         P-SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 12 24 12 24 12 6 12 6 2 12 6 2 12 6 12 6
BCV       12       4       1       0       12         CVA       24       4       2       0       24         CVS       12       3       1       0       12         CVT       12       2       3       0       12         CVTA‡       12       2       3       0       12         CVTA‡       12       2       3       0       24         CVTA‡       12       2       0       12       2         CVT↓       6       2       1       0       12         DWV       8       2       1       0       8         FFV       6       2       1       0       8         FFV       6       2       1       0       6         LTV‡       6       2       2       0       12         LTV↓       6       2       1       0       6         P-V       6       0       1       0       6         P-V       6       0       1       0       12         SCS       12       4       1       0       12         SDS <td< td=""><td>BCV       12       4       1         CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVTA‡       24       2       3         CVTA‡       12       2       3         CVTA‡       12       2       2         CVTL‡       6       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         CVA       24       6       <t< td=""><td>0 0 0 0 0 0 0 0 rule rule 0 0 0</td><td>12 24 12 24 12 6 12 6 2 12 6 2 12 6 12 6</td></t<></td></td<>	BCV       12       4       1         CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVTA‡       24       2       3         CVTA‡       12       2       3         CVTA‡       12       2       2         CVTL‡       6       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         CVA       24       6 <t< td=""><td>0 0 0 0 0 0 0 0 rule rule 0 0 0</td><td>12 24 12 24 12 6 12 6 2 12 6 2 12 6 12 6</td></t<>	0 0 0 0 0 0 0 0 rule rule 0 0 0	12 24 12 24 12 6 12 6 2 12 6 2 12 6 12 6
CVA 24 4 2 0 24 CVS 12 3 1 0 12 CVT $\ddagger$ 12 2 3 0 24 CVTA $\ddagger$ 24 2 3 0 24 CVTA $\ddagger$ 24 2 3 0 24 CVTA $\ddagger$ 12 2 2 0 6 CVTA $\ddagger$ 12 2 2 0 6 CWV 12 2 1 0 12 DWV 8 2 1 0 8 FFV 6 2 1 0 6 HDW 2 2 1 rule 2 HDW-V 12 2 1 rule 12 LTV $\ddagger$ 6 2 2 0 6 LTVA $\ddagger$ 12 2 2 0 6 LTVA $\ddagger$ 12 2 0 2 0 12 PLV 6 2 1 0 6 P-SCS 12 0 2 0 12 P-V 6 0 1 0 6 P-VA 12 0 1 0 12 SCS 12 8 2 0 12 SDS 12 4 1 0 12 SCS 12 4 1 0 12 CARNIVON CARRIERS (R19.0) EBB 8 4 2 120 <sup>*</sup> 12f BBV 24 6 2 300 <sup>*</sup> 24 BCS 6 4 2 84 <sup>*</sup> 6 BCV 12 4 2 168 <sup>*</sup> 12 CVA 24 6 2 300 <sup>*</sup> 24 CVA 24 6 2 30 <sup>*</sup> 24 CVA 24 6 2 30 <sup>*</sup> 26 CVA 24 7 12 8 2 15 <sup>*</sup> 12 CVA 24 1 16 <sup>*</sup> 12 CVA 4 1 16 <sup>*</sup>	CVA       24       4       2         CVS       12       3       1         CVT‡       12       2       3         CVTA‡       24       2       3         CVTA‡       24       2       3         CVTA‡       12       2       2         CVT4‡       6       2       2         CVV       12       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         SCS       12       4       1         SCS       12       4       2         SDS       12       4       2         BB       8       4       2         CVA       24       6       2         CVA       24       6       2         CVTA       12	0 0 0 0 0 0 0 rule rule 0 0 0 0	24 12 24 12 6 12 8 6 2 12 6 2 12 6 12 6 12 6 12
CVS 12 3 1 0 12 CVT $\ddagger$ 12 2 3 0 12 CVT $\ddagger$ 12 2 3 0 24 CVTA $\ddagger$ 24 2 3 0 24 CVTA $\ddagger$ 12 2 2 0 6 CVTA $\ddagger$ 12 2 1 0 12 DWV 8 2 1 0 8 FFV 6 2 1 0 6 HDW 2 2 1 rule 2 HDW-V 12 2 1 rule 12 LTV $\ddagger$ 6 2 2 0 6 LTV $\ddagger$ 12 2 0 2 0 6 LTV $\ddagger$ 12 2 0 2 0 6 LTV $\ddagger$ 12 2 0 1 0 6 P-SCS 12 0 2 0 12 P-V 6 0 1 0 6 P-SCS 12 0 1 0 12 SCS 12 8 2 0 12 SDS 12 4 1 0 12 SCS 12 8 2 0 12 SDS 12 4 1 0 12 SCS 12 8 2 0 12 SDS 12 4 1 0 12 CCARNIVON CARRIERS (R19.0) EB 8 4 2 120* 12f BBV 24 6 2 300* 24 BCV 12 4 2 168* 12 CVA 24 6 2 300* 24 BCV 12 4 2 168* 12 CVA 24 6 2 300* 24 CVS 12 4 1 0 12 CVT $\ddagger$ 12 4 4 144* 14f CVTA $\ddagger$ 12 6 3 150* 14f CVTA $\ddagger$ 12 6 3 150* 14f CVTA $\ddagger$ 24 8 4 300* 26f CVTA $\ddagger$ 24 8 4 300* 26f CVTA $\ddagger$ 24 8 1 10 CVTA $\ddagger$ 24 8 4 300* 26f CVTA $\ddagger$ 12 4 1 168* 12 CVT $\ddagger$ 12 4 1 168* 12 DWV 8 2 1 120* 8 FFV 6 2 1 72* 6 HDW-V 12 2 1 rule 3f HDW-V 12 2 1 rule 3f LTV $\ddagger$ 6 6 2 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV4 12 8 2 150* 12 PLV 6 6 2 1 72* 6 LTV5 12 6 127 6	CVS       12       3       1         CVT‡       12       2       3         CVTA‡       24       2       3         CVTA‡       12       2       2         CVTL‡       6       2       2         CWV       12       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       4       1         SCS       12       4       2         SDS       12       4       2         CVA       24       6       2         BB       8       4       2         CVS       12       4       2         CVTA       12	0 0 0 0 0 0 rule rule 0 0 0	12 12 24 12 6 12 8 6 2 12 6 12 6 12 6 12 6 12 6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0 rule rule 0 0 0	12 24 12 6 12 8 6 2 12 6 12 6 12 6 12 6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 rule rule 0 0 0	24 12 6 12 8 6 2 12 6 12 6 12 6 12 6
CVTAL‡       12       2       2       0       12         CVTL‡       6       2       2       0       6         CWV       12       2       1       0       12         DWV       8       2       1       0       6         HDW       2       2       1       rule       2         HDW-V       12       2       1       rule       12         LTV‡       6       2       2       0       6         LTV4‡       12       2       2       0       12         PLV       6       2       1       0       6         P-VX       6       0       1       0       12         SCS       12       8       2       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         SCS       6       4       2       84*       6         BEV       24       6       2       300*       24         CVA       24       6       2       300*       24         CV	CVTAL‡       12       2       2         CVTL‡       6       2       2         CWV       12       2       1         DWV       8       2       1         DWV       8       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         CVA       24       6       2         BCV       12       4       2         CVA       24       6       2         CVT‡       12       4       4         CVTA‡       24       8       <	0 0 0 rule rule 0 0 0	12 6 12 8 6 2 12 6 12 6 12 6 12 6
CVILL       0       2       2       0       0         CWV       12       2       1       0       12         DWV       8       2       1       0       8         FFV       6       2       1       0       6         HDW       2       2       1       rule       2         HDW-V       12       2       1       rule       12         LTV‡       6       2       2       0       12         PV       6       2       1       0       6         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       0       1       0       12         SCS       12       4       1       0       12         SDS       12       4       1       0       12         SDS       12       4       1       0       12         BB       8       4       2       126*       12f         BCV       24       6       2       300*       24         CVX	CVIL+       0       2       2         CWV       12       2       1         DWV       8       2       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1         HDW       2       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVT       2       4       4	0 0 0 rule rule 0 0 0	6 12 8 6 2 12 6 12 6 12 6 12 6
DWV $12$ $2$ $1$ $0$ $12$ DWV $8$ $2$ $1$ $0$ $8$ FFV $6$ $2$ $1$ $0$ $6$ HDW $2$ $2$ $1$ $rule$ $2$ HDW-V $12$ $2$ $1$ $rule$ $2$ HDW-V $12$ $2$ $1$ $rule$ $12$ LTV $\ddagger$ $6$ $2$ $2$ $0$ $6$ LTV $\ddagger$ $12$ $2$ $2$ $0$ $12$ PLV $6$ $2$ $1$ $0$ $6$ P-V $6$ $0$ $1$ $0$ $12$ SCS $12$ $0$ $1$ $0$ $12$ SDS $12$ $4$ $1$ $0$ $12$ SDS $12$ $4$ $2$ $120^*$ $120^*$ BB $8$ $4$ $2$ $120^*$ $120^*$ CARNIVON CARRIERS (R19.0) $120^*$ $120^*$ $120^*$	12 $2$ 1         DWV       8       2       1         FFV       6       2       1         HDW $2$ $2$ 1         HDW-V $12$ $2$ 1         HDW-V $12$ $2$ $1$ HDW-V $12$ $2$ $1$ LTV4 $6$ $2$ $2$ PLV $6$ $2$ $1$ P-SCS $12$ $0$ $2$ P-V $6$ $0$ $1$ P-VA $12$ $0$ $1$ SCS $12$ $4$ $1$ TSC‡ $12$ $4$ $1$ TSC‡ $12$ $4$ $2$ BB $8$ $4$ $2$ BCV $12$ $4$ $2$ CVA $24$ $6$ $2$ CVS $12$ $4$ $4$ CVTA‡ $24$ $6$ $3$ CVT4‡ $12$ $4$ $3$ CVTL‡ $6$ <td>0 0 rule rule 0 0 0</td> <td>12 8 6 2 12 6 12 6 12 6 12 6</td>	0 0 rule rule 0 0 0	12 8 6 2 12 6 12 6 12 6 12 6
