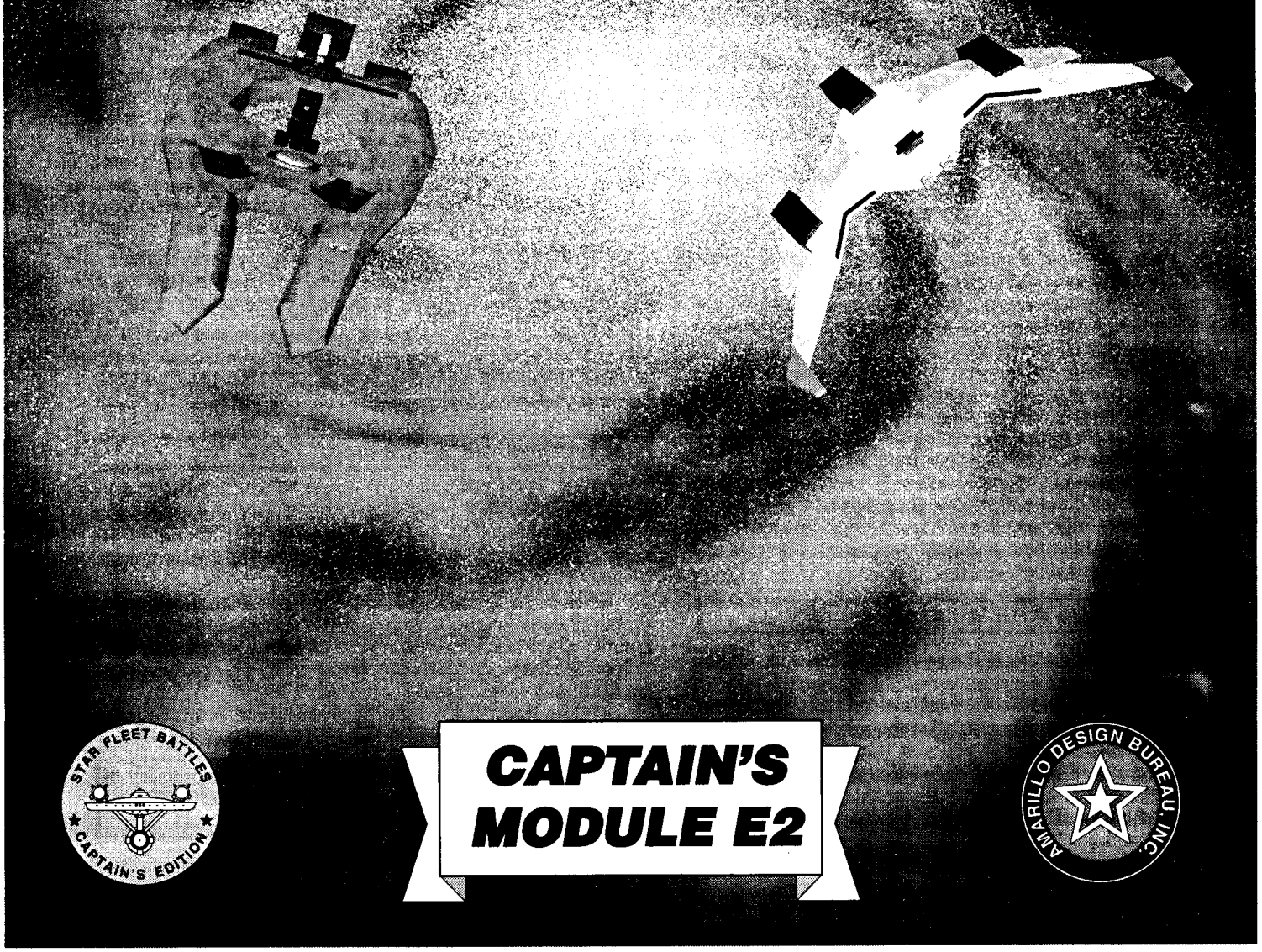
STAR FLEET BATTLES

THE TRIANGULUM GALAXY



STAR FLEET BATTLES
CAPTAIN'S EDITION

CAPTAIN'S MODULE E2

AMARILLO DESIGN BUREAU, INC.

(Z94.0) NOTES ON MODULE E2

(Z94.1) ORGANIZATION AND COMPONENTS

STAR FLEET BATTLES MODULE E2 is a playtest pack of a future modular component of the Star Fleet Battles Captain's Edition game system. It is published to develop ideas, solicit comments and playtest reports, and determine the market's reception of the product concept. You must have the Star Fleet Battles Basic Set to use this product (and Advanced Missions is highly recommended). Module J will be needed for the Mallaran Viper fighters and their Blur Device pods. No other SFB products are required; many would be useful. This product is complete in one 64-page book.

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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 web site.

All submissions are accepted only under our standard terms as published in SFB Advanced Missions.

Dealer inquiries are welcome. Hobby and game stores, please write to ADB, Inc. on your letterhead and ask for a list of qualified wholesalers, or call and ask for a salesman. ADB Inc. products are available to individuals in retail stores, from several direct-mail outlets, from the shopping cart on our web site, and directly from us. If your store does not carry our products, send us his name and address and we will have our wholesalers contact him.

(Z94.4) DESIGNER'S INFORMATION

The Triangulum Galaxy is the creation of Francois Angers and his company, New Galaxy Games. This galaxy has been around for several years as an unofficial project, a web site, and even a few playtest copies. Francois has continued to develop the project and what you see here differs seriously from earlier drafts. It should be noted that many of his rules, such as battle armor, could easily be adapted for use by the races of the Alpha or Omega Sectors, or even by those of the Magellanic Cloud.

Module E2 is a testament to the commitment of ADB Inc. to bring new ideas, concepts, and designers into the Star Fleet Battles family in a way that reflects values and integrity.

(Z94.5) TABLE OF CONTENTS

(Z94.6) PLAYTEST INSTRUCTIONS

As this is a playtest pack, we do want and need your playtest reports. Reports on ships and scenarios should use the report forms found later in this book. Reports on rules should be in the standard "ine item format". This format requires that each report be a separate paragraph linked to a specific rule number. The rule number must come first, followed by the problem, the proposed solution, a justification statement as to why the solution is such a good idea, then your name and the date. An example of a report would be:

(E99.315) This rule does not define what happens during the WW explosion period. I would assume the mass drivers fire at the explosion, but that might be dumb.--Kumerian, 1 Apr 00

Players can obtain a playtest update on this module by sending an email to triangulum@starfleetgames.com as this auto-responder will send back a brief list of changes, updates, new material, or tactical suggestions.

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TIMELINE OF THE TRIANGULUM GALAXY

THE OLD EMPIRE ERA

-Y1000 and before: During this era most of the known galaxy was dominated by a race known to today's inhabitants only as "the Ancient Ones". Their history is shrouded in mystery as most records from that time were lost during the *Annihilation War*. Their memory still survives in the myths and oral traditions of most races. To most, the Ancient Ones are remembered as an evil force that tried to enslave the whole galaxy. To the Imperium, they were a benevolent race that wanted to help elevate other races to their own level (of course this could not be done all at once, you had to educate them before they could benefit from the technology and social advances) and they tried to fashion their Imperium in the image of the Ancient Ones' Old Empire.

.....The exact event that brought the downfall of the Ancient Ones and of the Old Empire is also shrouded in mystery. All that is known is that another powerful race (known only as "the Saviors" to the current inhabitants of the galaxy — except in the Imperium where they are known as the "Usurpers") rallied the support of some of the races under the rule of the Ancient Ones (most notably the Frigian who were one of the most numerous subject races used in the Old Empire military) to overthrow them. When the *Annihilation War* ended, both the Ancient Ones and the Saviors disappeared, never to be seen again.

.....The Helgardian home system was shifted into our dimension during this early period. After searching unsuccessfully for over 300 years for a way to return to their own dimension, they decided to accept the shift and try to build a new empire. They had superior technology to the "young races" that were rising in the power vacuum.

THE PRE-WARP ERA

-Y1000 to Y0: "Pre-Warp" is something of a misnomer. The Triangulum Galaxy was recovering after the defeat of the Ancient Ones. Some races have warp technology (e.g., Frigian and Imperium), but are too exhausted by the *Annihilation War* to make frequent contact with the other races, or are isolationist in nature (i.e., the Helgardian). The Frigian and the Imperium are in a constant low-level struggle against one another for the remnants of the Old Empire. The Helgardians are building the basic infrastructure of their new territory, albeit at their usual slow pace.

-Y330 ...The Xxrix gain total control of their home planet but, since there is practically no metal on it, they cannot build starships; their primitive spacecraft are limited to low orbits. As they can see the stars, they speculate that other worlds await exploration and seek ways to achieve star travel.

-Y278 ...The Xxrix captured a Golag (a giant space-faring beast that nourishes itself from the gases in the higher atmospheres of gas giants) and start experimenting to modify them for use as starships.

-Y112... Important divisions within the Edurian Theocracy (already a part of the Imperium) on the subject of Dogma start to appear after the appearance of the Prophet and of the Savior.

-Y102... The Great Schism takes place in the Edurian Theocracy as the Savior forms a new religion (the Order of Ultimate Truth) to confront the Prophet. For a time, the dispute is more political than violent.

-Y92..... The untimely death of the Prophet at the hand of an assassin from the Order of the Ultimate Truth marks the start of a religious civil war. The Imperium tries to keep out of the conflict, since it concerns only the internal affairs of the Edurian Theocracy.

-Y92 to -Y42.....The First Religious War (between the Edurians and the Order) devastates the Edurian Theocracy. The Imperium is, near the end, forced to take a side and sends forces to support the Edurians, but it is not enough to prevent the secession of the Order.

-Y42..... The Order of Ultimate Truth, originally one of the two warring Edurian factions, becomes an independent nation with roughly half of the remaining Edurian territory. Both nations require nearly 50 years to recover from the ravages of the horrible Civil War. Both have to face the loss of the OUT territory due to the involvement of some external forces — the Ussite Pack and the Loth Pack.

-Y35..... The Parthean Trading Network is established and starts laying the foundation of trade lines across the known galaxy.

-Y28..... The Malkhat perfect trans-dimensional technology and make contact with bizarre entities from another dimension. The Demony Alliance is formed between the Malkhat and these entities.

-Y22..... The Great Plague hits Mallara.

-Y17..... The Malkhat acquire warp technology from their cross-dimensional allies.

-Y15..... After many unsuccessful attempts, the Xxrix manage to genetically modify a Golag for use as a starship. Unfortunately, adult Golag cannot be used, only newborn ones. Since it takes many years to grow them to Size Class 4 size (the smallest size capable of interstellar travel) they are still limited to exploring their own system for the time being.

..... Mallarans begin construction of an artificial intelligence, Project Overmind, to find a cure.

-Y12..... A Terran colony caravan bound for a new planet within eight parsecs of Earth (in the Milky Way Galaxy) is caught in a space anomaly that transports it to a place they later identify as a different galaxy. They find a suitable planet to colonize after two years of searching.

-Y11..... The Parthean make contact with the Helgardians. For the first time, the Helgardians are in contact with an advanced and peaceful civilization. (They had already had limited contact with the warlike Imperium and Frigians.) They conclude (erroneously) from this encounter that if they can just contact other races and establish diplomatic and

trade relations, that they could mold them into peaceful traders, like the Parthean.

-Y10.....The Overmind takes full control of the Mallaran government.

-Y3.....The Virax Republic, a one-planet nation without warp technology, discovers an ancient base on one of the moons of a gas giant in their system. The base has a small shipyard and lots of information about ancient technology, but strangely has almost no information about its builders. The base is estimated to be at least 1000 years old but cannot be definitely linked to the Saviors or to the Ancient Ones. It takes the Virax almost a decade to understand the technology.

THE EARLY YEARS

Y1.....The Helgardians make contact with the Mallarans and, after a short period of negotiations, sign a trade pact. The pact gives the Helgardian several advantages (such as fixed prices and first pick of some resources) in exchange for a small number of frigate-sized warp nacelles and the technology to use them. The Helgardians would make many more of these deals in the following years, and these would come to be known as Warp Pacts. The Helgardians made a major miscalculation in these deals, as they did not think that the races who received the technology could reverse-engineer, at least not as fast as they in fact did. This mistake cost them, and most of the other races in the galaxy, dearly in the following century as multiple wars would be waged using warp technology.

Y2.....The Waet revolution takes place; Uni-Corp forms the "Uni-Corp Security Force (UCSF)".

Y3.....The Helgardians give warp engines to the Aloola under a Warp Pact.

.....Uni-Corp takes over the Waet Republic, bans political parties, and quickly absorbs all other corporations, using the offensive capability of the UCSF as necessary.

Y4.....The Helgardians give warp engines to the Azary and the Sunfire Khanate under separate Warp Pacts.

Y6-15 ...Second Religious War. The Savior's second attempt at "liberating" the subjects of the Edurian Theocracy ends in failure. The Edurians are able to retake a couple of planets lost during the First Religious War.

Y7.....The Helgardians encounter a Gorthang ship. The Gorthang are surprised to encounter a biological life form capable of higher thought (other then themselves and the mythical Creators). They always believed that they were the only intelligent life form that still existed in the galaxy. The idea that they are sharing their galaxy with other intelligent life forms is distasteful to them.

Y9.....Warp Pacts are made between the Helgardians and several minor races in what would become the Khartax Free Zone.