bit v       6       2       1       0       6         FFV       6       2       1       rule       2         HDW       2       2       1       rule       12         HDW-V       12       2       1       rule       12         LTV‡       6       2       2       0       6         LTV‡       6       2       2       0       12         PLV       6       2       1       0       6         P-V       6       0       1       0       6         P-V       6       0       1       0       12         SCS       12       0       1       0       12         SDS       12       4       1       0       12         SDS       12       4       1       0       12         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       300*       24         CVA       24       6       2       300*       24         CV	DWV       6       2       1         FFV       6       2       1         HDW       2       2       1         HDW-V       12       2       1         LTV‡       6       2       2         LTV‡       6       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       0       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       4       2         CVA       24       8       4         CVTA‡       12       4       3         CVTL‡       6       4       3	0 rule rule 0 0 0	6 2 12 6 12 6 12 6 12 6
Interpretation       Inte	Initial       Initia       Initial       Initial	rule rule 0 0 0	2 12 6 12 6 12 6
HDW-V       12       2       1       rule       12         LTV‡       6       2       2       0       6         LTVA‡       12       2       2       0       12         PLV       6       2       1       0       6         P-SCS       12       0       2       0       12         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         SCS       12       4       1       0       12         SDS       12       4       1       0       12         SDS       12       4       1       0       12         BB       8       4       2       168*       12         CVA       24       6       2       300*       24         CVA       24       6       2       300*       24         CVA       24       8       4       300*       26f <t< td=""><td>HDW-V       12       2       1         LTV‡       6       2       2         LTV4‡       12       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       8       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         CVA       24       6       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       4       3         CWV       12       4       1         DWV       8       2</td><td>rule 0 0 0 0</td><td>12 6 12 6 12 6</td></t<>	HDW-V       12       2       1         LTV‡       6       2       2         LTV4‡       12       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       8       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCV       12       4       2         CVA       24       6       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       4       3         CWV       12       4       1         DWV       8       2	rule 0 0 0 0	12 6 12 6 12 6
LTV‡       6       2       2       0       6         LTVA‡       12       2       2       0       12         PLV       6       2       1       0       6         P-SCS       12       0       2       0       12         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         SDS       12       4       2       168*       12         CV4       24       6       2       300*       24         BCS       6       4       2       368*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0	6 12 6 12 6
LTVA‡       12       2       2       0       12         PLV       6       2       1       0       6         P-SCS       12       0       2       0       12         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         SDS       12       4       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       144*       14f         CVT4       <	LTVA‡       12       2       2         PLV       6       2       1         P-SCS       12       0       2         P-V       6       0       1         P-VA       12       0       1         SCS       12       8       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVT       12       4       4         CVTA‡       14       8       4         CVTA‡       12       4       3         CWV       12       4       1         DWV       8       2       1         HDW       2       2	0 0 0	12 6 12 6
PLV       6       2       1       0       6         P-SCS       12       0       2       0       12         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         BB       8       4       2       120*       12         BCV       24       6       2       300*       24         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVT       12       4       3       300*       26f         CVT1‡       12       4       3       120*       8         <	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	6 12 6
P-SCS       12       0       2       0       12         P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         SDS       12       4       1       0       12         TSC‡       12       2       3       0       12         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVT       12       4       3       300*       26f         CVT4‡       12       6       3       150*       14f         CVT4‡       12       4       1       168*       12	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	12 6
P-V       6       0       1       0       6         P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         TSC‡       12       2       3       0       12         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVT‡       12       4       300*       26f       14f         CVTL‡       6       3       150*       14f <th< td=""><td><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td><td>-</td><td>6</td></th<>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	6
P-VA       12       0       1       0       12         SCS       12       8       2       0       12         SDS       12       4       1       0       12         TSC‡       12       2       3       0       12         CARNIVON CARRIERS (R19.0)         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVV       12       4       2       168*       12         CVT‡       12       4       3       300*       26f         CVT4‡       14       4       144*       14f         CVT4‡       12       6       3       150*       14f         CVT4‡       12       4       1       168*       12         DWV       8       2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	10
SCS       12       8       2       0       12         SDS       12       4       1       0       12         TSC‡       12       2       3       0       12         CARNIVON CARRIERS (R19.0)         BB       8       4       2       120*         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVV       12       4       2       168*       12         CVV       12       4       2       168*       12         CVT‡       12       4       3       30*       26f         CVT4‡       24       8       4       300*       26f         CVT4‡       12       4       1       168*       12         DWV       8       2       1       120*       8         FFV       6       2       <	SCS       12       8       2         SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVS       12       4       4         CVTA‡       24       8       4         CVTA‡       12       4       3         CVTA‡       12       4       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1	0	12
SDS       12       4       1       0       12         TSC‡       12       2       3       0       12         CARNIVON CARRIERS (R19.0)         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVV       12       4       2       168*       12         CVS       12       4       2       168*       12         CVT‡       12       4       4       144*       14f         CVT↓       2       3       150*       14f         CVT↓       12       4       1       168*       12         DWV       8       2       1       120*       8         FFV       6       2       72*       6         HDW-V       12       2       1	SDS       12       4       1         TSC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVS       12       4       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1	0	12
ISC‡       12       2       3       0       12         CARNIVON CARRIERS (R19.0)         BB       8       4       2       120*       12f         BBV       24       6       2       300*       24         BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVT       12       4       4       144*       14f         CVTA‡       24       8       4       300*       26f         CVTA‡       12       6       3       150*       14f         CVTL‡       6       4       3       72*       8f         CWV       12       4       1       168*       12         DWV       8       2       1       72*       6         HDW       2 <td>ISC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVS       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1</td> <td>0</td> <td>12</td>	ISC‡       12       2       3         CARNIVON CARRIERS (R         BB       8       4       2         BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVA       24       6       2         CVA       24       6       2         CVS       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1	0	12
CARNIVON CARRIERS (R19.0)BB842 $120^*$ $12f$ BBV2462 $300^*$ 24BCS642 $84^*$ 6BCV1242 $168^*$ 12CVA2462 $300^*$ 24CVS1242 $168^*$ 12CVT1244 $144^*$ $14f$ CVT1244 $300^*$ $26f$ CVTAL‡1263 $150^*$ $14f$ CVTL‡643 $72^*$ $8f$ CWV1241 $168^*$ 12DWV821 $120^*$ 8FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221 $rule$ $3f$ HDW-V1221 $rule$ $12f$ LTV‡662 $72^*$ 6LTVA‡1282 $150^*$ 12PLV621 $72^*$ 6	CARNIVON CARRIERS (R           BB         8         4         2           BBV         24         6         2           BCS         6         4         2           BCV         12         4         2           CVA         24         6         2           CVA         24         6         2           CVS         12         4         2           CVT‡         12         4         4           CVTA‡         24         8         4           CVTA‡         12         6         3           CVTL‡         6         4         3           CWV         12         4         1           DWV         8         2         1           FFV         6         2         1           HDW         2         2         1	0	12
BB842 $120^*$ $12f$ BBV2462 $300^*$ 24BCS642 $84^*$ 6BCV1242 $168^*$ 12CVA2462 $300^*$ 24CVS1242 $168^*$ 12CVT1242 $168^*$ 12CVT1244 $144^*$ $14f$ CVTAL1263 $150^*$ $14f$ CVTAL643 $72^*$ $8f$ CVV1241 $168^*$ 12DWV821 $120^*$ 8FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221rule $13f$ LTV1662 $72^*$ 6LTV41282 $150^*$ $12$ PLV621 $72^*$ 6	BB       8       4       2         BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVS       12       4       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         HDW       2       2       1	9.0)	
BBV2462 $300^*$ 24BCS642 $84^*$ 6BCV1242 $168^*$ 12CVA2462 $300^*$ 24CVS1242 $168^*$ 12CVT1242 $168^*$ 12CVT1244 $144^*$ $14f$ CVTA‡2484 $300^*$ $26f$ CVTAL‡1263 $150^*$ $14f$ CVTL‡643 $72^*$ $8f$ CWV1241 $168^*$ 12DWV821 $120^*$ 8FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221rule $13f$ LTV‡662 $72^*$ 6LTVA‡1282 $150^*$ 12PLV621 $72^*$ 6	BBV       24       6       2         BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVS       12       4       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         HDW       2       2       1	120*	12 <i>f</i>
BCS       6       4       2       84*       6         BCV       12       4       2       168*       12         CVA       24       6       2       300*       24         CVS       12       4       2       168*       12         CVT       12       4       2       168*       12         CVT       12       4       2       168*       12         CVT‡       12       4       4       144*       14f         CVTA‡       24       8       4       300*       26f         CVTAL‡       12       6       3       150*       14f         CVTL‡       6       4       3       72*       8f         CWV       12       4       1       168*       12         DWV       8       2       1       120*       8         FFV       6       2       1       rule       3f         HDW       2       2       1       rule       13f         LTV‡       6       6       2       72*       6         LTV4‡       12       8       2       150*       1	BCS       6       4       2         BCV       12       4       2         CVA       24       6       2         CVS       12       4       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         HDW       2       2       1	300*	24
BCV1242 $168^*$ 12CVA2462 $300^*$ 24CVS1242 $168^*$ 12CVT‡1244 $144^*$ $14f$ CVT4‡2484 $300^*$ $26f$ CVTA‡2484 $300^*$ $26f$ CVTA‡1263 $150^*$ $14f$ CVT4‡643 $72^*$ $8f$ CWV1241 $168^*$ 12DWV821 $120^*$ 8FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221rule $13f$ LTV‡662 $72^*$ 6LTV4‡1282 $150^*$ 12PLV621 $72^*$ 6	BCV       12       4       2         CVA       24       6       2         CVS       12       4       2         CVT‡       12       4       4         CVTA‡       24       8       4         CVTA‡       12       6       3         CVTL‡       6       4       3         CWV       12       4       1         DWV       8       2       1         FFV       6       2       1         HDW       2       2       1	84*	6
CVA       24       6       2       300°       24         CVS       12       4       2       168*       12         CVT‡       12       4       4       144*       14f         CVT‡       12       4       4       144*       14f         CVT4‡       24       8       4       300*       26f         CVTA‡       24       8       4       300*       26f         CVTA↓‡       12       6       3       150*       14f         CVT↓‡       6       4       3       72*       8f         CWV       12       4       1       168*       12         DWV       8       2       1       72*       6         HDW       2       2       1       rule       3f         HDW-V       12       2       1       rule       13f         LTV‡       6       6       2       72*       6         LTV4‡       12       8       2       150*       12         PLV       6       2       1       72*       6	$CVA$ $24$ $6$ $2$ $CVS$ $12$ $4$ $2$ $CVT\pm$ $12$ $4$ $4$ $CVTA\pm$ $24$ $8$ $4$ $CVTA\pm$ $24$ $8$ $4$ $CVTA\pm$ $12$ $6$ $3$ $CVTL\pm$ $6$ $4$ $3$ $CWV$ $12$ $4$ $1$ $DWV$ $8$ $2$ $1$ $FFV$ $6$ $2$ $1$ $HDW$ $2$ $2$ $1$	168*	12
$CVS$ 1242 $168^{\circ}$ 12 $CVT$ 1244 $144^{\circ}$ $14f$ $CVTA$ 2484 $300^{\circ}$ $26f$ $CVTAL$ 1263 $150^{\circ}$ $14f$ $CVTL$ 643 $72^{\circ}$ $8f$ $CVTL$ 641 $168^{\circ}$ 12 $DWV$ 1241 $168^{\circ}$ 12 $DWV$ 821 $120^{\circ}$ 8 $FFV$ 621 $72^{\circ}$ 6 $HDW$ 221rule $3f$ $HDW-V$ 1221rule $13f$ $LTV$ 662 $72^{\circ}$ 6 $LTVA$ 1282 $150^{\circ}$ 12 $PLV$ 621 $72^{\circ}$ 6	$CVS$ 12       4       2 $CVT_{\ddagger}$ 12       4       4 $CVTA_{\ddagger}$ 24       8       4 $CVTA_{\ddagger}$ 12       6       3 $CVTA_{\ddagger}$ 6       4       3 $CVTL_{\ddagger}$ 6       4       1 $DWV$ 12       4       1 $DWV$ 8       2       1 $FFV$ 6       2       1         HDW       2       2       1	300^	24
$CVT4$ $12$ $4$ $4$ $144$ $14j$ $CVTA1$ $24$ $8$ $4$ $300^*$ $26f$ $CVTAL1$ $12$ $6$ $3$ $150^*$ $14f$ $CVTL1$ $6$ $4$ $3$ $72^*$ $8f$ $CWV$ $12$ $4$ $1$ $168^*$ $12$ $DWV$ $8$ $2$ $1$ $120^*$ $8$ $FFV$ $6$ $2$ $1$ $72^*$ $6$ $HDW$ $2$ $2$ $1$ $rule$ $3f$ $HDW-V$ $12$ $2$ $1$ $rule$ $13f$ $LTV1$ $6$ $6$ $2$ $72^*$ $6$ $LTV4$ $12$ $8$ $2$ $150^*$ $12$ $PLV$ $6$ $2$ $1$ $72^*$ $6$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	108	145
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	CVTAL     24     6     4       CVTAL     12     6     3       CVTL     6     4     3       CWV     12     4     1       DWV     8     2     1       FFV     6     2     1       HDW     2     2     1	144 300*	14j 26f
$VTL_{+}$ $12$ $0$ $3$ $72^{*}$ $8f$ $CVTL_{+}$ $6$ $4$ $3$ $72^{*}$ $8f$ $CWV$ $12$ $4$ $1$ $168^{*}$ $12$ $DWV$ $8$ $2$ $1$ $120^{*}$ $8$ $FFV$ $6$ $2$ $1$ $72^{*}$ $6$ $HDW$ $2$ $2$ $1$ rule $3f$ $HDW$ -V $12$ $2$ $1$ rule $13f$ $LTV_{+}$ $6$ $6$ $2$ $72^{*}$ $6$ $LTV_{+}$ $12$ $8$ $2$ $150^{*}$ $12$ $PLV$ $6$ $2$ $1$ $72^{*}$ $6$ $DVA_{+}$ $12$ $8$ $2$ $150^{*}$ $12$ $PLV$ $6$ $2$ $1$ $72^{*}$ $6$	CVTL‡     6     4     3       CWV     12     4     1       DWV     8     2     1       FFV     6     2     1       HDW     2     2     1	150*	20J 14f
CWV1241 $168^*$ 12DWV821 $120^*$ 8FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221rule $13f$ LTV‡662 $72^*$ 6LTV4‡1282 $150^*$ 12PLV621 $72^*$ 6	CWV     12     4     1       DWV     8     2     1       FFV     6     2     1       HDW     2     2     1	72*	8f
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	DWV 8 2 1 FFV 6 2 1 HDW 2 2 1		12
FFV621 $72^*$ 6HDW221rule $3f$ HDW-V1221rule $13f$ LTV‡662 $72^*$ 6LTV4‡1282 $150^*$ 12PLV621 $72^*$ 6	FFV 6 2 1 HDW 2 2 1	168*	8
HDW       2       2       1       rule $3f$ HDW-V       12       2       1       rule $13f$ LTV‡       6       6       2 $72^*$ 6         LTV‡       12       8       2 $150^*$ 12         PLV       6       2       1 $72^*$ 6	HDW 2 2 1	168* 120*	6
HDW-V       12       2       1       rule $13f$ LTV‡       6       6       2 $72^*$ 6         LTV4‡       12       8       2 $150^*$ 12         PLV       6       2       1 $72^*$ 6         DOOL       10       0       2       1 $72^*$ 6		168* 120* 72*	3 <i>f</i>
LTV‡ 6 6 2 72* 6 LTVA‡ 12 8 2 150* 12 PLV 6 2 1 72* 6	HDW-V 12 2 1	168* 120* 72* rule	13 <i>f</i>
LTVA‡ 12 8 2 150* 12 PLV 6 2 1 72* 6	LTV‡ 6 6 2	168* 120* 72* rule rule	,
PLV 6 2 1 72* 6	LTVA‡ 12 8 2	168* 120* 72* rule rule 72*	6
	PLV 6 2 1	168* 120* 72* rule rule 72* 150*	6 12
P-5US 12 U 2 168° 12		168* 120* 72* rule rule 72* 150* 72*	6 12 6
r - v b U 1 /2° b D V 1 1 /2° b D V 1 1 /2° b 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		168* 120* 72* rule rule 72* 150* 72* 168*	6 12 6 12
F-VA 12 2 1 150° 12 SCS 12 1 2 160* 12	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	168* 120* 72* rule 72* 150* 72* 168* 72*	6 12 6 12 6
SDS 12 4 2 100 12 SDS 12 4 2 168* 12	SDS 12 4 2	168* 120* 72* rule 72* 150* 72* 168* 72* 168* 150* 168*	6 12 6 12 6 12 6
	TSC‡ 12 4 4	168* 120* 72* rule 72* 150* 72* 168* 72* 150* 168* 168* 168*	12 6 12 6 12 6 12 12 12