Y10.....The Helgardians encounter and establish diplomatic relations with Uni-Corp, which had already acquired warp technology independently. Relations are cordial, but Uni-Corp refuses to grant any economic concessions to the Helgardians, and decide to establish their own small, but prosperous, trade routes with adjacent territories. As time passes, these routes become more active and extensive.

Y12.....The Imperium makes contact with the Mallaran Empire.

Y13.....The Helgardians give warp engines to the Quegan Matriarchy and the Valorean under separate Warp Pacts.

Y14.....The Helgarians give warp engines to the Human refugees under yet another Warp Pact.

Y16.....Under the last of the Warp Pacts, the Helgarians give warp engines to the Atrean.

Y17.....The Demony Alliance fleet replaces the shields on their ships with Trans-Dimensional Shields.

Y18.....The Helgardians try to make contact with the Demony Alliance, which refuses to give them trade access to their territory. The Demony only agree to trade with the Parthean.

Y24.....The Arachnids capture a scout ship from the Aloola and within the next three years take over what they assumed was the entire race. A small ducal colony in the northeastern quadrant remained unnoticed, and managed to both survive and thrive.

Y25.....The Mallarans capture a newly established and undefended colony (Driaxia) of the Quegan Matriarchy and quickly establish a "genetic research center" on it. The Quegan are unable to stop them, but a deep hatred is established and the Quegans begin building up a poweful space fleet. (See events: Y37.)

Y26.....The Nekronites start harassing their neighbors.

Y27.....An Arachnid ship encounters a trading ship from the Helgardians and tries to take over the crew. This first encounter turns out badly for the Arachnids when an enzyme produced by the Helgardian nervous system rejects, and kills, all Arachnids who enter a Helgardian body.

Y29.....A Mallaran ship encounters an Arachnid ship in what would later be known as the Khartax Free Zone. Both refuse to disengage from the system and a battle breaks out. The Mallaran ship retreats with minor damage but the first Khartax War has begun.

Y30.....Incursions of the Jandar Raiders begin.

Y29-31 . First Khartax War. The Mallarans and Arachnids fight many battles but the small size of the squadrons precludes anything more than an inconclusive result. The Helgardians are shocked when neither side accepts their mediation offer, and both sides begin to build larger and larger warships.

Y32-54 . Third Religious War. More blood is spilled during the Third Religious War than in the first two wars combined, as both sides "cleanse" some of the population from captured planets. At the end of the war, the border had hardly changed.

Y33-38 . First Demonic War. The Demony Alliance invades the Human Republic. After years of bitter battles, the Humans lose two planets to the Demony and a peace treaty is signed.

Y34.....The Quegan Matriarchy invents the Spatial Distortion Device.

.....Human Republic scientists invent the Targeting Scanner.

Y36.....Edurian ships are equipped with the Quantum Field Destabilizer.

..... The Khadij Mercenaries start selling their services to the highest bidders.

Y36-40.. Second Khartax War (Mallaran vs Arachnids). After the Quegan attack the Mallarans in Y37 (see below), the Arachnids are able to capture territory in the Khartax Free Zone. After the Mallarans sign a peace deal with the Quegan in Y39, they were able to redeploy forces and the fighting became a series of inconclusive actions as in the First Khartax War.

Y37-39.. First Retribution War. The Quegan take advantage of the Second Khartax War to attack the unprepared Mallarans. The Quegan have the advantage and capture several Mallaran colonies. The Mallarans (fighting a two-front war and losing both) sign a humiliating peace treaty in Y39, ceding back Driaxia and one other planet.

Y38..... The Gorthang invent the Deflector.

Y39..... The Mallaran fleet launches a powerful new warship. While it will later be classed as a Light Cruiser, it is the first Size Class 3 warship built by one of the Young Races that had signed a Warp Pact with the Helgardians.

Y40..... The Sunfire Khanate invents the Temporal Shield.

Y41-43.. The Lost Colony War. An Arachnid attack on a Valorean colony in Tragg's Realm was a wake-up call to the Directorate (who never understood the fear created by the Arachnid in the small duchy). The colony found itself on the wrong side of the border, and the Arachnids assumed it was allied with the Aloola. The Valorians and Aloola quickly ally to repel the invaders.

Y42..... The One Month War: In an ill-conceived plan, the Mallaran Empire tries to invade the Helgardian Protectorate. After the initial shock to the Helgardian high command, which had never foreseen this event, the entire invading fleet is encircled and annihilated. After this victory, the Helgardians will be left alone for a long time.

Y43..... Tragg's Realm starts rearming its fleet with Pulson Cannon.

Y44..... The Mallaran Empire develops the RAM Torpedo.

Y45-48.. An incident at a small Arachnid colony precipitates the First Cyborg War between the Atreans and the Arachnids.

Y46..... Sunfire Khanate ships start carrying Firebird fighters.

Y47..... The Arachnids finish the prototype of the Dragon, the first true heavy cruiser built by the Young Races. It is immediately used in the First Cyborg War where, after some initial problems, it performs admirably.

..... A group of several races in the Khartax Free Zone unite to form a commonly-armed fleet to protect themselves from the damage caused by the various wars between Mallarans and the Arachnids.

Y49..... The Imperium starts fielding the Medium Mine Rack.

Y56-62.. Fourth Khartax War. For the first time, incursions from the Mallarans and the Arachnids are met by an organized, if still small, Corsair force. Both the Mallarans and the Arachnids exercise restraint to avoid forcing the Corsairs to join the other side.

Y59..... Corsair ships are equipped with the Advanced Targeting System.

Y60-69 . The Troubled Sixties. A revolt in the eastern Khans requires ten years to be resolved by the 10th dynasty, and only after the extermination of six Khan families.

Y63..... The Arachnids develop the Hellfire Blaster.

Y63-66 . Second Cyborg War. The Atreans invade the Valorean Coalition and make huge gains.

Y64..... Sunfire Khanate starts carrying Sunbird fighters.

Y67..... The One-Year War. The Frigians try to invade the Arachnids but are stopped cold at the first battle and forced to limp home in shame. The Young Races are, for the first time, able to stand up to the Old Races.

Y71-75 . Second Demonic War. Once again, the Demony Alliance attacks the Human Republic without provocation, but this time the Humans are prepared. After some very costly battles in the first two years of the war, both sides were reduced to keeping their fleets on a defensive posture to avoid suffering major damage.

Y74..... The Corsair fleet, still only equipped with Size Class 4 ships (mostly FFs and DDs) is starting to fall behind the other nations who are building larger ships. Unfortunately, none of the Corsair races' shipyards can accommodate the construction of any larger hull. A brilliant engineer by the name of Sov Ven Cleet devises a way to hard-weld multiple FF or DD hulls together to create larger ships. For the next few years the Corsairs are hard at work building larger ships for their fleet.

Y78-87 . Fifth Khartax War starts after the Mallarans tried to attack the Corsair fleet. The Arachnids could not stand on the sideline while the Mallarans were advancing their cause in the Khartax Free Zone. For the first time, the Imperium has to intervene directly to protect its interests in the region.

Y83-87 . Third Cyborg War. The Atreans attack the Valorean Coalition again, using a trade dispute as an excuse. The Atreans have a larger fleet at their disposal and use it to good effect, capturing around 20% of Valorean territory.

Y85-87 . Imperium First Civil War. The Gorthang province revolts and, with the direct help of the Quegans (and indirect help from the Fifth Khartax War), wins its independence.

Y88-90 . Second Retribution War. The Gorthang are involved in a war for the first time when they have to defend their territory from a Mallaran fleet trying to outflank the Quegan. The Gorthang refuse to permit this fleet to use their territory as a jumping off point and fight for their neutrality. An alliance is signed with the Quegan and together they are able to repulse the assault of the Mallaran fleet. After this war, the Star League is formed.

Y92-97 . Fourth Cyborg War. The Gorthang launch a surprise attack on the Frigian, but surprisingly the Frigian seem ready for them. Diplomatic interventions from the Helgardians help to arrive at a peace treaty in Y97.

Y98-104 Sixth Khartax War. After cargo ships from the Mallarans are attacked around a Corsair base, the Mallarans once again invade the Khartax Free Zone to protect their national interests. Once again, the Arachnid response is to send their fleet to "defend" the Khartax Free Zone. The Imperium government seems

overwhelmed by the events and loses some territory during this war. Both the Mallarans and Arachnids have noticed the indecision of the Imperium government and, correctly, determine that the Imperium is not as powerful as its seems.

Y100-110...The Sunfire Succession Wars. During this period a total of eight different rulers take the title of Great Khan. All take the throne by force, and all, except Yamatite the Invincible, lose it by force. The intervention of the Demony and of the Azary into the internal matters of the Khanate only helps to exacerbate the nationalistic pride of the Sunfirite, who could not accept the rule of a Khan that they felt was put in power by an outside force. Finally, Yamatite the Invincible is able to kick out the last Demony fleet still inside the Khanate and claim victory, and the title of Great Khan, to found the 12th Dynasty. In reality, the Demony were already withdrawing their fleet when they were attacked by Yamatite's force.

THE FIRST GREAT EXPANSION WAR
The Ascension of the Young Races

Y114-115...The Prelude: What was at first known as the Seventh Khartax War begins. Both the Mallarans and the Arachnids use a minor incident in the Khartax Free Zone as a pretext for war. The Corsairs are better organized this time and are successful in keeping the combatants away from their most important planets. Neither side can afford a major battle with the Corsair Fleet. A vast diplomatic game is played out behind the scenes as both enemies look for allies.

Y116: The Beginning. The Atreans are not difficult to recruit as Mallaran allies against the Arachnids and in Y116 the invasion begins. At first the Arachnids appear totally unprepared, but this is only a ruse.

Y116-117 . The Mallarans launch a series of supporting attacks along the Arachnid front to relieve as much pressure as possible on the Atreans. These attacks are effective, as the Arachnids cannot use their forces effectively against the Directorate.

Y117 .... Both the Frigians and Valoreans invade Atrean territory. The Atreans, unprepared for a three-front war, are stunned. The initial Atrean defense quickly collapses. The Atrean hastily regroup at their second line of defense.

Y118 .... An Arachnid reserve fleet manages to attack into Atrean territory, creating a minor panic. The Atreans are starting to feel the pain of a three-front war. Renewed attacks by the Valoreans and the Frigians once again capture large parts of Atrean territory. To relieve pressure on the Atreans, the Helgardians decide to pay the Confederation (a loose association of mostly barbaric states) to invade the Frigian and Arachnid domains.

Y119 .... The Frigians find themselves unable to effectively maneuver against the large Atrean fleet in their space due to the small front line. The Frigian King takes a desperate gamble (ordering a fleet to slip through Tragg's territory to outflank the Atreans). The gamble fails and the Aloolan's repel the invaders after inflicting heavy losses. The Frigians now find themselves with another front to watch.

..... The Star League decides to use the confusion of this major war to again invade the Mallaran Empire. At first the League makes good gains, but reinforcements from the main Mallaran front are sent to stop them. The galactic political situation is about to explode in an extremely complex war of alliances and counter-alliances.

Y120 .... The Aloola mount a harassing campaign against the Frigians to punish them for invading their territory.

..... Once more the Order of the Ultimate Truth invades the infidel Edurians. The war quickly turns into a bloody brawl.

..... The Demony Alliance starts an attrition war against the Human Republic with some help (mostly logistical) from the Mallarans (who are *worried* that the Humans *might* help the Quegan against them). The Demony launch a series of smaller attacks in the hopes of engaging the entire Human fleet and slowly annihilating it with their superior production capacity.

..... The Mallarans achieve a minor breakthrough into Quegan territory but are quickly kicked out.

Y120-123. The Atlar province revolts and the Imperium is involved in its Second Civil War. The Atlar revolt is beaten down, but the struggle leaves the faltering Imperium even less capable of defending itself. This event will have repercussions in the near future.

Y121 .... Once again with the help of the Mallarans, who permit a Demony fleet to pass through their territory (and even paid for its supplies), the Demony mount a successful flanking move that captures a large part of Human territory.

..... The Mallarans counter-attack the Quegans with a larger fleet and make major gains, threatening to cut off the Quegan fleet still operating inside Mallaran space.

..... The Edurians attempt to outflank the Arachnid invasion fleet, but are met by a new fleet assembling behind the line. The resulting battle stops the Edurian fleet but also slows the Arachnid invasion, as units needed to sustain the offensive are sent to the other front. Instead of the killing blow they were preparing, the Arachnid fleet has to reorganize and consolidate its gains.

Y122 .... The Betrayal of Neutrality: Helgardian intelligence gets evidence of preparations for a major assault into Gorthang territory by a large Arachnid fleet. This attack would probably knock the Atreans out of the war and unbalance the whole conflict in favor of the Arachnids. The Council of Wise Ones decides to intervene in the conflict and launches a daring, and successful, attack into Arachnid territory destroying the gathering assault fleet.

The history of the Triangulum Galaxy extends beyond Y200, but these periods must wait for another product. The conflicts in those decades include the Faltering of the Arachnids, the Imperium Debacle, the Second Great Expansion War, the Barbarian Onslaught, and the Survival War. If reaction to Module E2 is positive, products covering these conflicts can be scheduled.

(DN100.0) BATTLE ARMOR AND POWERED BATTLE ARMOR

Battle Armor (BA) and Powered Battle Armor (PBA) are special types of boarding parties.