This chart shows the numbers of fighters (Ftrs), administrative shuttles (Admin), shuttle bays (Bays), and deck crews (DC) that each of the listed ships has.

‡ This is a Tug+Pod combination. Not all such combinations are listed.

*f* The number of deck crews includes those for death bolt racks on the ship.

\* The number is the number of anti-drones carried for the fighters, e.g., 120 anti-drones is equivalent to 60 drone spaces.

MRS shuttles are not shown or included.

Drone storage from carrier pods is loaded into the cargo boxes of the tug itself (if any).

HDWs show 2-12 (2 minimum, 12 maximum, fighters).

#### ANNEX #7K: CARGO SPACE POINTS

This data is used for purposes of (G25.1).

1.....Death bolts.

ANNEX #7L: UNIT TOWING COSTS

## This data is used for purposes of (G7.321).

UDS, PACKS, AND PALLETS	
Pods, Paravian or Carnivon space control	0.6667
Pods, Paravian or Carnivon double-weight	0.3333
Pods, Paravian or Carnivon single-weight	0.2500

#### ANNEX #7N: DRONE RELOADS

In the Captain's Edition, ships with multiple drone reloads are marked as such on their SSD or are so noted in their ship description, making this annex almost redundant.

Certain ships, however, have special reload provisions in addition to the normal drone rack reloads and are noted here. Except for the PFTs, the drones are stored in cargo boxes (where present) and subject to loss due to combat damage.

RULE	SHIP	TYPE	. STORAGE
R19.17	Carnivon CB	DB	
R19.25	Carnivon CWB	DB	
R19.65	Carnivon P-DB	DB	

DB = Drone Bombardment Ship. These ships store their drones in the cargo boxes of the SSD.

† This storage is death bolts.

**NOTE:** The storage is in addition to normal death bolt rack reloads.

# ANNEX #8: WEAPONS DATA

#### ANNEX #8B: ORION PIRATE, WYN DEFENSE FORCES, AND BARBARIAN SIMULATOR FORCES OPTIONAL WEAPONS COST CHART (G15.4)

WEAPONS OR SYSTEM	COST	NOTES
Death Bolt Rack	NA	∞
Disruptor Cannon-10 (PFs only	y)0	
Disruptor Cannon-15	1	
Disruptor Cannon-22	2	
Disruptor Cannon-30		‡
Disruptor Cannon-40	4	‡
Heel Nipper	NA	∞
Quantum Wave Torpedo	0	

### SIMULATOR USE ONLY

 Death Bolt Rack......Δ

 Heel Nipper

- ∞ ...Orion (and WYN) option mounts can never, *under any circumstances*, have this weapon. Orions and WYNs also cannot have Tholian (web, web caster, snare, web fist), Seltorian, or Andromedan (DisDev, PA, TR) technology. (Allowed in Simulator.)
- ‡.... Cannot be used on size-4 or smaller ship.
- $\Delta$  ... Cannot be used in Orion wing mounts.

Orion PFs which select disruptor cannons for their option mounts use Range 10 disruptors with no cost reduction.

- Orion disruptor cannons with ranges more than 22 include DERFACS from Y168 (E3.62).
- Only tractors on wings can have mech links.
- Weapons with ammunition (e.g., deah bolt racks) are fully loaded at no extra cost (drone speed upgrades must be paid for).

#### ANNEX #8H: OPTIONAL SYSTEMS COST CHART AS APPLIED TO HEAVY WAR DESTROYERS

WEAPONS OR SYSTEM	COST	NOTES
Death Bolt Rack	5	H ∞
Disruptor Cannon-15	4	H
Disruptor Cannon-22	6	H
Heel Nipper	4	H ∞
Quantum Wave Torpedo	4	

Weapons with ammunition (e.g., drone racks) are fully loaded at no extra cost (drone speed upgrades must be paid for). Note that outside of the simulators only the Carnivons can put death bolt racks or heel nippers in their HDW's weapon option mounts.

H denotes Heavy Weapons.

**NOTE:** The forward option mounts on the Orion HDW and HDWX and the wing option mounts on the WYN HDW and HDWX are under the normal optional weapons restrictions of Annex #8B. The rear-firing weapon options on those ships use Annex #8H and cannot use hellbores or phaser-Gs.

# ANNEX #9: COST OF REPAIR CHART

Data is used with (D9.7) and (G17.0). Repairs to X-ships require double the normal repair cost unless an X-unit is doing the repairs. This includes an X-unit repairing itself. See (XG17.3) in Module X1.

SYSTEM	REPAIR COST
Death Bolt Rack	
Death Bolt Rack, Hasty Repair	
Disruptor Cannon: Range 10	
Disruptor Cannon: Range 15	
Disruptor Cannon: Range 22	7
Disruptor Cannon: Range 30	
Disruptor Cannon: Range 40	10
Heel Nipper	
Quantum Wave Torpedo	10
Quantum Wave Torpedo, Hasty Repair	6

# ANNEXES

## ANNEX #10: TACTICAL INTELLIGENCE HULL TYPE CLASSIFICATIONS

## PARAVIAN SHIPS

BB	.BB, BBV, SDS, RBB§ (presence of pods
	detected at level D§).
BCH	.BCH, BCS, BCV.
CA	.CC, CA, CVS, SR, CB, CF, BCH‡, Tug
	(presence of pods detected at
	level D§), SCA±, WCA, WCC,
	YCA.
CL	.CL, CLL, WCL, WLG, YCL, YLG, YSR,
	YTG (presence of pods detected
	at level D§).
CW	.CWL. CW. CWV. ČWE. CWA. CWB. CWG.
	CWM CWP CWS LTT (presence
	of pods detected at level D8)
	CWF
חח	
	carrying a pod)
	DN SCS CVA DNHS DMSS (proconce of
DN	.DN, 303, CVA, DNI 19, HIV39 (presence of
DINL	DINL.
DW	.DVV, DVVL, DVVV, DVVE, DVVA, DVVS, DVVIVI,
	DVVG, DVVPS, DVVT (§ wnen
	carrying a pod), HDW§.
FF	.FF, FFL, FFV, FFE, FFA, FFS, FFM, FFG,
	FCR, FFT (§ when carrying a
	pod), FLG§, SFF‡, WFF, YFF.
HDW	.HDW.
POL	.POL, PLV.
Tug	.Tug (presence of pods detected at level
-	D§).
	<b>C</b> ,

## **CARNIVON SHIPS**

BB	.BB, SDS, CVA
BCH	.BCH, BCS, BCV.
CA	.CC, CA, CVS, SR, CB, CF, TG (presence
	of pods detected at level D§),
	YCC, YCA, WCC, WCA.
CL	.CLL, CL, WCL, YCL, YCB, YCN, YCG,
	YSR, YTG (presence of pods
	detected at level D§), WCL, WCG.
CW	.CWL, CW, CWV, CWE, CWA, CWB, CWG,
	CWM, CWP, CWS, LTT (presence
	of pods detected at level D§),
	CWF.
DD	.DDL, DD, YDD, YDB, YDG, YDNI, WDD.
DN	.DN, CVA, SCS, DNH§, YDN, WDN.
DNL	.DNL.
DW	.DWL, DW, DWV, DWE, DWA, DWS, DWM,
	DWG, DWP, DWT (§ when
	carrying a pod).
FF	.FFL, FF, FFV, FFE, FFA, FFS, FFM, FFG,
	FCR, FFT (§ when carrying a
	pod), FLG§, YFF, WFF.
HDW	.HDW.
POL	.POL, PV.
Tug	.Tug (presence of pods detected at level
	D§).
	D9).

## TACTICAL INTELLIGENCE NOTES

1. Each classification includes all refits and any unlisted variants.

- PFs within each empire/type are the same hull type. (Note that some empires have two types, e.g., Romulan StarHawk and Centurion. Also, WYN-foreign PFs are reported as a PF of the original empire-type.) Interceptors of that empire are distinguishable from PFs as §. (Romulan Decurion looks like Centurion§.)
- Pods (each empire) are a single hull type; "heavy" pods are distinguishable as §. This includes base augmentation modules.
- 4. Each type of base is a separate hull type, with the exception that SAMS and ComPlats are of a ‡ group.
- † Ships of this ‡ group can only be distinguished from each other by their actions (e.g., how many fighters they launch), or by boarding them.
- ‡ Not a class, but a grouping of similar hull types distinguishable from the larger category at Level D.
- § Major outward differences distinguishable at Level D.

# SYMBOLS ON FIGHTER SSDs

SYMBOL	MEANING
4	Type–I drone
4	Type–III drone
Δ	Type–VI drone
	Chaff Pack
	Anti-Drone System with six shots (some have only four shots)
9	Type–D Plasma Torpedo
9	Type-K Plasma Torpedo
0	Disruptor, Fusion Beam, Hellbore, Ion Pulse Cannon, Disruptor Cannon, or Quantum Wave Torpedo
0	Photon, type–F Plasma Torpedo, or Ion Cannon
EW	Electronic Warfare Pod
$\diamond$	Prospecting Charge
•	Flivver Hyperdrone
$\oplus$	Death Bolt
	Rail-Launched Anti-Drone, FA arc only

## END OF ANNEXES, MODULE C6

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Notes				CNJ, V	CNJ, V, P	CNJ, V	CNJ, TG				R		V, P	٨	TG		ı	Ŧ			AL Al V P	AL V	, <u>,</u> ,		AL	AL. R	AL	AL, R	AL, V	AL, V, R	AL, ♦	AL, F			AL	AL, R	AL	AL, R			AL	AL
War	Status			LPW	LPW	LPW	LPW			LPW	LPW	LPW	LPW	LPW	LPW			LPW				I PW	]		RPW	RPW	RPW	RPW	RPW	RPW	RPL	RPL			RPW	RPW	RPW	RPW			RPW	RPW
F&E	CIMID	D		10	10	10	8			10	10	10	10	10	8			ი		0	0 0	10	2		ი	6	ω	8	6	6	8	8			7	7	9	9			7	9
D5.2 -	Expio Str			44	43	41	33			30	30	32	28	28	25		00	28		50	23	23	24		20	20	19	19	20	20	16	21			15	15	14	14			17	16
C13.3	Dock Pts			36	36	36	36+2			13	13	13	13	13	13+4		(	12		40	10	10	2		ი	6	6	6	6	6	6	6			8	8	8	8			ω	ω
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J1.42	Shttl			3+3	2+3	3+6	5			3	3	3	2+2	2+4	4		0	2		¢	2+3	2+7	1		2	2	2	2	1+2	1+2	2	2			-	-	-	-			5	<del>.</del>
C2.12	Move Cost			2.00	2.00	2.00	2.00			1.50	1.50	1.50	1.50	1.50	1.50		10	1.25	ANTS		1 00	1 00	202		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			0.67	0.67	0.67	0.67			0.67	0.67
C6.5	down			3-6	3-6	3-6	3-6		TS	3-6	3-6	3-6	3-6	3-6	3-6		0	3-6 3	VARI	2		29		NTS	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6		Г	4-6	4-6	4-6	4-6		S	5-0	5-0
S2.1	2 2 2	ERS	ARIANTS	290	320/300	300/280	320/200		VARIAN	205	209	225	220/198	220/195	240/100	Ŀ		215	SER AND	100	188	185	2	D VARIA	133	135	120	122	140	142	140/115	139		VARIAN	100	102	88	90		VARIANI	126	116
D7.0	Brog Partvs	RAID	ND V	40	30	30	20		F AND	30	30	30	30	30	14			30	FCRUIS		20	20	24	R AN	20	20	20	20	20	20	16	20		R AND	16	16	10	10		AND	18	16
G9.0	Units	<b>VIAN</b>	SHIP A	56	79	79	50		IOUGH1	99	99	69	66	99	44			60	BATTI	202	29	20	3	CRUISE	52	52	49	49	52	52	22	49		CRUISE	38	38	36	36		RUISER	44	40
Ship	I ype	PARA	BATTLE	BB	SDS	BBV	BMS		DREADN	DN	DNa	DNH	SCS	CVA	RMS	TL C		DNL	HFAVY					HFAVY	8	cCa	CA	CAa	CVS	CVSa	SR	CF		LIGHT (	CLL	CLLa	ы С	CLa		WAR CI	CM	₹ N

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Notes			AL, V	E, LA, AL	E, A, AL	AL, T	AL, MS	AL, P, ♦	AL, ♦	AL, TG	AL, F		AL		AL	AL, R	AL	AL, R		AL	AL	AL, V	AL, E, LA	AL, E, A	AL, ♦	AL, MS	AL, T	AL, P, ◆	AL, TG		AL	AL, R	AL	AL, R	AL, V	AL, LA, E	AL, A, E	AL, LA, E	AL, ♦	AL, ♦, R	AL, T
War	Ship	Status	RPW	RPW	RPW	LPW	LРW	LРW	RPL	LРW	RPL		LPW		RPW	RPW	RPW	RPW		RPW	RPW	RPW	RPW	RPW	RPL	RPW	LРW	RPL	LРW		RPW	RPW	RPW	RPW	RPW	RPW	RPW	LPW	RPL	RPL	ПРМ
F&E	CMD	Rating	9	9	9	9	9	9	9	9	9		9		5	5	4	4		5	4	4	4	4	4	4	4	4	4		4	4	с С	е	ю	3	e	ო	ю	с	က
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Year	Ч	Srvc	169	169	175	170	171	182	172	175	173		180		129	168	123	168		169	167	170	169	175	169	170	168	182	171		135	168	127	168	170	169	175	170	130	168	130
	Rule	Nbr	24	25	25A	26	27	28	29	30	31		32		33	33	34	34		35	36	37	38	38A	39	40	41	42	43		44	44	45	45	46	47	47A	48	49	49	50
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C3.3	Turn	Mode	ш	m	ш	۵	۵	м	В	+	ъ		В		В	в	В	В		ш	ш	В	В	ш	ш	m	ю	ш	+		ш	۵	ш	ш	ш	В	В	В	В	ш	۵
R0.6	Size	Class	e	ო	ო	ო	с	ო	ო	m	m		4		4	4	4	4		4	4	4	4	4	4	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4
J1.42	Spare	Shttl	1+2	-	-	1+2G	-	I	-		-		-		I	1		I				1+2		1	I	1	1+2G	I	1			1	I						1	1	
C2.12	Move	Cost	0.67	0.67	0.67	0.67	0.67	0.67	0.67	ł	0.67		0.67		02.0	0.50	0:50	0:50		0.50	0.50	0:50	0.50	0.50	0.50	0.50	0.50	0.50	+		0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
C6.5	Break	down	5-6	5-6	5-6	5-6	5-6	5-6	5-6	4-6	5-6		5-6		4-6	4-6	4-6	4-6	ANTS	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6		5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6
S2.1	BPV		121/114	118	124	125/88	125/104	122/100	124/100	124/100	129	OYER	115	ARIANT	06	92	80	82	ND VARI	108	66	105	104	112	111/86	100/90	108/84	110/85	104/82	ANTS	88	89	73	74	80/75	80	87	77/62	80/60	81/61	77/58
D7.0	Brdg	Partys	16	16	16	37	16	10	16	9	16	DESTR	12	ND V	10	10	10	10	rer ai	14	14	14	14	14	14	14	37	10	9	VARIA	10	10	10	10	9	10	10	9	10	10	18
G9.0	Crew	Units	40	40	40	42	40	40	40	35	40	WAR I	38	YER A	24	24	21	21	ESTRO	32	29	29	29	29	29	29	36	29	25	AND	22	22	18	18	19	18	18	12+6	18	18	23
Ship	Type		CWV	CWE	CWA	CWG	CWM	CWP	CWS		CWF	НЕАVY	HDW	DESTRC	DDL	DDLa	DD	DDa	WAR DI	DWL	DW	DWV	DWE	DWA	DWS	DWM	DWG	DWP	DWT	FRIGATI		FFLa	Ē	FFa	FFV	FFE	FFA	FCR	FFS	FFSa	5FG

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Notes		AL. MS	AL, TG	AL, T, MS, 🔶		AL	AL, V		AL, TG					>	F		♦ A				•	<ul> <li>✓</li> </ul>						CNJ, V	CNJ, V, P	CNJ, V				V, P	>		ш		
War	Status	LPW	ГРW	RPL		RPW	RPW		LPW			RPW	LPW	LPW	LPW	LPW	RPL	ГРW	ГРW	LPW	RPL	Π	ГРМ					LPW	LPW	LPW		LPW	ГРW	LPW	LPW		LPW		LPW
F&E	Rating	ο 	m	4		с	ю		8				+2	Ŷ	ç	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	ę	ç	<u></u>					10	10	10		10	10	10	10		6		10
D5.2	Str	50	∞	ω		7	7		18			0 <del>1</del>	+3	+2	÷	+2	÷	42	Ŧ	Ŷ	+3	4	မု	,				43	41	42		30	34	29	29		29		23
C13.3	Pts Pts	4	4+4	4		с	с		9+4			3	3	с	e	e	ю	e	с	с С		5	4					34	34	34		17	18	17	17		16		12
Year	Srvc	162	133	137		124	168		130			130	150	171	130	134	180	155	182	177	165	182	173					175	182	175		162	179	182	172		168		180
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C3.3	Mode	В	+	ъ		A	A		+									1			1	1						ш	ш	ш		≏			Δ		Δ		ပ
R0.6	Class	4	4	4		4	4		3			4°	4°	4°	4°	4°	4°	4°	¢	4°	•4	4°	4°					2	2	2		2	2	2	2		2		ო
J1.42	Shttl		1	I					٢				Ι	-	1	1	Ι		1	1	1	0+4	0+2	•				2+2	2+4	3+6		е	ю	2+2	2+4		-		-
C2.12	Cost	0.33	+	0.33		0.33	0.33		+																			2.00	2.00	2.00		1.50	1.50	1.50	1.50		1.25	ANTS	1.00
C6.5	down	5-6	5-6	5-6	RIANT	6	6		3-6												I	1	1					3-6	3-6	3-6	TS	3-6	3-6	3-6	3-6		3-6	VARI	5-0
S2.1	> ר ח	77/65	75/54	65/30	AND VAF	60	65		130/110			14/10	34	12/11	55/10	28/14	18/11	34/18	19/5	30/10	20/12	70/50	25		010	2	ARIANTS	280	290/275	290/270	VARIAN	215	235	240/210	240/210	ЧT	222	SER AND	180
D7.0	Brog Partvs	10	9	18	ETTE /	9	4		10				9	0	37	2	0	0	0	0	4	4	4					30	30	30	T AND	16	20	20	20	NOUGH	16	ECRUIS	16
G9.0	Units	18	18	23	CORV	13	14		44				12	ω	22	9	10	10	4+8	4+4	12	20	18				SHIP \	73	73	73	IOUGH	59	65	63	63	DREAD	51	BATTL	50
Can Can	e - -	LEM J'S		ELG	S POLICE	POL		5 UL	DI	. © .	SOOd 20	0 4 13	Р-В 14	>-d DB	P-T	P-SD	P-PF	P-R	P-PT	P-HT	P-SC	P-SCS	P-VA				BATTLE	BB	SDS	BBV	DREADN	ND	HND	SCS	CVA	LIGHT	DNL		BCH