Battle Armor is a boarding party equipped with a special type of armor that basically heightens its durability. Battle Armor units are used by the Human Republic, the Imperium, and the Helgardian Protectorate.

Powered battle armor is a boarding party composed of a single person in very heavy and advanced armor. Powered battle armor has much more extensive capabilities then a normal boarding party, and is capable of autonomous movement and combat in space. Powered battle armor is used by the Human Republic and the Order of the Ultimate Truth.

Battle Armor and Powered Battle Armor are Triangulum Galaxy only rules, they can only be used in simulators outside of the Triangulum Galaxy.

(DN100.1) BATTLE ARMOR

(DN100.11) COST: It costs 0.5 Commander's Option points to convert a boarding party into a BA. It costs 1 Commander's Option point to add a BA to a ship. All of the boarding parties on a ship (except Commando and Heavy Weapons) can be converted to BA. The maximum of ten additional boarding parties purchased under Commander's options can all be equipped with BA.

(DN100.12) CAPABILITY: BA requires two casualty points to destroy in boarding actions. If on a hit-and-run raid (D7.8) and the result is the destruction of the boarding party, you must roll a die: on a result of 1-3, the BA is destroyed; on a result of 4-6, the BA returns with one point of damage.

(DN100.121) DAMAGE: A BA with one point of damage acts exactly like a regular boarding party.

(DN100.122) RECORDS: Records will need to be kept on damage sustained by any one BA boarding party. Such records are, for simplicity's sake, always open to review by all sides in any given scenario.

(DN100.1221) One solution is to use the counters from Module M, with each BA represented by a single counter. When a given BA is damaged, turn the counter upside down. When it is destroyed, remove the counter.

(DN100.1222) (OPTIONAL) Another means of holding record keeping to a minimum is to require that the resolution of damage to BA be done on the basis of eliminating whole counters, e.g., five damage points destroys two BAs and damages a third. A second volley of five damage points eliminates the damaged BA and destroys two others. Obviously this method favors the non-BA player as it reduces the BA side's firepower faster than if that side were allowed to cripple all its BAs to resolve damage before any are destroyed.

(DN100.123) BA units are destroyed by damage to the ship they are on exactly as non-BA-boarding parties are (D7.21), e.g., if the ship has taken its 50th damage point, one BA boarding party is destroyed. If the ship has BA and non-BA boarding parties, the owning player may choose which is lost (and will obviously choose a non-BA boarding party).

(DN100.124) BA boarding parties cannot be affected by non-violent marine combat (D6.46). They can use (D6.46) against opposing forces not in BA or PBA armor.

(DN100.13) OTHER EFFECTS: In all other ways, a BA unit acts as a regular boarding party; e.g., requires one transporter action to move (G8.3), two BAs can be carried by a shuttle into a combat situation (J2.211), has an offensive potential of one point (D15.87), are all destroyed if the barracks box they are in is destroyed (G28.33), etc.

(DN100.14) OTHER RULES:

(DN100.141) Heavy Weapons Squads (D15.81), Militia Squads (D15.83), Commando Squads (D15.84), Civilians (D15.85), Engineer Squads (D15.86), Prime Teams (G32.0), and Legendary Officers (G22.0) cannot be equipped with Battle Armor.

(DN100.142) Battle armor cannot be repaired during a scenario. It is automatically repaired at no cost between scenarios of a campaign as part of the (G17.132) repairs.

(DN100.1421) A Legendary Engineer (G22.4), Legendary Marine Major (G22.5), Legendary Ground Forces Officer (G22.9), or a Legendary Captain acting in the role of one of the above (G22.22) can repair one point of BA armor per turn. The Legendary Officer must be present with (in the same location as) the BA unit and perform no other action on the turn he repairs the BA armor. The unit being repaired must be a boarding party designated as a BA unit which has taken one point of damage. The above listed Legendary Officers cannot raise a BA unit from the "dead", but see (DN100.143).

(DN100.1422) Note that BAs can only be repaired between rounds of a campaign if they are on the ship/planet, etc. BA units that were killed when the shuttle they were on was blown up in space or that were left behind on an enemy ship (or carried off by an enemy ship) or planet cannot be repaired and are lost.

(DN100.143) The actual "boarding parties" can be healed by the normal rules (G9.23) and (G22.611). Note that "dead" BA boarding parties healed by a Legendary Doctor during a scenario will not have their armor, but will be normal boarding parties for all purposes. However, see (DN100.1421).

(DN100.144) If using these rules, the Robotic Boarding Parties (G11.26) of a ship controlled by a Super-Intelligent Battle Computer are treated as if they had Battle Armor, i.e., each takes two damage points to destroy. Regular boarding parties on such a ship can purchase BA status under the Commander's Option rules normally; they are not automatically equipped with it.

(DN100.145) Ships with Poor Crews (G21.141) cannot purchase BA status for more than 50% of their boarding parties, including any additional boarding parties purchased above its starting level. Ships with Outstanding Crews (G21.142) gain no additional benefit in the purchase of BA status, i.e., they may spend Commander's Option points in the same manner as a non-Outstanding Crew ship.

(DN100.146) BA provides no protection from attack by Transporter Artillery (E20.0) [including Cluster Bombs (E20.36) and Ground Attack Drones (E20.37)] except that each such unit requires two points of damage to be destroyed (DN100.12).

(DN100.2) POWERED BATTLE ARMOR

The three races in this product do not use Powered Battle Armor (PBA). For those who would like to experiment with this rule, a copy can be found on the Starfleet Battles web site.

(DN101.0) TRIANGULUM GALAXY SENSOR/ SCANNER SYSTEMS

Starships in the Triangulum races use a different kind of sensor/scanner system than the Milky Way races. The sensor and scanner ratings do not change with damage, but the ships suffer from an increased amount of natural ECM that is applied as a penalty against this particular unit.

(DN101.1) SENSORS

The sensor rating of all Triangulum units is assumed to be six and cannot be reduced by damage. For all other effects of sensors use (D6.1).

(DN101.2) SCANNERS

The scanner rating of all Triangulum units is assumed to be zero and cannot be reduced by damage. For all other effects of scanners use (D6.2).

(DN101.3) SENSOR/SCANNER TRACK

(DN101.31) RATING OF THE SENSOR/SCANNER TRACK: The current rating (the first undestroyed box) on the sensors/scanners track represents the amount of natural ECM that will affect this particular unit.

EXAMPLE: A Mallaran destroyer has a current sensor/scanner rating of two, so it will be penalized by two points of natural ECM for any function it performs, i.e., firing weapons, guiding seeking weapons, using transporters, etc.

(DN101.311) NEGATIVE RATING: Some units have a negative sensor/scanner rating in their first box. This rating represents a rather advanced fire control system. In this case the rating represents freely received ECCM points if it is using active fire control and has a lock-on to the target.

(DN101.312) The fact that a unit is using the Triangulum Sensor/Scanner system is known if its fire control is active at Tactical Intelligence Level A. This would, obviously, only become important in a "double blind" game using tactical intelligence against a totally unknown opponent.

(DN101.32) DAMAGING SENSOR/SCANNER TRACKS: The boxes on the Sensor/Scanner track are destroyed by either sensor or scanner damage points on the DAC chart. The boxes can also be destroyed by hit-and-run raids. Damage to Sensor/Scanner Tracks cannot be repaired during a scenario by any means, but is repaired between scenarios in the same manner as normal Sensors and Scanners.

(DN101.4) ELECTRONIC WARFARE

(DN101.41) BASIC RULES: Use the rules found in (D6.3) except where noted below. For all fire-control purposes, use the standard rules except where noted, e.g., a ship must go on passive fire control if it is cloaking (G13.0) or using hidden deployment (D20.0).

(DN101.42) GENERATING ELECTRONIC WARFARE (EW): All Triangulum units are assumed to have a sensor rating of six and can always generate six points of EW until destroyed (the unit, not its sensor-scanner system) if energy is available.

(DN101.43) ELECTRONIC COUNTER-MEASURES (ECM): Due to the way that Triangulum ships generate warp fields, the energy cost to produce ECM is affected by the size of the ship. Note that this only affects generated ECM and not lent ECM points. [Note, ECCM operates normally, i.e., one point of power produces one point of ECCM regardless of the size of the ship generating it, but see (DN101.44)].

Size Class	Cost per point of ECM Generated
1	2 energy points
2	1.5 energy points
3	1 energy point
4	0.67 energy points
5	0.5 energy points

(DN101.44) ADVANCED COUNTER-COUNTER MEASURES (ACCM): After the Y154 refit, all Triangulum units of Size Class 4 or larger (exception: Size Class 6 or smaller in the case of the Khadij Mercenaries) were equipped with advanced fire control systems able to generate ACCM. ACCM points cannot be lent in any way.

(DN101.441) EFFECT OF ACCM: ACCM points have the same effect as ECCM points except when the number of ACCM points of the firing unit is at least two points higher then the ECM points of the target. In this case subtract one from the die or dice rolls of any direct-fire weapons fired from the unit generating ACCM against that target, or from guided seeking-weapons directed at that target.

EXAMPLE: Helgardian C fires four MGBs at a Mallaran CAR at four hexes range. The Helgardian C is using six points of ACCM. The Mallaran CAR is using four points of ECM. As the difference is at least two ACCM points higher than the defending ECM, the Helgardian player subtracts one from each die roll. The Helgardian rolls a three, four, two, and one which would result in 11 points of damage. However, with the minus one from the die rolls are modifed to a two, three, one, and one which result in 13 points of damage.

(DN101.442) GENERATING ACCM POINTS: To generate ACCM points, a unit must be equipped with an advanced fire control system (DN101.44). A unit cannot generate both ECCM and ACCM points at the same time; if it wants to start generating ACCM points and is already generating ECCM points it must drop those before generating ACCM points. The first ACCM point generated costs two points of energy, all subsequent ACCM points cost one point of energy.

(DN101.443) ACCM cannot be generated by uncontrolled (G2.2) units. It cannot be used by units on Low-Powered Fire Control (D6.7) or whose fire control is not active (D6.6). Units with disrupted fire control (D6.68) lose the benefit of any ACCM they are generating until their fire control is no longer disrupted.

(DN101.444) Ships with Poor Crews (G21.1) cannot generate ACCM. Ships with Outstanding Crews generate one more point of ACCM than they actually paid for, e.g., the two points of power used for the first point of ACCM (DN101.442) actually produces two points of ACCM. Legendary Weapons Officers do not increase the effects of ACCM (G22.71), but retain their die roll modifier (G22.72).

(DN101.445) The fact that a unit is able to employ ACCM is known if its fire control is active at Tactical Intelligence Level A (even if it is not actually generating any at that time).

(DN101.446) If a unit generating ACCM is guiding a seeking weapon with its own ECCM, the two systems cannot be combined, and the player must choose which EW system he will used, the guiding unit's ACCM, or the seeking weapon's ECCM. The guiding player can switch between the two systems while the seeking weapon is in flight during the SW Control Step of the Seeking Weapons Stage (686) of the Impulse Procedure, and could change it on every impulse.

(DN102.0) MICRO-THIN NEUTRONIUM ARMOR PLATING

Most races of the Triangulum Galaxy have adopted this defensive system. It consists of a thin layer of extremely resistant neutronium armor placed over sensitive systems.

(DN102.1) ARMOR BANK

(DN102.11) POSITION: Neutronium armor is very heavy, even when applied in the limited quantities used here. The weight restricts the amount of it which can be applied, and larger units are better able to benefit from it than smaller units.
(DN102.111) On Size Class 1 units there is one armor bank per shield arc.
(DN102.112) On Size Class 2, 3, and 4 units there are two armor banks: the FH one covering shield arcs #1, #2 and #6 and the RH one covering shield arcs #3, #4 and #5.
(DN102.113) On Size Class 5 or smaller units there is only one armor bank covering the entire unit.
(DN102.114) An armor bank only protects against damage through the shield arc(s) it covers.
(DN102.115) In cases where damage strikes the boundary between one armor bank and another, use the procedures provided to determine which shield would have been hit in a like circumstance. However, if shield boxes remained at the point where the damage was scored, the armor belt behind the shield which is penetrated will be the belt which is struck by that penetrating damage.

EXAMPLE: A Size Class 3 unit is struck on the border between its #2 and #3 shields, and the player has the choice between which shield will be hit. If he chooses the #2 shield, any damage which penetrates must be resolved against the forward armor belt. If he chooses the #3 shield, any penetrating damage must be resolved against the rear armor belt.

(DN102.12) DIFFERENCE FROM ARMOR: Neutronium micro-thin armor is not damaged as a result of shield penetration like normal armor (D4.12), but uses its own procedure (DN102.2).

(DN102.13) COMBINATION WITH NORMAL ARMOR: If a ship has both Neutronium micro-thin armor and normal armor (or Ryn Ceramic-Composite Armor), there is no change in the resolution of either armor system. Normal armor is destroyed by any damage penetrating the unit's shields, and all such armor must be destroyed before any Neutronium micro-thin armor might be damaged. Exception, it is possible that a Starbase might still have normal armor in its opposite armor bank while taking damage on a facing Neutronium micro-thin armor bank.

(DN102.14) TACTICAL INTELLIGENCE: The presence of Neutronium micro-thin armor on a unit is detected at Tactical Intelligence Level A.