**MASTER SHIP CHART** 

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Notes		V, P	>			R		R	>	•	₹ •		R	ц	F, R				R		R				٧	E, LA	Е, А		г	MS	, ₽	•	IG	ш					R	
War	Ship Status	LPW	LPW		RPW	RPW	RPW	RPW	RPW	RPL	RPL	LPW	LPW	RPL	RPL			RPW	RPW	RPW	RPW		RPW	RPW	RPW	RPW	RPW	LPW	LPW	LPW	LPW	RPL	LPW	RPL		LPW		RDW	RPW	RPW
F&E	CMD Rating	10	10		ი	ი	ω	8	<u>о</u>	ω	ω	8	8	8	ω			7	7	6	6		7	6	7	6	9	9	9	9	9	9	9	9		9		۲	5	4
D5.2	Explo Str	22	22		21	21	19	19	19	16	16	18	18	21	21			15	15	13	13		18	17	17	17	17	16	13	15	14	16	14	19		16		10	10	10
C13.3	Dock Pts	12	12		10	10	10	10	10	10	10	10	10	10	10			8	8	8	8		7	7	7	7	7	7	7	7	7	2	7+2	7		7		ų	9	9
Year	ln Srvc	182	181		129	166	124	166	168	128	166	131	166	166	166			130	166	122	166		169	166	170	168	175	174	170	170	182	169	171	175		180		130	166	124
	Rule Nhr	11	12		13	13	14	14	15	16	16	17	17	18	18			19	19	20	20		21	22	23	24	24A	25	26	27	28	29	80	31		34		33	32	33
Product	Where Published	C6	90 00		පි	9 S	පි	90 00	පි	8	90 80	C6	CG	C6	90 00			C6	CG	CG	C6		CG	C6	C6	CG	C6	80	පි	90 Ce	ප	80	90 00	90		CG		y U	88	9 C
C3.3	Mode	с U	ပ		ပ	ပ	ပ	ပ	ပ	ပ	ပ	ပ	ပ	ပ	ပ			ပ	υ	ပ	ပ		В	В	В	В	В	ш	ш	m	മ	m .	+-	ш		В		α	n m	в
R0.6	Size Class	33	e		e	с	ო	e	e	с	ო	3	3	3	ო			ო	з	3	3		3	3	3	3	З	ო	ო	ო	ო	m	ო	e		4		T	4	4
J1.42	Spare Shttl	1+2	2+4		-	-	-	-	1+2	4	4	1	1	1	~			-	٢	1	1		2	1	2-3	٢	٢	-	1+2G	-	I	-	I	-		1+1		I		I
C2.12	Move Cost	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			0.75	0.75	0.75	0.75		0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	+-	0.67		0.67		0 50	0.50	0.50
C6.5	Break	5-6	5-6	NTS	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	9-9	2-6	5-6	ŀ	_	4-6	4-6	4-6	4-6	S	5-6	5-6	9-9	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6		5-6		5-6	5-6	5-6
S2.1	BPV	192	188	D VARIA	144	147	130	133	148/133	140/109	143/112	144/115	147/118	149	152			110	112	97	99	VARIANT	124	115	130/115	120	130	126/100	120/98	122/105	125/105	125/105	124/96	139	OYER	115			84	75
D7.0	Brdg Partvs	16	16	ER AN	16	16	12	12	16	12	12	8	8	12	12		R ANU	12	12	10	10	AND	14	10	10	10	10	10	35	8	10	ω	9	10	<b>DESTR(</b>	8			10	ω
G9.0	Crew	50	50	CRUISI	45	45	40	40	45	49	49	40	40	40	40			35	35	32	32	RUISER	37	32	37	32	32	32	39	30	36	30	30	32	WAR	30		YER A	22	18
Ship	Type	BCS	BCV	НЕАVY	8	с С	CA	CA+	CVS	SR	SR+	CB	CB+	СF	CF+		LIGHI	CLL	CLL+	CL	CL+	WAR CF		CW	CWV	CWE	CWA	CWB	5 MO 12	CWM	CWP	CWS		CWF	НЕАVY	E HDW	n'e			8

# **MASTER SHIP CHART**

S								A														Е		Ш						R		R	S, ♦	S, ♦, R							2	
Note		ч					>	С Ш	А Ш	٠	MS	⊢	۲	Ъ				Я		Я	>	LA,	А, Е	LA,	٠	€ ¢	⊢	T, R	MS	MS,	ДG	TG,	T, M	T, M		z	Z, R	>,<		р	<u>T</u> G	
War	Status	RPW			Mda	RPW	RPW	RPW	RPW	RPL	RPW	LPW	RPL	LPW			RPW	Mda	RPW	Mda	RPW	Mda	RPW	МdЛ	RPL	RPL	LРW	Ш	LРW	LPW	LPW	LPW	ЧЧ	RPL		RPW	RPW	RPW		LPW	LPW	
F&E	Rating	4			5	4	5	4	4	4	4	4	4	4			4	4	3	3	4	3	з	3	с С	ო	3	с	3	3	3	3	4	4		3	с	ო		8	ω	
D5.2	Expio Str	10			13	12	12	12	12	11	11	10	10	10			9	6	6	6	6	8	11	7	ω	∞	7	7	7	7	7	7	7	7		7	7	7		19	19	
C13.3	Pts Pts	9			9	9	9	9	9	9	9	9	9	6+2			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5+4	5+4	5	5		4	4	4		10+2	10+2	
Year	Srvc	166			169	167	174	170	175	171	170	170	182	171			130	166	124	166	170	168	175	171	129	166	128	166	161	166	133	166	132	166		124	166	169		134	166	
- (	Nbr	33			35	36	37	38	38A	39	40	41	42	43			44	44	45	45	46	47	47A	51	48	48	50	50	49	49	52	52	53	53		54	54	55		56	56	
Product	vvnere Published	8			90 Ce	90 00	8	9 S	8	9 Ce	C6	C6	90	90 80			CG	CG	CG	CG	C6	CG	C6	C6	90	90 00	CG	90 Ce	CG	CG	C6	CG	C6	C6		9 Ce	90 00	C6		80	SC	
C3.3	Mode	В			В	ш	ш	ш	ш	ш	В	в	В	+			A	A	A	A	A	A	A	A	A	A	A	A	A	A	+	+	A	A		A	A	A		+-	+	
R0.6	Size Class	4			4	4	4	4	4	4	4	4	4	4			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		4	4	4		ო	ε	
J1.42	Shttl	1			1	I	0+2		1	I		1+2G		I				I	I	I	0+1	Ι	1	Ι	1	I	1	I	I	I		I	Ι			I	1	0+1		-	-	
C2.12	Move Cost	0.50			0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	+			0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	+	+	0.33	0.33		0.33	0.33	0.33		+-	+-	
C6.5	break down	5-6		ANTS	2-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6			9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	RIANT	9	9	9		4-6	4-6	
S2.1	∧ רק	77		ND VARI	66	92	98/90	98	107	104/82	98/80	98/82	100/82	104/79		ANTS	66	72	60	99	20	69	75	67/50	70/53	76/59	67/50	69/52	70/55	72/57	67/50	69/52	66/52	67/54	AND VAF	48	50	54/50		140/123	143/126	
D7.0	Brdg Partys	8		YER A	12	ω	ω	8	ω	9	9	35	9	9		VARI/	8	8	9	9	9	9	9	4	4	4	28	28	4	4	4	4	17	17	ETTE	4	4	4		10	10	
G9.0	Units	18		ESTRO	25	22	24	22	22	20	20	29	26	20		AND	16	16	14	14	14	14	14	12+6	13	13	25	25	13	13	12	12	19	19	CORV	11	11	13		36	36	
Cario Car	ed 	+00 's	Mo	PAR DE		MD C6	DWV	DWE	DWA	SMD	MMQ	DMG	dMD 20		ΑΓ	ERIGATE		EFL+	Ħ	FF+	FFV	FFE	FFA	FCR	FFS	FFS+	FFG	FFG+	FFM	FFM+	FFT	FFT+	FLG	FLG+	POLICE	POL	POL+	PLV	Э П Р	DL	+ <u>5</u> -117	-7

Notes							T, GL	٨		٨	•				P, ♦	V, P, ♦																
War	Ship	Status		RPW	LPW	LPW	LPW	LPW	LPW	LPW	LPW	LPW	LPW	LPW	RPL	LPU	LPW															
F&E	CMD	Rating		1	0 <del>1</del>	Ŷ	Ŷ	+	+	+	+1	+	Ŷ	0 <del>1</del>	Ŷ	+	0+															
D5.2	Explo	Str		Ŷ	+2	+	+	+	44	+2	+4	+3	+	Ŷ	+	+2	0+															
C13.3	Dock	Pts		с	3	с	3	3	с	4	3	ო	3	3	с	5	3							ce.								
Year	Ч	Srvc		134	134	155	137	168	145	175	169	168	183	178	182	183	135							oattle for								
	Rule	Nbr		57	58	59	60	61	62	63	64	65	99	67	68	69	70							art of a b								
Product	Where	Published		ဗ	CG	ဗဗ	C6	CG	ဗဗ	C6	90 Ce	ဗဗ	C6	90 Ce	ဗ	C6	CG				o a carrier.			is unit as pa								3).
C3.3	Turn	Mode		1		1	1		1	1		1	1		1	1					it is als			asing th							32).	(P2.433
R0.6	Size	Class		4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°			5.22).	ghters if			f purcha							n (P2.4:	system
J1.42	Spare	Shttl		1		1	1	0+2	1	1+4	1	1	1		1	0+4	I			), and (J1	heavy fig			G24.35) i					(M8.0).		ng syster	: landing
C2.12	Move	Cost					$\nabla$													(J11.13	coperate			<ol> <li>See (</li> </ol>					2.45) and		vity landi	odynamic
C6.5	Break	down				1			1			1			1				ġ.	(14.93)	d cannot			e (G24.0		4).			see (M2		r the grav	the aero
S2.1	BPV			14/10	28/14	18/12	30/20	14/12	30	23	21/13	25	19/5	19/5	20/12	75/55	14/10	ERMS	unbuilt sh	e (J4.75),	(K2.0) an			ensors, se	cort.	egis (D13.	D13.0).		esweeper,		olanets by	planets by
D7.0	Brdg	Partys		1	2	2	35	2	9	4	4	9	0	0	4	∞	0	OF TE	jectural	arrier, se	F tender	ip.		pecial se	arrier eso	imited a	ll aegis (	op ship.	true mine	tug.	and on I	and on p
G9.0	Crew	Units		1	9	6	20	10	10	16	13	10	4+8	4+4	13	22	9	ATION	is a con	a true ci	a true P	a fast sh	a refit.	nit has s	iit is a ca	nit has I	iit has fu	it is a tro	unit is a	ship is a	unit can	init can l
Ship	Type		PODS	P-C	P-SD	P-R	P-T	P-V	P-B	P-VA	P-SC	P-DB	P-PT	P-HT	P-PF	P-SCS	P-HFR	EXPLAN	CNJ: Unit	V: Unit is	P: Unit is	F: Unit is	R: This is	♦: This ui	E: This ur	LA: This u	A: This un	T: This un	MS: This I	TG: This §	GL: This ι	AL: This L

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# **MASTER SHIP CHART**

																																									Τ		ngth.	61)
				LB	В	LB	ГВ	PL, LB	L, LB	PL. LB	LB	L. LB	LB	PL, LB	LB	PL, LB	PL, LB	PL, LB		LB	LB	LB	LB	LB	PL, LB	L, LB	PL, LB	LB	, LB	LB	°L, LB	В	PL, LB	PL, LB	PL, LB								plosion stre	o nointe /k1
Notes				AL, PL,	AL, PL,	AL, PL,	AL, PL,	VF, AL,	T, AL, P	MS. AL.	AL, PL,	♦. AL. F	AL. PL.	♦, AL, F	AL, PL,	EW, AL,	VF, AL,	N1, AL,		AL, PL,	AL, PL,	AL, PL,	AL, PL,	AL, PL,	VF, AL,	T, AL, P	MS, AL,	AL, PL,	♦, AL, F	AL, PL,	♦, AL, F	AL, PL,	EW, AL,	VF, AL,	N1, AL,		al sensors						on the ex	nod hv fiv
War	Ship	Status		RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	LPW	LPW	RPW		RPW	RPW	RPW	LPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	RPW	ΓΡΜ	LPW	RPW		rith specia						no effect	/ ie rodu
F&E	CMD	Rating		с	e	e	e	e	e	e	က	с	e	ო	З	с	e	0		с	e	ю	e	ε	e	3	3	3	3	3	3	ю	ო	3	0		F fitted w						icks has i	
D5.2	Explo	Str		8	ω	ω	∞	ω	∞	ω	ω	∞	∞	ω	5	5	5	ω		8	ω	ω	ω	ω	ω	8	8	8	8	8	8	5	S	5	8		♦ = A P		d a GCV	r itealf	119011		ooster pa	
C13.3	Dock	Pts		1	-	-	-	-	1	-	-	-	-	-	-	1	-	-		٢	-	-	-	-	-	1	1	1	1	1	1	-	-	1	1				arties an		iadron.	packs.	of warp bo	-
Year	Ч	Srvc		182	182	182	182	182	182	182	182	184	184	182	180	180	180	183		182	182	182	182	182	182	182	182	182	184	184	182	180	180	180	183		us.		oarding p	rod a min	of its sou	use warp	ibsence c	
	Rule	Nbr	-	PF1	PF2	R1.PF1	R1.PF6	R1.PF5	R1.PF3	R1.PF4	R1.PF6	R1.PF8	R1.PF9	R1.PF2	PF0	K3.75	K3.8	R1.PF7		PF1	PF2	PF3	R1.PF1	R1.PF6	R1.PF5	R1.PF3	R1.PF4	<b>R1.PF6</b>	R1.PF8	R1.PF9	R1.PF2	PFO	K3.75	K3.8	R1.PF7		HET bon	EW/	fensive b	o concida		inable to u	sence or a	-
Product	Where	ublished		90 00	g	පි	ප	ප	පි	ප	90	90	ප	90	පි	80	පි	පි	-	ő	පි	90 00	8	ප	ප	C6	90 00	C6	C6	C6	C6	පි	90 00	C6	C6	JRS	the double	lend them	ies or six of	iti saltırda	to other Int	ons and is u	The pre	
C3.3	Turn	Mode F		AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	-	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	CEPTC	not have	hters or	ding part	Duinee	warfare .	st weapo		:
R0.6	Size	Class	-	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		5	5	5	5	S	5	5	5	5	5	5	5	5	5	5	5	NTER	They do	arvice) fic	sive boar	o mines	lectronic	ed of mc	P2.433).	
J1.42	Spare	Shttl				1			I	I	1	1		1	1		I	1								1	I		Ι		I		I		Ι		column.	annot se	en offens	no po	o lend e	en stripp	nethod (F	-
C2.12	Move	Cost	S	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.17	0.17	0.17	0.20	S	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.17	0.17	0.17	0.20	IIPS /	he notes	es (hut c	v up to te	minac ar	ninco ai or. able t	s has be	anding n	, -
C6.5	Break	down	AIDER	9	9	9	ဖ	9	9	9	9	9	9	9	9	9	9	9	ORDE	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	DL SH	d "N" in t	tor carri	e to carr		rercepto	agencies	vnamic la	
S2.1	ВРV		AN R	20/40	20/40	20	40/50	30	25	25	40/50	110/20	20	100/50	15/22	18	20	20	H NO	20/37	20/35	20/35	20	40/50	30	25	25	40/50	110/20	20	100/50	15/22	18	20	20	PATRO	ot marked	r Intercen	of PF able	of DF ahl	viriant of Ir	o civilian	the aerod	
D7.0	Brdg	Partys	ARAVI	-	-	-	2	-	11	-	2	2	-	-	-	-	-	-	ARNIV	-	-	-	-	2	-	11	1	2	2	-	1	-	-	1	-	FAST	but are n	t of PF oi	t variant (	varcion	arfare va	t is sold t	anets by t	
G9.0	Crew	Units	F0) P/	с	ო	e	4	e	∞	e	4	4	e	e	2	2	2	-	F0) C/	с	e	с	e	4	e	8	З	4	4	З	3	2	7	2	-		e Nimble,	on varian	di Assaul	- Warfare	ctronic W	PF varian	and on pla	-
Ship	Type	:	(R18.P	HBD	НВР	PFC	PFL	PFF	PFG	PFM	HBPL	PFQ	PFR	PFS	INT	INT-E	INT-F	WB	(R19.P	ЪF	РЕР	PFH	PFC	PFL	PFF	PFG	PFM	PFPL	PFQ	PFR	PFS	INT	INT-E	INT-F	WB	NOTES	All PFs are	$VF = Fi_{0}$	T = Groun	MC - Min		N1: This F	AL: Can la	

# MASTER FAST PATROL SHIP CHART

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MASTER	FIGH	TER	CHART				ST	AR FI	EET	BAT	TLES
Туре	Size	Spd	Phaser	Drones	Dmg	Other Weapons	BPV	Year	DFR	Prod	Ref
(R18.0) PA	ARAVIA	N FI	GHTERS								
						1xQuantum Wave					
<u></u>	1	8	1xP-3-FA		7	Torpedo-FA	5	165	1	C6	F1
TFE	1	8	1xP-3-FA		7	1xEW pod	7	172	1	C6	F1
то						2xQuantum Wave	-	405	•	00	50
	1	8	1xP-3-FA		8		/	165	2	<u>C6</u>	FZ
	1	0	TXP-3-FA		0	2xEW pou	9	172	2	0	ГZ
TR	1	12	1xP-3-FA		8	Torpedo-FA	8	170	3	C6	F3
TRF	1	12	1xP-3-FA		8	2xFW pod	10	170	3	C6	F3
		12			0	2xQuantum Wave		112	•	00	10
TC	1	15	2xP-3-FA	_	10	Torpedo-FA	9	173	4☆	C6	F4
						2xQuantum Wave					
						Torpedo-FA, two					
TCM	1	30	2xP-3-FA	—	12	charges each	13.5	180	2☆	C6	F4
TCE	1	15	2xP-3-FA	—	10	2xEW pod	11	173	4☆	C6	F4
						2xEW pod;					
TCEM	1	30	2xP-3-FA		12	2 extra pod rails	16.5	180	2☆	C6	F4
						4xQuantum Wave					
TD	1	14	1xP-3-FA		16	Torpedo-FA	15	177	1☆	C6	F5
						4xQuantum Wave					
TDM					10	I orpedo-FA, two	00.5	100	•	00	
	1	28	1xP-3-FA	—	18	charges each	22.5	180	0☆ 1 ^	<u>C6</u>	F5
IDE	1	14	TXP-3-FA		16	2xEW pod	17	177	াম	Co	FD
	1	28	1vD_3_EA		18	2xEvv pou, 2 extra pod rails	25.5	180	0~	CG	E5
	1	20	TXF-3-FA		10	2 exita pou fails	25.5	100	Uж	0.	
						Torpedo-FA two					
			2xP-2-FA			charges each.					
TS	2	12	1xP-3-RA	_	18	1xEW pod	18	177	0☆	C6	F6
						3xQuantum Wave					
						Torpedo-FA, three					
			2xP-2-FA			charges each;					
TSM	2	24	1xP-3-RA	—	20	1xEW pod	27	180	0☆	C6	F6
			2xP-2-FA			2xQuantum Wave					
			2xP-3-FA			Torpedo-FA;					
TSI	2	12	1xP-3-RX		18	1xEW pod	18	177	0☆	C6	F7
						3xQuantum Wave					
						Torpedo-FA, two					
TOF	2	15			10	charges each;	20	170	0-^-	<u> </u>	го
155	2	15	IXP-3-KA		10	3xQuantum Wave	20	170	<b>U</b> ¥	Co	го
						Tornedo-FA three					
			2xP-2-FA			charges each.					
TSFM	2	30	1xP-3-RX	_	20	1xEW pod	30	180	0☆	C6	F8
			2x-2-FH			2xQuantum Wave					
			2xP-3-FX			Torpedo-FA;					
TSFI	2	15	2xP-3-RX	_	18	1xEW pod	20	178	0☆	C6	F9
						2xQuantum Wave					
			2x-2-FH			Torpedo-FA, two					
			2xP-3-FX			charges each;					
TSFIM	2	30	2xP-3-RX	—	20	1xEW pod	30	180	0☆	C6	F9
			1xP-2-FA			3xQuantum Wave					
			1xP-2-LS			I orpedo-FA, two					
		_	1xP-2-RS			charges each;	07	407	_		<b>F40</b>
IG-A	3	6			24		21	167	-1	Сb	F10
			1xP-2-FH			Torpedo-EA two					
			1xP-2-LO			charges each					
TG-B	3	12	1xP-3-RH	_	24	1xFW pod	29	173	_1	C6	F11
	U U	1 1 2			21						