(DN102.15) OPERATIONS: Neutronium micro-thin armor is a passive system. It is always in place (as normal armor is) even if the unit is "surprised" (D18.0). It cannot block, and has no effect on, hit-and-run raids (D7.8) or any other transporter operations (G8.0). It provides no defense against terrain other than its damage reduction effect (DN102.21), e.g., it will not prevent the crew of a ship from being killed by radiation poisoning in an ion storm or radiation zone (P15.1).

(DN102.2) DAMAGE PROCEDURE

(DN102.21) EFFECT: Neutronium micro-thin armor banks protect sensitive systems. This affects the resolution of damage on the Damage Allocation Chart.
(DN102.211) If a unit is equipped with neutronium micro-thin armor, die rolls of 2-5 and 9-12 on the Damage Allocation Chart destroy a point of armor on the facing bank rather than an SSD box inside the ship. A second identical die roll in the same volley (e.g., a second "4") ignores the armor and is resolved normally by (D4.31).
(DN102.212) For die rolls of 6, 7, or 8 the armor has no effect.

EXAMPLE: A player is resolving seven points of damage against a ship with Neutronium micro-thin armor. The first roll is snake-eyes, normally a bridge box, but scored on the armor. The second roll is a 12, normally aux con, but scored on armor. The third roll is a six, not scored on armor but on a forward hull box. The fourth roll is another 12, as this has been rolled before, the armor does not protect the aux con, and one box is marked destroyed. The fifth roll is another 12, and since both the armor and the aux have already been hit, it is resolved on the Emergency Bridge. The sixth roll is an eleven, but is blocked by the armor. The seventh roll is an eight, scored on Aft Hull.

(DN102.213) The destruction of a point of armor protecting a system on one turn, or even one impulse of one turn, or one damage step or volley of one impulse, has no effect on subsequent turns/impulses/volleys/damage steps. If, in the above example, the seven points of damage had been caused by a mine during movement, and another point of damage was caused by a phaser later that same impulse on the same armor bank, a result of 2 would strike another box of armor (assuming one remained), and not the bridge.
(DN102.214) In the event of multiple volleys striking the same armor bank in the same damage step, use the following:

(DN102.2141) Each volley of damage resolved against an armor bank treats the armor bank under (D4.31) in relation to each possible die roll, i.e., each volley that rolls a two destroys a box of armor (unless no armor remains) and a second two would strike the bridge.
(DN102.2142) In the case of enveloping weapons penetrating multiple shields, each point of damage which rolls a hit to be resolved under (D4.31) can be applied by the target unit to any armor bank behind a shield which damage from the enveloping weapon has penetrated. The normal procedures apply (DN102.211) and subsequent rolls for a given volley of damage will strike the protected system.

(DN102.215) Neutronium micro-thin armor has no benefit versus damage caused by internal explosions (D12.0), it will not block (and is itself not damaged by) any damage to systems caused by such explosions. It will not prevent Souldra ships from draining life energy from the ship (OJ4.22), but is otherwise affected under (OG10.11).

(DN102.22) REPAIRING NEUTRONIUM ARMOR: It costs eight repair points to repair one box from a Neutronium micro-thin armor bank, but this does not count against the limit of the unit's damage control rating, e.g., a unit with a damage control rating of four could repair four normal systems and any number of Neutronium micro-thin armor boxes subject only to its ability to allocate the repair points. It cannot be repaired by Emergency Damage Repair (D14.0).

(DN103.0) WORLDS OF UNIONS SPECIAL BOARDING RULES

Due to the Arachnids' capacity to assimilate other races, this rule is used when boarding party or ground combat includes Worlds of Unions troops in conjunction with (D7.0) Space Marine Boarding Parties, (D15.0) Ground Combat, and (D16.0) Advanced Marine Boarding Parties.

(DN103.1) EFFECT

(DN103.11) SPECIFIC DAMAGE ALLOCATION ASSIMILATION: If the Worlds of Unions player decides to use the specific damage allocation procedure from (D7.43) Step #3, roll a die for each opposing boarding party "destroyed" by that procedure. On a roll of 1, 2, or 3, the opposing boarding party is not destroyed but assimilated and becomes a Worlds of Unions boarding party.

(DN103.111) Add one to the assimilation die roll if the majority of the Worlds of Unions boarding parties that participated in that turn's action are units with poor crews (G21.1) and/or are militia squads.

(DN103.112) Subtract one from the assimilation die roll if all the Worlds of Unions boarding parties participating in that turn's attack are from units with outstanding crews with no militia squads. (It does not matter if the militia squads are from a ship that has an outstanding crew, they are still militia for this purpose.)

(DN103.113) Subtract one from the die roll if there are no militia squads or boarding parties from units with poor crews among the WoU forces participating in that turn's attack and at least one commando boarding party is present with Worlds of Unions forces. The commando boarding party must be participating in the attack; it does not have to survive. This is cumulative with (DN103.112).

(DN103.114) The Worlds of Unions player, or any player for that matter, is not required to use all of his firepower on any given round of ground combat, and so he could choose to attack with only his best (or worst as the situation dictates).

(DN103.115) Legendary Ground Forces Officers (G22.9), including Marine Majors (G22.5), on either side have no effect on the Assimilation die rolls, their effect is to increase the casualties of the opposing side.

(DN103.116) Units killed by die rolls on table (D7.421) where more than half the firepower was provided by non-boarding party units, e.g., shuttles, fighters, GCVs, tanks, etc. cannot be assimilated.

(DN103.12) NORMAL DAMAGE ALLOCATION ASSIMILATION: If boarding party casualties are not allocated using the Specific Damage Allocation Assimilation procedure above (DN103.11), roll a die for each non-Worlds of Unions casualty resulting from the Worlds of Unions attack. On a roll of one the boarding party (or militia squad) is converted into a World of Unions boarding party (or militia squad) instead of being destroyed; no modifiers apply. Note that the non-Worlds of Unions player may choose to give up as casualties units which cannot be assimilated in this case (DN103.13), or keep them against the time he will have to make a last stand.

(DN103.121) Legendary Ground Forces Officers (G22.9), including Marine Majors (G22.5), on either side have no effect on the Assimilation die rolls, their effect is to increase the casualties of the opposing side.

(DN103.122) Units killed by die rolls on table (D7.421) where more than half the firepower was provided by non-boarding party units, e.g., shuttles, fighters, GCVs, tanks, etc. cannot be assimilated.

(DN103.13) IMMUNITIES: Some units are immune to assimilation efforts of the Worlds of Unions.

(DN103.131) Vehicle units (D15.82), powered battle armor units (DN100.2), units in shuttles/fighters [exception, shuttles boarded by transporting inside (D7.60)], Prime Teams (G32.0), and Legendary Officers (G22.0) cannot be converted into Words of Unions units.

(DN103.132) Andromedan (R10.0) robotic boarding parties and crew units, Drex (OR8.0) robotic boarding parties and crew units, and Super-Intelligent Battle Computer boarding parties (G11.0) cannot be assimilated by any means.

(DN103.133) Cholorphons (OR7.0), their Keepers, and Helgardians (RN100.0) are also immune to assimilation as are Sigvirion (OR11.0) crew units and boarding parties (although the latter might try to infect the Worlds of Unions troops). Loriyill (OR12.0) and Souldra (OR13.0) units (such as they are) are also immune to the Worlds of Unions assimilation attempts. Hydrans (R9.0) and Tholians (R7.0) are also immune to assimilation due to the incompatability of their environments to the Arachnids.

(DN103.134) Units "killed" by methods that do not include die rolls on table (D7.421) cannot be assimilated, e.g., units killed by Transporter Artillery (E20.0).

(DN103.135) Units killed in a "hostile" environment cannot be assimilated, e.g., on the surface of an asteroid outside of a ground station, on the surface of a planet designated in the scenario as having an atmosphere that cannot support life. Again, combat inside of a ground base in such situations could result in assimilation.

(DN103.14) DE-ASSIMILATION: Crew units and boarding parties assimilated by the Worlds of Unions must be tracked.

(DN103.141) If any are recaptured during the current battle, usually through the use of Non-Violent Ground Combat (D6.46), but this can be accomplished by specific allocation (i.e., killing them so they can be saved) they can be cured by being treated by a Legendary Doctor (G22.6), Legendary Science Officer (G22.3) or Prime Team (G32.0).

(DN103.142) The units must be transported to the location of the above individuals/team to be treated. After two turns (Legendary Doctor) or three turns (Legendary Science Officer) or four turns (Prime Team), or one turn if any of the two are working in concert, the boarding party/crew unit in question is cured.

(DN103.143) A maximum of four crew units can be treated by any one of the above at one time, a maximum of six by any two at one time. This increases to six and eight (respectively) if the crew units are "alive" when brought to the treatment site [i.e., captured by being "stunned" (D6.46)].

(DN103.144) Any crew unit/boarding party that does not begin treatment within ten turns is too far gone to be saved by heroic local measures.

(EN100.0) PROTON PULSE EMITTER

The Proton Pulse Emitter (PPE) is a versatile weapon that is used by most races from the western quadrant of the Triangulum Galaxy. It can be used for offensive and defensive purposes. The PPE fires an energy pulse that does damage by its sheer kinetic power. There are six types of PPEs and four different "Mount" types that can be installed on ships or bases. PPEs use the rules and interactions of phasers (E2.0) except where explicitly stated otherwise, e.g., they cannot damage ESGs or fire through Tholian webs.

(EN100.1) DESIGNATION

(EN100.11) DESIGNATION: The designation system for the different types of PPEs and mount types is as follow:

The first letter is always a "P" which designates that the weapon is a PPE. The number that follows designates the mount type and the letter at the end designates the type of PPE in the mount.

EXAMPLE #1: "P1E" means the weapon is a single mount type-E PPE.

EXAMPLE #2: "P3A" means the weapon is a type-3 mount with three type-A PPEs.

(EN100.12) DESTRUCTION: A box on the SSD represents a single PPE mount and is destroyed by a single damage point, even if it is a multiple mount. PPEs are destroyed on "phaser" damage points and use the "phaser directional damage" procedure (D4.321).

(EN100.121) DAMAGE PRIORITY: The order of priority is as follows: Add the amount of energy required to fire all of a given mount's tubes independently, determine this for each of the mounts on the ship that are subject to destruction by a given volley of damage. The mount with the largest result is the first in the order of priority, i.e., is treated as the "best" weapon and must be the third one destroyed, and the others follow. If two mounts are equal the player receiving the damage determines which is destroyed.

(EN100.13) REPAIR: It requires 2 repair points to repair a type-A PPE, 3 points for a type-B, 4 points for a type-C, 6 points for a type-D, 8 points for a type-E and 10 points for a type-F. This repairs only one tube on a PPE multiple mount.

(EN100.131) MULTIPLE MOUNT: The second and subsequent tubes of a mount each cost one repair point less than the first tube, so to repair a type-A double mount costs three points. If the weapon remains in repair continuously until all of its tubes are fixed without firing, it counts as single repair against the unit's repair rating. See (EN100.132).

(EN100.132) HASTY REPAIRS: A multiple mount PPE can be hastily repaired, by repairing only a certain number of tubes, you must record the number of tubes that are to be repaired at the beginning of the repair process. Tubes on a given mount that are not repaired cannot be repaired at a later time during a scenario unless the mount is again destroyed. If the mount is destroyed a second time it may subsequently be completely repaired.

(EN100.133) DOWNGRADE REPAIRS: A given PPE cannot be hastily repaired as a lesser PPE.

(EN100.14) TECHNOLOGY RESTRICTION: PPEs are Triangulum technology and cannot be used in option mounts outside of Simulators.

(EN100.15) TACTICAL INTELLIGENCE: PPEs are distinguished at Tactical Intelligence Level G (D17.4) as to the number of tubes on a given mount. The number of operable tubes on a given PPE mount can be determined at Level I. The type of PPE on a given mount can only be determined by its firing. The arming of a PPE is not known at any status just like phasers; see (D17.4-L).

(EN100.16) TYPES OF PROTON PULSE EMITTER:

(EN100.161) PPE TYPE-A - Point defense weapon: The type-A is the least powerful of the PPEs and is more useful as a last defense against seeking weapons and fighters. It costs 0.5 of a point of energy to fire the first shot and .25 for the subsequent shots, if in a multiple mount and fired at the same time at the same target.

(EN100.162) PPE TYPE-B - Defensive weapon: The type-B is a short-range weapon that is used primarily for seeking weapon defense and fighter defense. It costs 0.75 of a point of energy to fire the first shot and 0.25 for subsequent shots, if in a multiple mount and fired at the same time and the same target.

(EN100.163) PPE TYPE-C - Multi-purpose weapon: The type-C is a more versatile weapon than the type-A or type-B because it has sufficient damage output and range to be used in an offensive mode. It costs 1 point of energy to fire the first shot and 0.5 point for subsequent shots, if in a multiple mount and fired at the same time and the same target. This weapon cannot be mounted on manned units smaller than size class 5, but it is found on Defense Satellites and Captor Mines.

(EN100.164) PPE TYPE-D - Offensive weapon: The type-D has more power and range than the type-C, making it an excellent offensive weapon, but a power hungry defensive weapon. It costs 1.5 points of energy to fire the first shot and 1 point for subsequent shots if in a multiple mount and fired at the same time and the same target. It cannot be mounted on non-stabilized units smaller than Size Class 4, but is used by planetary defense stations and bases.

(EN100.165) PPE TYPE-E - Long-range weapon: The type-E is the biggest and most powerful PPE that can be mounted on a ship. Its power and range make it a perfect offensive weapon. It has only been utilized in limited quantities. It costs 2 points of energy to fire the first shot and 1.5 for subsequent shots, if in a multiple mount and fired at the same time and the same target. A minimum of Size Class 3 is required to mount this weapon.