STAR FL	ЕЕТ В	ATTI	ES			Ν	IAST	ER FI	GHTE		IART
Туре	Size	Spd	Phaser	Drones	Dmg	Other Weapons	BPV	Year	DFR	Prod	Ref
			1xP-2-FX			3xQuantum Wave		[			
			1xP-2-LS			Torpedo-FA, two					
<b>TO O</b>			1xP-2-RS			charges each;		4			= 10
IG-C	3	15		_	24	1xEVV pod	31	1//	<u>−1☆</u>	<u>C6</u>	F12
			1xP-2-FA			Torpedo-FA two					
			1xP-2-RS			charges each:					
TG-CM	3	30	1xP-3-RX	_	26	1xEW pod	46.5	180	–1☆	C6	F12
			2xP-2-FX			4xQuantum Wave					
			1xP-2-LS			Torpedo-FA, two					
TOU		45	1xP-2-RS		00	charges each;	00	470		00	<b>E40</b>
IG-H	4	15	2XP-3-KX 2yD-2-FY	-	32	2xEVV pod 4xQuantum Wave	38	178	<b>−</b> 2₩	Co	F13
			1xP-2-LS			Torpedo-FA two					
			1xP-2-RS			charges each;					
TG-HM	4	30	2xP-3-RX	_	34	2xEW pod	55	180	–2☆	C6	F13
	Size	Spd	Phaser	Drones	Dmg	Other Weapons	BPV	Year	DFR	Prod	Ref
(R19.0) CA		ON FIG			7		Б	165	1	Ce	<b>E</b> 1
JK-1 IK-1F	1	0 8	1xP-3-FA	TXADD-4	7	 2xFW pod	5	172	1	C6	F1
JK-2	1	10	1xP-3-FA	1xADD-4	10		7	170	2	C6	F2
JK-2E	1	10	1xP-3-FA	_	10	2xEW pod	9	172	2	C6	F2
JK-3	1	12	1xP-3-FA	1xADD-6	14	—	9	173	3	C6	F3
JK-3E	1	12	1xP-3-FA	—	14	2xEW Pod	11	173	3	C6	F3
JK-4	1	15	2xP-3-FA	1xADD-6	14	—	11	176	4☆	C6	F4
JK-4M	1	30	2xP-3-FA	1xADD-6	16	— 0.:5)//	16.5	180	2☆	C6	F4
JK-4E	1	15	ZXP-3-FA	-	14	2xEVV pod	13	176	<b>4</b> ☆	60	F4
.IK-4FM	1	30	2xP-3-FA		16	2 extra pod rails	19.5	180	25	C6	F4
		00			10	1xDisruptor Cannon-	10.0	100			
HY-1	1	10	1xP-3-FA	_	10	FA	7	170	1	C6	F5
HY-1E	1	10	1xP-3-FA	—	10	2xEW pod	9	172	1	C6	F5
						1xDisruptor Cannon-	_				
HY-2	1	12	1xP-3-FA	-	14	FA, two charges	9	173	2	C6	F6
HY-2E	1	12	1xP-3-FA	-	14	2XEVV P00	11	173	2	60	Fb
HY-3	1	15	2xP-3-FA	2xADD-FA	14	FA two charges	12	176	3☆	C6	F7
		10	2/1 01/1	2/3/00 17/	· ·	1xDisruptor Cannon-	12	170			
HY-3M	1	30	2xP-3-FA	2xADD-FA	16	FA, three charges	18	180	1☆	C6	F7
HY-3E	1	15	2xP-3-FA	—	14	2xEW pod	14	176	3☆	C6	F7
						2xEW pod;					
HY-3EM	1	30	2xP-3-FA	<u> </u>	16	2 extra pod rails	21	180	1☆	C6	F7
						2xDisruptor Cannon-					
			2xP-2-FA			charges:					
DG-1	2	12	1xP-3-RA	1xADD-6	18	1xEW pod	18	177	1☆	C6	F8
			2xP-2-FA								
			2xP-3-FA								
DG-1i	2	12	2xP-3-RX	2xADD-6	18	1xEW pod	18	177	1☆	C6	F9
						2xDisruptor Cannon-					
						FA, each two					
DG-2	2	15	2XP-2-FA 1xP-3-RX		18	1xEW pod	20	178	1-1-2-2	C6	F10
00-2	2	15			10	2xDisruptor Cannon-	20	170		00	110
						FA, each three					
			2xP-2-FA			charges;					
DG-2M	2	30	1xP-3-RX	1xADD-6	20	1xEW pod	30	180	0☆	C6	F10
			2xP-2-FH								
	_	45	2xP-3-FX	0.400.0	40	4.x⊏\0/ m = -1		470		00	
DG-2i	2	15	2xP-3-RX	2xADD-6	18	1xEVV pod	20	178	1ជ	<u> </u>	⊢11

MASTER	FIGH	TER	CHART				ST	AR F	LEET	BAT	TLES
Туре	Size	Spd	Phaser	Drones	Dmg	Other Weapons	BPV	Year	DFR	Prod	Ref
			2xP-2-FH								
			2xP-3-FX								
			1xP-3-FA								
DG-2iM	2	30	2xP-3-RX	2xADD-6	20	1xEW pod	30	180	0☆	C6	F11
			1xP-2-FA								
			1xP-2-LS			3xDisruptor Cannon,					
			1xP-2-RS	2xDeath Bolt		each two charges;					
BR-1	3	6	1xP-3-RA	1xADD-6	24	1xEW pod	27	168	1	C6	F12
			1xP-2-FH								
			1xP-2-LS			3xDisruptor Cannon,					
			1xP-2-RS	2xDeath Bolt		each two charges;					_
BR-2	3	12	1xP-3-RH	1xADD-6	24	1xEW pod	29	173	1	C6	F13
			1xP-2-FX								
			1xP-2-LS			3xDisruptor Cannon,					
			1xP-2-RS	2xDeath Bolt		each two charges;					
BR-3	3	15	1xP-3-RX	1xADD-6	24	1xEW pod	31	178	–1☆	C6	F14
			1xP-2-FH			3xDisruptor Cannon-					
			1xP-2-LS			FA, each two					
	•		1xP-2-RS	2xDeath Bolt		charges;	40.5	100		00	<b>F</b> 44
BR-3IVI	3	30		TXADD-6	20		46.5	180	-127	Co	F14
						4xDisruptor Cannon-					
			1XP-2-LO	AvDeeth Delt		FA, each two					
KO	4	15	1XF-2-R3		22	Charges,	20	170	1-^-	CG	E16
KU	4	15		TXADD-0	32	4xDisruptor Cappon	30	179	-1%	Co	гю
			1vP-2-FA			EA each two					
			1vP-2-PS	AvDeath Bolt		charges:					
KOM	4	30	2xP-3-RX	1xADD-6	34	2xEW pod	57	180	–2☆	C6	F15

# LOST EMPIRES



# **WOLVES AMONG THE LIONS**

The Carnivons were descended from the same genetic stock that the ancient Leopard Kings planted on several planets, spawning the tiger-like Kzintis and lynxoid Lyrans. The Carnivons were wolf-like, and operated in packs with no central government. The predictable result was their annihilation. But there were historical alternatives that almost happened. One Carnivon leader almost became the mythical Gookwar, the emperor of all Carnivons. He might have led his species to not just survival, but conquest. Even in the final days of the Carnivons, one horde dove into the WYN Cluster but did not survive long enough to plant a colony that might have become an important factor. What if they had made it?

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