(EN100.166) PPE TYPE-F - Heavy weapon: The type-F is the largest PPE. A huge weapon, it can only be singularly mounted on a base with active positional stabilizers or affixed to a planetary/moon surface or large asteroid. It costs 4 points of energy to fire a type-F PPE. There are no multiple mounts that can use the type-F.

(EN100.17) TYPE OF MOUNT:

(EN100.171) MOUNTS: There are four types of mounts that are differentiated by the number of weapon tubes that can be mounted. Type-1 has one tube, type-2 has two tubes, type-3 has three tubes, and type-4 has four tubes. Only bases can use type-4 Mounts. There is a limit to the type of PPE that can be used with each mount. Different PPEs cannot be mixed in a single mount. (Exception: Azary Heaven ships can mount one type-2 mount one size larger, i.e., a Size Class 4 unit could have one P2D and a Size Class 3 unit could have one P2E. However no ship can mount a type F PPE).

Mount Type	PPE Type	Limitation
1	A-F	None.
2	A-D	Size class 4 cannot use PPEs of type D with this mount.*
3	A-C	Size class 5 cannot use PPEs of type C with this mount.†
4	A-E	Can only be mounted on Bases.‡

*Exceptions for Defense Satellites, Captor Mines, Small Bases with positional stabilizers, and small planetary Defense Stations.

†Exceptions for Small Bases with positional stabilizers and small planetary Defense Stations.

‡Exception for small planetary Defense Stations.

(EN100.172) SHUTTLES: Shuttles can only use mount types-1, -2 and -3 with PPE types-A and -B or a type-1 with a PPE type-C.

(EN100.173) LIMITATION: A multiple mount (types-2, -3 and -4) can only fire on one target in a single impulse even if firing more than one tube. All of the tubes that fire in a single impulse must fire at the same target and must use the same die roll (using the narrow salvo procedure). There is however an energy bonus to this procedure, see (EN100.24).

(EN100.2) ARMING PROCEDURE

(EN100.21) ENERGY: See the individual description for each PPE type for the energy cost (EN100.16). PPEs can use energy from any source.

(EN100.22) CAPACITOR: A ship equipped with PPEs has a single capacitor (H6.0) from which any number of PPEs can draw energy during the direct-fire phase. This capacitor is large enough to accumulate energy to fire each of the PPE tubes on the ship separately.

EXAMPLE: If a ship is equipped with one P3A, two P2Cs, and two P1Es, its capacitor would be large enough to accumulate 9.5 points of energy (four for the PPE type-E, 1.5 for the type-A and four for the type-C).

(EN100.221) CAPACITOR STORAGE CAPACITY: This capacitor will lose storage capacity at the same time that a PPE mount is destroyed.

EXAMPLE: If the ship from the previous example lost one of its type-E PPE Mounts, it would lose two points of storage capacity from its capacitor.

(EN100.23) RESERVE POWER: Reserve power can be used to arm and fire a PPE but it can still only fire once per turn or after eight impulses of firing on a previous turn.

(EN100.24) WEAPONS STATUS: At Weapons Status-0 and -I, the capacitor is empty and unenergized. At Weapons Status-II the capacitor is half full. At Weapons Status-III, the capacitor is full.

(EN100.3) FIRING PROCEDURE

(EN100.31) PROCEDURE: Roll one die modified for EW and consult the appropriate chart. Find the target range and cross-reference it and the result of the die to find the damage scored on the facing shield of the target.

(EN100.311) MULTIPLE MOUNT FIRING PROCEDURE: If a multiple mount (types-2, -3, and -4) fire more than one tube in a single impulse they must all fire at the same target using the narrow salvo procedure (E1.6) (same die roll for all the tubes fired). The first shot uses the regular energy cost but the subsequent shots cost 0.5 energy point less (exception: the type-As only save .25 point per subsequent shot).

EXAMPLE #1: A CA decides to fire his wing mount, which is a type 2 mount with type D PPEs. If it were firing the two tubes in different impulses it would cost it 3 points of energy (1.5 + 1.5). But if it decides to fire them in the same impulse the cost would be reduced to 2.5 (1.5 + 1) due to the saving of 0.5 point on the second shot.

EXAMPLE #2: A CA decides to fire one of its type 3 mounts that have type A PPEs at the same target in the same impulse. The total energy cost will be 1 point of energy (0.5 + 0.25 + 0.25).

(EN100.312) A PPE mount with more than one PPE can fire one tube on one impulse, and a second (or more) tubes on a second impulse at the same or a different target. Any tubes fired on the same impulse must all be fired at the same target as a narrow salvo (EN100.311). Note that under (EN100.16) firing the tubes individually requires more energy, while firing all of the tubes of one mount at one time uses less energy.

(EN100.313) If using Low-Powered Fire Control (D6.7), a given ship could fire two PPE "Mounts", each in a single impulse (could be two separate impulses or the same one) as its two allowed Direct-Fire Weapons. The ship could also fire two "tubes" on different impulses as its allowed direct-fire weapons, or one entire mount in a single impulse plus one "tube" from another mount.

(EN100.314) An uncontrolled ship (G2.2) can only fire each mount one time, it cannot fire one tube on one impulse and another tube on the same mount on a subsequent impulse.

(EN100.315) A unit with Aegis (D13.0) cannot fire subsequent shots by the same mount with different tubes on the same impulse at the same or different targets during subsequent Aegis impulses. A PPE mount firing more than one tube in an impulse must fire them all as a narrow salvo (EN100.311).

(EN100.32) WEAPON TABLES:

(EN100.321) TYPE-A (POINT DEFENSE):

DIE ROLL	RANGE 0	1	2	3
1	6	5	2	1
2	5	4	1	0
3	4	4	1	0
4	4	4	0	0
5	4	3	0	0
6	3	2	0	0

(EN100.322) TYPE-B (DEFENSE):

DIE ROLL	RANGE 0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

(EN100.323) TYPE-C (MULTI-PURPOSE):

DIE ROLL	RANGE 0	1	2	3-4	5-8	9-15	16-25
1	7	6	6	5	3	2	1
2	7	5	5	4	3	1	0
3	6	5	4	4	2	1	0
4	5	4	4	3	2	0	0
5	4	4	3	2	1	0	0
6	4	4	3	2	0	0	0

(EN100.324) TYPE-D (OFFENSIVE):

DIE ROLL	RANGE 0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

(EN100.325) TYPE-E (LONG-RANGE):

DIE ROLL	RANGE 0	1	2	3-4	5-8	9-15	16-25	26-40	41-60	61-75
1	14	13	13	10	6	3	3	2	1	1
2	14	12	12	10	6	2	2	1	1	0
3	13	11	10	9	5	2	1	1	0	0
4	12	9	8	7	4	2	0	0	0	0
5	11	8	7	5	3	1	0	0	0	0
6	10	7	6	5	1	0	0	0	0	0

(EN100.326) TYPE F (HEAVY WEAPON):

NO TABLE PROVIDED

(EN100.33) MAXIMUM RANGE:

TYPE	Maximum True Range
A	3 hexes
B	8 hexes
C	25 hexes
D	50 hexes
E	75 hexes
F	100 hexes

(EN100.34) TRUE RANGE AND EFFECTIVE RANGE: When the true range and the effective range are different use the effective range.

(EN100.35) FEEDBACK: PPEs do not cause feedback.

(EN100.36) OVERLOADS: There is no overload function for the PPE.

(EN100.4) RESTRICTIONS AND CONDITIONS

(EN100.41) TERRAIN: PPEs cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], star (P12.1), black hole (P4.23) or pulsar (P5.32). They can be fired into such a hex. They can be fired through ring (P2.223), asteroid (P3.33), and dust (P13.4) hexes with the standard EW penalties.

(EN100.42) ATMOSPHERE: A PPE receives a penalty of one point of ECM for each hex of atmosphere that the line of fire passes through (P2.51).

(EN100.43) SIZE CLASS SEVEN TARGETS:
(EN100.431) DRONE OR MISSILE: PPEs are not penalized when fired at drone or missile, see (FD1.51).
(EN100.432) PLASMA TORPEDO: PPEs damage plasma torpedoes in the same manner as phasers (FP1.61).
(EN100.433) MINESWEEPING: PPEs operate as phasers for purposes of sweeping mines, see (M8.52).

(EN100.44) RATE OF FIRE: The rate of fire for PPEs is tracked for each tube, not mounts. A given tube can only fire once per turn and cannot fire twice within eight consecutive impulses, even in two different turns.

(EN100.45) LOW POWER: A PPE cannot be fired using the low-power procedure.

(EN100.46) BLINDING SENSORS: The firing of a single tube from a type-A or -B PPE will not blind special sensors (G24.13). If a second tube on a given mount is fired within eight impulses of a previous firing it will blind a special sensor. Any other types of PPE automatically blind sensors at a rate of one special sensor per tube fired.

(EN100.47) NON-VIOLENT COMBAT: PPEs can use the NVC procedure, see (D6.4).

(EN101.0) GRAVITON BEAM

The Graviton Beam (GB) is an offensive and defensive weapon that is used exclusively by the Helgardians. The GB requires little energy to fire and does correspondingly little damage. Its strengths lie in a very high rate of fire and its wide variety of firing modes that can be used depending on the situation.

(EN101.1) TYPES OF GRAVITON BEAMS

There are three types of graviton beams.

(EN101.11) LIGHT GRAVITON BEAM (LGB): The LGB is a short-range, low-damage weapon used primarily for point defense. It costs 0.25 points of energy to fire in standard mode (EN101.21). It uses the MGB table when fired in overload mode (EN101.24).

(EN101.12) MEDIUM GRAVITON BEAM (MGB): The MGB is more powerful than the LGB, and is the largest GB that can be installed on a non-base unit. It costs 0.5 points of energy to fire in standard mode (EN101.21). It uses the HGB table when fired in overload mode (EN101.24).

(EN101.13) HEAVY GRAVITON BEAM (HGB): The HGB has more punch in the short range than a MGB, but dies off in the long range. This limitation makes it best suited as a secondary weapon. The HGB can only be mounted on bases. It costs 1 point of energy to fire the HGB in standard mode (EN101.21). There is no overload mode for this weapon.

(EN101.14) FIRING TABLES: See Helgardian SSDs.

(EN101.2) FIRING MODES

(EN101.20) PROCEDURE: There are four different types of firing modes that can be used at the time of firing. The decision to use a given firing mode for a given GB is made in the Fire Decision Step of the Fire Allocation Stage (6D1).
(EN101.201) Different firing modes cannot be combined for one GB during any given turn. The use of one firing mode precludes the use of another for the remainder of the current turn. If an MGB is fired in focus mode (EN101.23), it cannot be fired in overload mode (EN101.24) at the same time, or for the remainder of the turn.
(EN101.202) The standard quarter-turn delay applies (E1.50) to the firing of a weapon over a turn, but the firing of the weapon in one mode during one turn does not preclude it firing in a different mode on a subsequent turn after the conclusion of the delay period.
(EN101.203) If the unit is uncontrolled (G2.2), it can only fire its GBs in Standard Firing Mode (EN101.21), and cannot fire

more than two pulses from each GB in addition to all the other rules for an uncontrolled ship (G2.23).

(EN101.21) STANDARD FIRING MODE: This is the default mode if a given GB is not specified as firing in another mode. This is the only firing mode that may be used by an uncontrolled ship (EN101.203).
(EN101.211) The GB can be fired every eight impulses, to a maximum of four times in a given turn. The weapon is not required to fire all four of its shots, and is not required to fire one shot every eight impulses, but cannot fire any two shots in a period of less than eight impulses.
(EN101.212) If the ship is operating under Low Powered Fire Control (D6.7), it may fire up to two GBs in this mode, both of which can fire all four of their shots. Each GB firing in this mode counts as one of its two allowed direct-fire weapons.
(EN101.213) Prior to the Y154 refit the weapon can only fire two times a turn in this mode.

(EN101.22) BURST MODE: If a GB is fired in this mode, then after the last shot, it cannot be fired in any mode for 32 impulses. This mode allows a GB to fire a burst of up to four shots, one shot every two impulses. The first shot is during the Direct-Fire Phase that burst mode was announced. Subsequent shots of the burst are fired every two impulses, i.e., if announced during Impulse #2, the weapon would fire on Impulses #2, #4, #6, and #8. The 32 impulse delay is counted from the impulse the last shot is fired.
(EN101.221) The weapon can voluntarily cease firing (or involuntarily if destroyed) after the first or any subsequent shot, but it cannot resume firing once stopped. Even if it was voluntarily stopped after the first shot of a burst mode, it still incurs the 32 impulse delay before it can fire in another mode.
(EN101.222) The energy cost to fire in this mode is equal to twice the cost to fire the weapon in the Standard Mode for each shot fired. If the weapon is destroyed, or voluntarily ceases firing before all four bursts are fired, any unexpended energy may remain in the capacitor system if the capacitor system has room available (EN101.321).
(EN101.223) A weapon can be fired in burst mode with less than the amount of energy needed to fire the full burst, i.e., all four shots. The firing player is not required to announce the number of shots that will actually be fired.

EXAMPLE: A ship decides to fire a MGB in burst mode; the cost of each shot would be (0.5x2 =) 1 point of energy. So if it fires three times, then the total energy cost would be three points.
(EN101.224) If the ship is operating under Low Powered Fire Control (D6.7), it may fire up to two GBs in this mode, both of which can fire all four of their shots. Each GB firing in this mode counts as one of its two allowed direct-fire weapons.
(EN101.225) Prior to the Y154 refit the weapon can only fire two times a turn in this mode.

(EN101.23) FOCUS MODE: If a GB is fired in this mode then it cannot be fired in any mode for 32 impulses. The use of this mode allows the effective range to be reduced, so that an enemy ship is treated as being closer than it is. The basic energy cost to use this mode is twice the standard mode cost for the GB. By adding additional standard cost(s) to the basic cost, the effective range can be reduced by three additional hexes.
(EN101.231) A maximum of nine hexes range can be subtracted to a minimum of three hexes effective range.
(EN101.232) The focus mode cannot be used on a target that is more than 12 hexes away.

EXAMPLE: A ship decides to fire a MGB at a target that is at range 12. It also decides to reduce that range to three. It would cost it one point (0.5x2 = 1) to fire the weapon in focused mode. Plus an additional 1.5 points (0.5x3 = 1.5) to reduce the range by nine hexes. The MGB would require a total of 2.5 energy points.
(EN101.233) This mode cannot be used if the unit is under Passive (D19.0), Low Powered (D6.7), or Disrupted (D6.68) fire control.
(EN101.234) This mode cannot be used versus any unit to which the firing unit does not have a lock-on. It can be used against a cloaked unit to which a lock-on has been retained. The Cloaked unit must be within the allowed range brackets of three to twelve hexes true range. The effect of focus mode is applied to the Effective range.

(EN101.24) OVERLOAD MODE: If a GB is fired in this mode then it cannot be fired in any mode for 32 impulses. When a GB is fired in this mode use the table of the weapon one size larger, e.g., the LGB uses the MGB table, and the MGB uses the HGB table.
(EN101.241) The HGB cannot use this mode.
(EN101.242) The cost to fire in this mode is four times the cost to fire the weapon in its Standard mode.

EXAMPLE: If a ship decides to fire a MGB in overload mode, it would require two (0.5x4 =) 2 points of energy and would use the HGB table.

(EN101.3) CONDITIONS AND RESTRICTIONS

(EN101.31) AVAILABILITY: In any direct-fire phase a ship can fire any number of GBs, as long as energy is available in the capacitor and the other restrictions are satisfied.

(EN101.32) ENERGY: The energy to fire a GB must come from its capacitor.
(EN101.321) CAPACITOR: A ship equipped with GBs has one capacitor linked to all of the GBs. This capacitor can store energy equal to that needed to fire each of its GBs four times in the Standard Mode (EN101.21). Use the standard rules for capacitor (H6.0) and note that when a GB is destroyed an equivalent portion of the capacitor equal to its ability to fire four times is also destroyed.

EXAMPLE: The Helgardian Heavy Cruiser is equipped with six MGBs and three LGBs. This means the ship will have a 15-point GB capacitor.
(EN101.322) ALLOCATION: Energy can be allocated to the capacitor during the Energy Allocation Phase or during a turn using reserve power (H7.2). Reserve power cannot be removed from the capacitor on the same impulse it arrives.
(EN101.323) WEAPON STATUS: At Weapons Status-0 and -I, no energy is stored in the capacitor. At Weapons Status-II, the capacitor has enough energy to fire each of a unit's GBs once in Standard Mode. At Weapons Status-III, the capacitor has enough energy to fire each of a unit's GBs twice in Standard Mode.

(EN101.33) DESTRUCTION: GBs are destroyed on "phaser" damage points. The phaser directional damage rules apply (D4.321) to GBs. For purposes of (D4.3221) the best to worst GBs are: HGB, MGB, then LGB.

(EN101.34) SMALL TARGETS: GBs are not penalized when firing at drones (FD1.52). When firing at size class 6 and 7 targets that are within two hexes true range, the amount of damage produced by the combat table is doubled.

EXAMPLE: A Mallaran fighter is at range two from a Helgardian CL. The ship fires an LGB at the fighter, rolling a two, which normally would score two points of damage, however this is doubled to four points of damage.

(EN101.35) BLINDING SENSORS: The firing of a LGB in standard mode will not blind scout sensors (G24.13), even if the weapon fires all four of its pulses. An HGB or MGB fired as an LGB will not blind sensors. Any other type of firing, including the firing of an LGB in one of the non-Standard modes will blind one special sensor for each shot.

(EN101.36) INTERACTION: For interaction with other systems, consider the GB a phaser, including damaging plasma torpedoes (FP1.61). Note: Because plasma torpedoes are Size Class 7 units (R0.6) they will be affected by (EN101.34).

(EN101.37) LOW-POWER: A GB can be fired in a Low-Powered Mode. The basic cost and the table used is one level lower than the GB firing. A HGB can be fired as an MGB or LGB. An MGB can be fired as an LGB. An LGB cannot use this firing procedure. This procedure can be combined with the different firing modes in (EN101.2).

(EN101.38) DIRECT-FIRE WEAPON: A GB is considered a direct-fire weapon for all purposes not specifically listed as being different, e.g., (EN101.34) and (EN101.23).

(EN101.4) OTHER RULES

(EN101.41) TERRAIN: Each terrain feature affects GBs as if the GBs are phasers.

(EN101.42) REPAIR: It requires two repair points to repair an LGB, five points for an MGB, and ten points for an HGB.
(EN101.411) HASTY REPAIR: An HGB can be hastily repaired as an MGB or LGB; an MGB can be hastily repaired as an LGB, in each case for the relevant number of points.

(EN101.43) TACTICAL INTELLIGENCE: GBs are distinguished at Tactical Intelligence Level G (D17.4) as to their presence and their number. The type of GB (HGB, MGB, or LGB) can be determined at Level I. The arming of a GB is not known at any status just like phasers; see (D17.4-L).

(EN101.44) TECHNOLOGY RESTRICTION: GBs are Triangulum technology and cannot be used in option mounts outside of Simulators.

(EN102.0) PULSE PHASER

Pulse Phasers (PP) are used in the Eastern quadrant of the Triangulum Galaxy and perform the same function as phasers in the Milky Way.

(EN102.1) PULSE PHASER TYPE

(EN102.11) LIGHT PULSE PHASER (LPP): A defensive weapon with a short range, it costs 0.5 points of energy from the capacitor to fire a LPP.
(EN102.111) TWIN PULSE PHASER (TPP): A pair of LPPs (EN102.11) packed into the same mount. They can be fired together or separately. It costs 0.25 points of energy from the capacitor to fire each one, i.e., 0.5 points of energy to fire both or 0.25 points of energy to fire only one.
(EN102.112) GATLING PULSE PHASER (GPP): Four LPPs (EN102.11) packed into the same mount. They can be fired together or separately. It costs 0.25 points of energy from the capacitor to fire each one, i.e., one point of energy to fire all four, 0.75 points of energy to fire three, etc.

(EN102.12) MEDIUM PULSE PHASER (MPP): The standard pulse phaser mount on most ships for either defensive or offensive purposes. It costs one point of energy from the capacitor to fire a MPP.
(EN102.121) DUAL PULSE PHASER (DPP): A pair of MPPs (EN102.12) packed into the same mount. They can be fired together or separately. It costs 0.5 points of energy from the capacitor to fire each one, i.e., 1 point of energy to fire both or 0.5 points of energy to fire only one.
(EN102.122) MULTI-PURPOSE PULSE PHASER (PPP): A variant of the MPP (EN102.12), this lighter version was an attempt to make a better defensive weapon then the LPP without the full cost of a MPP. It costs 0.75 points of energy from the capacitor to fire a PPP.
(EN102.123) EXTENDED-RANGE PULSE PHASER (EPP): A variant of the MPP (EN102.12), this costly weapon has a longer range than a MPP without costing more energy to fire. It costs one point of energy from the capacitor to fire a EPP.
(EN102.124) SHORT-RANGE PULSE PHASER (SPP): A variant of the MPP (EN102.12), this weapon was designed to pack a lot of punch at short range at the expense of the MPP's long range punch. It costs one point of energy from the capacitor to fire a SPP.

(EN102.13) HEAVY PULSE PHASER (HPP): Only mounted on bases with positional stabilizers (G29.0) or affixed to the surface of a planet (P2.0), moon (P2.23), or large asteroid (P3.4). It costs two points of energy from the capacitor to fire a HPP.

(EN102.14) PULSE PHASER TABLES: See SSDs.

(EN102.2) DAMAGE AND REPAIR

(EN102.21) DESTRUCTION: PPs are destroyed on "phaser" damage points and use the "phaser directional damage" procedure (D4.321).
(EN102.211) DAMAGE PRIORITY: The order of priority to determine the best pulse phaser is as follows: HPP, DPP, GPP, EPP, SPP, MPP, TPP, PPP, LPP. Note that the HPP is the best and the LPP is the worst.

(EN102.22) REPAIR COST: The number of repair points required to repair each type of pulse phaser is as follows:

PHASER TYPE		REPAIR COST	PHASER TYPE		REPAIR COST
HPP	=	12	MPP	=	5
DPP	=	10	TPP	=	3
GPP	=	7	PPP	=	3
EPP	=	7	LPP	=	2
SPP	=	6			

(EN102.221) Any pulse phaser can be hastily repaired (G17.5) as an LPP, but this is the only hasty repair available.

(EN102.23) TECHNOLOGY RESTRICTION: Pulse phasers are Triangulum technology and cannot be used in option mounts outside of Simulators.

(EN102.24) TACTICAL INTELLIGENCE: Pulse phasers are distinguished from other weapons at Tactical Intelligence Level G (D17.4). The specific types of pulse phasers in each position is determined at Level I. Note that the firing of pulse phasers may reveal their types at longer ranges. The arming of a pulse phaser is not known at any status just like phasers; see (D17.4-L).

(EN102.25) MIXING WITH NON-PULSE PHASERS: Pulse phasers cannot be installed on ships that use non-pulse phasers. The capacitor systems of the two phaser types while functionally identical are operationally incompatible.

(EN102.26) TECHNOLOGY RESTRICTION: Pulse phasers are Triangulum technology and cannot be used in option mounts outside of Simulators.

(EN102.3) ARMING PROCEDURE

Pulse phasers use the same arming procedures as phasers as found in (E2.0), and the same capacitor system as found in (H6.0). The energy cost to fire a given pulse phaser is found in its description under (EN102.1).

(EN102.4) FIRING PROCEDURE

Pulse phasers fire using the same rules as phasers except that their damage is determined by the roll of two dice rather than one and they have their own damage charts.

(EN102.5) OTHER INTERACTIONS

Pulse phasers are considered to be phasers for all interactions with other systems, terrain, and weapons.

(EN104.0) MULTI-PURPOSE DEFENSE SYSTEM

The Multi-Purpose Defense System (MPDS) is a defensive weapon used by the Mallarans. It is a versatile system, although very short-ranged, that can defend against most types of non-direct-fire attacks. It is a canister that is energized and when fired releases a small ball of energy that tracks a target and damages it on impact. The speed of the energy ball is so very high that it is considered to be a direct-fire weapon for all purposes and does not use a counter.

The MPDS uses a special targeting system that is independent of normal active fire control (D6.6).

(EN104.1) DESIGNATION

(EN104.11) DESIGNATION: Multi-Purpose Defense Systems are designated MPDS on Mallaran SSDs.

(EN104.12) DESTRUCTION: Multi-Purpose Defense Systems are destroyed on "drone" damage points.
(EN104.121) DAMAGE PRIORITY: For purposes of damage priority (D4.3223), Ram Torpedoes (FSN100.0) are considered better then MPDS on units with both weapons.

(EN104.13) REPAIR: It requires five repair points to repair an MPDS system. The rack will be empty and must be reloaded before the repaired MPDS may be fired.

(EN104.14) TECHNOLOGY RESTRICTION: A MPDS is Triangulum technology and cannot be used in option mounts outside of simulators.

(EN104.15) TACTICAL INTELLIGENCE: MPDSs are identified at Level F (D17.4) if they have not previously been fired. The arming status of an MPDS cannot be detected. The fact that a unit has an operating MPDS Targeting System (EN104.22) is detected at Tactical Intelligence Level A.

(EN104.2) ARMING PROCEDURE

(EN104.21) COST: It cost 0.1 energy from any source to fire one shot of MPDS. A given MPDS can be fired once in every period of four consecutive impulses (i.e., cannot fire within four impulses of a previous firing). Reserve power can be used to allow the weapon to fire more times than energy was allocated for (within the firing rate limit). Energy allocated to an MPDS system during Energy Allocation, or from Reserve Power (H7.0), but not used, is lost at the end of the turn; the ammunition is not expended however.

(EN104.22) TARGETING SYSTEM: To activate an MPDS targeting system requires 0.25 energy points per launcher; this enables that launcher to fire during that turn. This energy can be allocated in the Energy Allocation Phase or allocated from Reserve Power (H7.0) during a turn. An MPDS launcher cannot fire with this targeting system if this cost has not been paid. There is no delay in the activation once the power is provided. If fired under normal Active Fire Control (D6.6), the targeting system need not be activated, but see (EN104.311).
(EN104.221) The targeting system of the MPDS is independent of the unit's active fire control (D6.6) and does not require its use.
(EN104.222) The activation of the MPDS Targeting System will void the hidden status (D20.3) of a unit which activates it.
(EN104.223) The Targeting System can be used even if the ship is otherwise on Low Powered (D6.7) or Passive Fire Control (D19.0). The Targeting system will not function if the ship is under Disrupted Fire Control (D6.68), but any MPDSs on the unit able to fire could do so under the normal Disrupted Fire Control rules, adjusting for any EW shifts.
(EN104.224) The Targeting System cannot be used by a unit under Erratic Maneuvers, but operates normally against a target using erratic maneuvers.
(EN104.225) The Targeting System cannot be used by a unit that is cloaked (G13.0), and activating the system will void the cloaking device (G13.40).
(EN104.226) The MPDS is unaffected by damage to the unit's normal Sensors and Scanners so long as it is operated under this targeting system.
(EN104.227) The targeting system cannot operate on a unit that is "surprised" (D18.0) until the unit is activated.
(EN104.228) Activating an MPDS Targeting System will void a wild weasel.

(EN104.23) RELOADING: Up to three MPDS canisters can be reloaded in the rack of a given MPDS launcher if it is not activated during the Energy Allocation Phase. The decision to reload a launcher is taken during the Energy Allocation Phase and must be recorded; this prevents that specific launcher from being fired, even with reserve power, during that turn.

(EN104.24) RATE OF FIRE: An activated launcher can fire one canister from its rack every four impulses, up to the limit of the ammunition in the rack and the number of impulses remaining in the turn, and its fire control status.
(EN104.241) An uncontrolled unit (G2.2) can only fire its MPDS on Active Fire Control, and can only fire one shot per launcher every eight impulses. It need not activate the targeting system (EN104.22), and would gain no benefit if it did.

(EN104.3) FIRING PROCEDURE

(EN104.31) PROCEDURE: To fire a MPDS, find the true range (D1.4) to the target, the to-hit number required for that range from the Multi-Purpose Defense System Table

(EN104.33) and roll one die. If the result is lower than or equal to the to-hit chance for that range a hit occurred and the damage appropriate to the Size Class of the target is scored (EN104.32), otherwise the shot missed.
(EN104.311) The die roll is not affected by EW (D6.3) if fired under the control of the MPDS targeting system (EN104.42), or by systems affecting the effective range such as cloaking devices (G13.0), but see (EN104.322) for damage resolution.
(EN104.312) If fired under normal fire control, the MPDS is affected by EW normally.
(EN104.313) The MPDS system cannot be fired if the firing unit does not have either its fire control fully active (D6.6) or its MPDS Targeting System (EN104.2) operating. It cannot be fired on Low-powered or Passive Fire Control.

(EN104.32) DAMAGE: The damage done depends on the target size class:

Target Size Class	Damage Applied
1-5	2
6	4
7	8

(EN104.321) This damage is treated as "phaser" damage for any interaction with other systems unless otherwise noted, e.g., it will damage a plasma torpedo (FP1.61), but cannot be used to sweep mines (EN104.433).
(EN104.322) If the target unit is cloaked, Table (G13.37) is still used to determine the total amount of damage scored.

(EN104.33) MULTI-PURPOSE DEFENSE SYSTEM TABLE

Range	0	1	2	3	4
Hit	1-2	1-3	1-5	1-3	1-2
Miss	3-6	4-6	6	4-6	3-6

(EN104.34) MODIFIERS: Ships with Poor Crews (G21.1) add one to the die roll in (EN104.31) at all ranges. Ships with Outstanding Crews (G21.2) subtract one from the die roll at all ranges. Legendary Weapons officers (G22.7) also subtract one from the die roll at all ranges, and this is cumulative with a crew quality. Super-Intelligent Battle Computers (G11.0) subtract one from the die roll at all ranges. There are no other modifiers.

(EN104.4) CONDITIONS AND RESTRICTIONS

(EN104.41) TERRAIN: MPDS cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], star (P12.1), black hole (P4.23) or pulsar (P5.32). They can be fired into such a hex. Note that such hexes will produce no EW modifiers (EN104.31).

(EN104.42) ATMOSPHERE: A MPDS can be fired into, out of, but not through atmosphere (P2.5) hexes. It can be fired at a unit in an atmosphere hex by another unit in an atmosphere hex adjacent to it.

(EN104.43) SIZE CLASS SEVEN TARGET:
(EN104.431) DRONE OR MISSILE: A MPDS is not penalized when fired at drone or missile, see (FD1.51).
(EN104.432) PLASMA TORPEDO: A MPDS will damage a plasma torpedo as if it was a phaser.
(EN104.433) MINESWEEPING: A MPDS cannot be used to sweep mines.

(EN104.42) WEBS: A MPDS can be fired into, out of, but not through web (G10.0) hexes. It can be fired at a unit in a web hex by another unit in a web hex adjacent to it.

(EN105.0) HELLFIRE BLASTER

Originally the Arachnid developed the Hellfire (HF) Blaster after a number of encounters in which they found the opponent was moving too fast and stayed too far away for the Hellfire Torpedo (FPN100.0) to get any solid hits. The HF Blaster gave them more flexibility in battle by allowing the discharge of the Hellfire Torpedo's warhead energy using the containment field as a firing tube.

This rule will not be usable without first familiarizing yourself with the rules and procedures of Hellfire Torpedoes, it is simply a direct-fire function for that torpedo.

(EN105.1) AVAILABILITY

(EN105.11) YEAR IN SERVICE: The Hellfire Blaster was installed in ships in Y63, prior to that date the basic cost of the unit is reduced by two BPV points per launcher. After that date it is standard on every ship, i.e., every Hellfire Torpedo Launcher is equipped with Hellfire Blaster capability. Note that as the Hellfire Blaster is simply a function of the Hellfire Torpedo, it is intrinsic to the Torpedo launcher and not separately detectable by Tactical Intelligence.

(EN105.12) TIME OF USE: A Hellfire torpedo can be optionally changed into a Hellfire Blaster at the instant of firing. Firing as a HF Blaster does not prevent a launcher from firing a HF torpedo, or another HF Blaster, on any subsequent turn. The decision to fire a Hellfire Torpedo as a Hellfire Blaster is made during the Fire Decision Step (6D1) of the Direct-Fire Weapons Segment (6D).

(EN105.13) POWER: As the Hellfire Blaster is an intrinsic use of the Hellfire Torpedo, it uses the same power that has been allocated to, or added by reserve power to, the warhead of the torpedo and has no separate power requirements.

(EN105.14) SSD: Hellfire Blasters are an intrinsic part of Hellfire Torpedoes (FPN100.0) and not shown separately on the SSD.

(EN105.15) TECHNOLOGY RESTRICTION: Hellfire blasters are Triangulum technology and cannot be used in option mounts outside of simulators.

(EN105.2) FIRING

A Hellfire Blaster operates in all ways and under all rules as a direct-fire weapon unless specifically noted otherwise.

(EN105.21) PROCEDURE: Using the range to the target and the HF Blaster chart, find the associated to-hit chance. Roll a die and if the modified result is equal to or less than the to-hit number, a hit has occurred.

(EN105.22) EFFECT: Take the warhead energy of the hellfire torpedo at the moment of firing as provided by (FPN100.2121). Multiply the energy number by the multiplier found on the chart for that range (round all fractions down). The result is the number of damage points scored on the facing shield of the target.

EXAMPLE: If an Arachnid CA decides to fire one of its HF torpedoes with a warhead strength of 40 in HF Blaster mode. The target is nine hexes away, which means a roll of three or less will result in a hit with a multiplier of 0.33. The Arachnid rolls a two resulting in a hit. The hit does (40x0.33 =) 13 points of damage to the target's facing shield.

(EN105.23) MAXIMUM RANGE: A HF Blaster can be fired at a maximum true range (D1.4) of 20 hexes.
(EN105.231) TRUE RANGE AND EFFECTIVE RANGE: When the true range and the effective range are different use the effective range to determine the probability of a hit and the true range to determine the damage. Note that other factors, such as a cloaked target, may further reduce the damage scored (G13.37).

(EN105.24) FEEDBACK: The HF Blaster can fire at range zero, but if the weapon hits at that range the firing unit will suffer feedback damage equal to 25% of the damage caused to the target under (EN105.22) to its facing shield.

(EN105.25) OVERLOADS: There is no overload function for the HF Blaster.

(EN105.3) CONDITIONS AND RESTRICTIONS

(EN105.31) TERRAIN: Hellfire Blasters cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], star (P12.1), black hole (P4.23) or pulsar (P5.32). They can be fired into such a hex. They can be fired through ring (P2.223), asteroid (P3.33), and dust (P13.4) hexes with the standard EW penalties.

(EN105.32) ATMOSPHERE: Hellfire Blasters cannot be fired through atmosphere.

(EN105.33) REPAIR: A HF Blaster is destroyed and repaired with the last box of the HF launcher, it has no separate repair being an intrinsic ability of the Hellfire torpedo launcher.

(EN105.34) FIRING ARC: A HF Blaster has the same firing arc as its associated HF torpedo launcher.

(EN105.35) RESTRICTION: Only energy put in the Hellfire Torpedo warhead (FPN100.21) counts as damage. Any energy put in the HF torpedo for any purpose other than warhead strength, e.g., holding energy, is lost at the moment of firing.

(EN105.35) SIZE CLASS SEVEN TARGET:
(EN105.351) DRONE OR MISSILE: A HF Blaster is penalized under (FD1.52) when fired at drone or missile.
(EN105.352) PLASMA TORPEDO: A HF Blaster will not damage a plasma torpedo.
(EN105.353) MINESWEEPING: A HF Blaster is penalized as a non-phaser weapon when fired at a mine (M8.52).

(EN106.0) PARTICLE SHOTGUN

The Particle Shotgun (PS) is the heavy weapon used by the Helgardian fleet. It is operated by accelerating small particles to hyper-warp speed and projecting them in a three-ball or six-ball pattern. Firing these balls in a pattern gives the weapon a higher chance of hitting a target, but with lesser damage done. The damage achieved is in proportion to the number of balls that hit the target.

(EN106.1) FIRING PROCEDURE

(EN106.11) PROCEDURE: A particle shotgun can be fired during any Direct-Fire Segment (6D) of any impulse. When firing consult the PS table and find the column with the target's range. Roll a die adjusting for any EW or other factors and cross-reference the result. Use the resulting number between the column and row to determine the number of hits obtained by the weapon in the right hand column. A non-overloaded PS cannot obtain more than three hits, so reduce the number of hits to three if more hits are obtained. Multiply the number of hits obtained by four, the result is the number of damage points suffered by the target.

EXAMPLE: An Helgardian CA fires three PSs at a target that is 15 hexes away. The target has one point of ECM and the Helgardian ship does not have any ECCM. The CA rolls a die for each PS: the results are 3 (adjusted due to EW to 4), 6 (adjusted to 7) and 1 (adjusted to 2). Consulting the PS table for range 15, we can see that with a modified roll of 7 there is no hit, a roll of 4 results in one ball hitting and a roll of 2 results in two balls hitting, thus the three shots together scored three hits. The damage per hit is four so a total of 12 points of damage is scored on the target.

(EN106.12) RANGE ZERO: The PS can always fire at range zero, but one point of feedback is scored on the firing ship's facing shield for every "ball" that hits. This does not reduce the damage scored on the target.

(EN106.13) SPECIAL FIRING: The PS can be fired in a narrow salvo; overloaded and non-overloaded PSs can be combined.
(EN106.131) The PS cannot be fired using the non-violent combat system (D6.4) due to the random effect of the pattern in which the balls are fired.

(EN106.14) PARTICLE SHOT GUN TABLE

RANGE	0	1–2	3–5	6–8	9–15	16–30	NUMBER OF HITS
	–	–	–	6	6	5-6	0
TO	–	6	5-6	4-5	4-5	3-4	1
HIT	5-6	5	4	3	2-3	1-2	2
#s	4	4	3	2	1	–	3
	3	3	2	1	–	–	4
	2	2	1	–	–	–	5
	1	1	–	–	–	–	6
DAM HIT	4	4	4	4	4	4	

(EN106.2) ARMING

(EN106.21) COST: The Particle Shotgun is a two-turn arming weapon. Arming a PS takes three points of energy in each of its two arming turns. The loading energy can come from any source during the Energy Allocation Phase. If no energy is allocated during the second turn of arming then the PS is immediately discharged. The discharge of a PS must be announced under the provisions of (E1.24).

(EN106.22) HOLDING ARMED PARTICLE SHOTGUNS: An non-overloaded armed PS can be held for two points of energy from any source. The holding energy must be allocated during the Energy Allocation Phase. If holding energy is not paid, the weapon must be discharged (E1.24) before the start of the turn.

(EN106.3) OVERLOAD AND UNDERLOADS

(EN106.31) COST: Overloading a PS costs five points of energy allocated in the second turn instead of the normal three points. The decision to overload is irreversible; an overloaded PS cannot be turned into a non-overloaded one.
(EN106.311) RESERVE POWER: A ship can overload a PS with reserve power by adding two points of energy to an

already armed PS, including one held from a previous turn, but the ship must fire it immediately.

(EN106.32) EFFECT: An overloaded PS is limited to a true range of eight hexes. An overloaded PS can obtain up to six hits (EN106.11).

(EN106.33) UNDERLOADS: It is possible to load a PS with only a single "shot". In such case the arming cost is two points of energy on each of two consecutive turns. Once the decision is made to underload a given PS, the weapon cannot be upgraded to a normal or overload shot, but only fired or discharged. Weapons loaded as underloads must achieve a result of "two hits" or better on the Particle Shotgun table as adjusted for EW and other conditions, although success means that only one "ball" strikes the target (i.e., it can never do more than four points of damage). Such underloads are generally only used when a ship is low on power or engaging multiple small targets (EN106.47) where the scatter function is otherwise ineffective.

EXAMPLE: If an underload was fired at a range of eight hexes any die result more than three would be a miss.

(EN106.4) CONDITIONS AND RESTRICTIONS

(EN106.41) DESTRUCTION: Particle Shotguns are destroyed on "torpedo" damage points.

(EN106.42) DESIGNATION: Particle Shotguns are designated PS on the SSD.

(EN106.43) REPAIR: It takes ten repair points to repair a particle shotgun. They can be hastily repaired (D17.5) for eight repair points, but such hastily repaired PSs cannot be overloaded. The decision to fully or hastily repair a PS must be made at the point where the first repair point is allocated to the system, and cannot be changed unless the repair is abandoned and restarted.

(EN106.44) DIRECT-FIRE WEAPON: The PS is considered a direct-fire weapon for determining its interactions with various rules, e.g., interaction with black holes (P4.23).

(EN106.45) ARMING RATE: A PS cannot be armed if it is already holding a PS shot. The Particle Shotgun can only start arming a new shot in the Energy Allocation phase following a turn in which the PS was fired, or discharged. If the PS is not armed at the start of a given turn, it may begin its arming in mid-turn through the allocation of reserve power.

(EN106.46) TERRAIN AND INTERACTION: For terrain effects and interaction with other systems treat each individual "ball" fired by the PS like a photon torpedo, e.g., each "ball" loses 25% of its warhead strength when passing through atmosphere (P2.542).

(EN106.47) SMALL TARGETS: Due to the spreading nature of the PS, it loses some effectiveness when fired at size class six or smaller targets. In such cases, any roll of a hit by a given PS after adjusting for EW and other affects, results in only a single "ball" striking a drone, shuttle, or fighter. It is not possible, even with a Legendary Weapons Officer, to strike a target smaller than size class five with more than one "ball". The weapon is penalized by (FD1.52) when fired at drones, and under (M8.52) if fired at a mine. PSs do not damage plasma torpedoes.

(EN106.48) TECHNOLOGY RESTRICTION: Particle shotguns are Triangulum technology and cannot be used in option mounts outside of simulators.

(EN108.0) PLASMATRON

The Plasmatron (PLAS) is a secondary heavy weapon that is used by the Mallarans. The Plasmatron is a very powerful but short-ranged weapon. It functions by releasing a stream of plasma at hyper-warp speed; the stream causes tremendous damage but dissipates rapidly at longer ranges.

(EN108.1) DESIGNATION

(EN108.11) DESIGNATION: On the SSD the Plasmatron is designated PLAS.

(EN108.12) DESTRUCTION: Plasmatrons are destroyed on "torpedo" damage points.

(EN108.13) REPAIR: It requires eight repair points to repair a Plasmatron. There is no hasty repair function.

(EN108.14) TECHNOLOGY RESTRICTION: The PLAS is Triangulum technology and cannot be used in option mounts outside of simulators.

(EN108.15) FIGHTER VERSION: Viper class fighters are armed with Plasmatrons, see rule (EN108.6).

(EN108.16) TACTICAL INTELLIGENCE: Plasmatrons are distinguished at Level F (D17.4). Their arming status is known at Level L.

(EN108.2) ARMING PROCEDURE

(EN108.21) ENERGY: A Plasmatron is armed over two turns with energy from any power source. On the first turn of arming, one point of energy must be allocated [arming can begin with reserve power, see (EN108.23)]. On the second turn of arming another two points of energy must be allocated during the Energy Allocation Phase or the Plasmatron must be discharged into space under the procedures of (E1.24) (this must be announced including the amount of power released).

(EN108.22) HOLDING: An armed Plasmatron can be held indefinitely for two points of energy from any source paid during the Energy Allocation phase of each turn it is held after being armed.

(EN108.23) RESERVE POWER: The procedures and restrictions in (H7.53) can be used to begin the arming of a Plasmatron.

(EN108.24) WEAPON STATUS: Plasmatrons are multi-turn arming weapon for purposes of (S4.13) and can begin held at WS–III.

(EN108.3) FIRING PROCEDURE

(EN108.31) PROCEDURE: Using the Plasmatron table, find the range to the target. Roll one die, adjust the result for EW, and cross-index the final result on the Plasmatron Firing Table (EN108.32). The resulting number is the damage to be applied to the target's facing shield.

(EN108.32) PLASMATRON FIRING TABLE:

Die Roll\Range	0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

(EN108.33) MAXIMUM RANGE: A Plasmatron can be fired at a maximum true range (D1.4) of 30.
(EN108.331) TRUE RANGE AND EFFECTIVE RANGE: When the true range and the effective range (D1.4) are different use the effective range.

(EN108.34) FEEDBACK: Plasmatrons can always fire at range zero and cause no feedback.

(EN108.4) OVERLOAD

Prior to Y120 Plasmatron could not be overloaded. Refits begining in that year added an overload function.

(EN108.41) PROCEDURE: A Plasmatron can be overloaded by paying six energy points on the second turn of arming in place of the usual two.
(EN108.411) RESERVE POWER: A Plasmatron can be overloaded with four points of reserve power (H7.0), this energy must be applied at the moment of firing.

(EN108.42) EFFECT: The effect of overloading a Plasmatron is to double the damage suffered by the target. An overloaded Plasmatron is limited to eight hexes true range (D1.4).

(EN108.43) LIMITATION: An overloaded Plasmatron must be fired by the end of the turn it was overloaded (whether with allocated or reserve energy) or it must be discharged into space. If discharged, the amount of energy lost must be announced. An overloaded Plasmatron cannot be held or converted back into a non-overloaded Plasmatron.

(EN108.5) CONDITIONS AND RESTRICTIONS

(EN108.51) TERRAIN: Plasmatrons cannot be fired through a hex containing a planet (P2.321), moon [Exception: (P2.3221)], star (P12.1), black hole (P4.23) or pulsar (P5.32). They can be fired into such a hex. They can be fired through ring (P2.223), asteroid (P3.33), and dust (P13.4) hexes with the standard EW penalties.

(EN108.52) ATMOSPHERE: A Plasmatron receives a penalty of one point of ECM for each hex of atmosphere that its line of fire passes through (P2.51).

(EN108.53) SIZE CLASS SEVEN TARGET:
(EN108.531) DRONE OR MISSILE: A Plasmatrons are penalized under (FD1.52) when fired at drones or missiles.
(EN108.532) PLASMA TORPEDO: A Plasmatron will not damage a plasma torpedo.
(EN108.533) MINESWEEPING: A Plasmatron is penalized as a non-phaser weapon when fired at a mine (M8.52).

(EN108.54) ARMING RATE: A Plasmatron cannot be armed if it is already holding a Plasmatron shot. A Plasmatron cannot begin arming on the same turn it was fired, not even with reserve power.

(EN108.55) SPECIAL FIRING: Plasmatrons can be fired in a narrow salvo (E1.6); overloaded and non-overloaded plasmatrons can be combined into a single narrow salvo. Plasmatrons can be fired using the non-violent combat system (D6.4).

(EN108.56) HIDDEN DEPLOYMENT/CLOAKS: The discharge of Plasmatron energy, whether from failure to pay the holding cost or necessitated by the failure to fire an overload, will reveal the presence of a hidden unit that discharged it (D20.3). The release of such energy by a cloaked unit will not void a cloaking device (G13.0).

(EN108.6) FIGHTER PLASMATRONS

(EN108.61) FIRING: Use the standard procedures to fire the Plasmatron but it is limited to a maximum effective range of ten hexes. The target must be in the FA arc of the fighter. Fighter Plasmatrons are restricted on launch (J1.342).

(EN108.62) REARMING: It requires one deck crew action (J4.817) to rearm a Plasmatron on a fighter from a ready rack.

(EN108.63) REARMING READY RACK: Fighter Ready Racks for plasmatron armed fighters are loaded in the same manner and for the same costs as normal Plasmatrons (EN108.2), however there is no (EN108.22) holding cost to hold a fighter plasmatron charge whether it is on the ready rack or already loaded on the fighter. The fighters cannot load or fire overloaded versions of the SRAM or Plasmatron.

(FPN100.0) HELLFIRE TORPEDO

The Hellfire (HF) Torpedo, first developed by the Arachnids, is a very powerful seeking weapon, but it is also very power hungry. This weapon can be launched with varying abilities and the warhead can be armed over a period of from one to four turns, allowing even power starved small ships to unleash large torpedoes. Later, a direct-fire function was developed for the launcher; see (EN105.0).

There is a variant of the hellfire torpedo known as the hellblazer (FPN100.6).

(FPN100.1) DESIGNATION

(FPN100.11) SSD: A Hellfire launcher consists of two adjacent boxes on the SSD designated "HF". A given Hellfire launcher will be marked A, B, C, etc.

(FPN100.12) DESTRUCTION: A HF launcher is destroyed by the allocation of two "Torpedo" damage points; the first damages the launcher, the second destroys it.

(FPN100.121) If one box on a HF launcher is destroyed, the weapon's operations are hindered. The launcher is limited to arming a torpedo over three turns or less, it cannot arm one over four turns, cannot hold an armed torpedo (FPN100.222), and cannot arm pseudo torpedoes (FPN100.51). A launcher already holding a torpedo with four turns of arming (including one completed in the last Energy Allocation Phase) must launch, fire, or discharge the torpedo by the end of the turn in which it was damaged.

(FPN100.122) If a unit has more than one HF launcher it could score one point of damage on each launcher before having to destroy a launcher.

(FPN100.123) A HF is not a plasma torpedo and cannot launch a torpedo after it is destroyed. Any torpedo in the launcher at the time of its destruction, whether fully armed or arming, is lost with the launcher (FPN100.34).

(FPN100.13) REPAIR: It takes ten repair points to repair one box of a HF launcher.

(FPN100.131) EMERGENCY REPAIR: Both boxes are repaired individually by emergency damage repair (D14.0).

(FPN100.132) While an HF launcher is under repair by any means [including by a Legendary Engineer (G22.4)] it cannot arm, or hold, a torpedo for the duration of the repair. Before repairs begin any torpedo in the launcher must be launched, fired as a hellfire blaster (EN105.0), or discharged under the procedures of (E1.24).

(FPN100.14) TECHNOLOGY RESTRICTION: A HF is Triangulum technology and cannot be used in option mounts outside of simulators.

(FPN100.15) TACTICAL INTELLIGENCE: HFs are distinguished at Level G (D17.4). Their arming status is known at Level L.

(FPN100.16) SEEKING WEAPON RULES: The HF Torpedo uses all the seeking weapon rules in (F0.0) unless these rules provide a specific exception. A HF torpedo is treated as a plasma torpedo except as provided in these rules.

(FPN100.2) ARMING

(FPN100.21) PROCEDURE: A HF torpedo warhead can be armed in one turn, or over up to four turns. At least one point of energy must be allocated to the warhead during the Energy Allocation phase for each of the arming turns, whether one, two, three, or four turns. If this energy is not allocated the HF torpedo is lost and must be ejected (this must be announced). A ship can only put energy into the warhead during the Energy Allocation phase; reserve power (H7.0) cannot be used to arm the warhead, but can be used to modify the warhead on the impulse of launch.

(FPN100.211) MODIFICATIONS: There are four modifications [(FPN 100.212) - (FPN100.215)] to a given torpedo that a unit can create, each has its own energy cost. The only mandatory energy costs are the arming of the warhead (FPN100.212) or the holding cost of an armed torpedo (FPN100.22). Modification energy can be added by reserve power (H7.0) on the impulse of launch, or can be allocated during Energy Allocation. Modification energy can be added to a held torpedo.

(FPN100.212) INCREASE WARHEAD YIELD: A unit can allocate 1 to 2.5 points of energy to the warhead in each arming turn. The warhead energy can be between 1 and 10 points and the warhead strength can be between 4 and 60.

(FPN100.2121) Using the Hellfire Torpedo Chart find the damage multiplier for the number of arming turns. Add the energy allocated to the warhead during the arming turns and multiply the result by the indicated damage multiplier.

EXAMPLE: If 2 points of energy was allocated to the warhead on the first turn, and 2.5 points of energy was allocated to the warhead on the second turn, if that torpedo was then launched it would give a result of (4.5x5 =) 22 damage points.

(FPN100.2122) Prior to the Y120 refit a maximum of two points of energy can be put in a HF torpedo warhead.

(FPN100.213) INCREASE SPEED: A unit can allocate up to two points of energy to a HF torpedo for speed. See the Hellfire Torpedo chart for the effect, which depends on the number of points of energy and the number of turns of arming. There are two lines; one for HF torpedoes armed in one or two turns and another one for torpedoes armed in three or four turns. Note a hellblazer variant (FPN100.6) can only use up to 1.5 energy.

(FPN100.214) REDUCE ENERGY RATE OF LOSS: A unit can allocate up to two points of energy to an HF torpedo to reduce its Rate of Loss (RoL) of warhead strength per hex traveled. See the Hellfire Torpedo chart for the effect. The result depends on the amount of energy allocated for the RoL and the number of turns of arming and is expressed in the number of points of warhead strength lost per hex moved. A hellblazer variant (FPN100.6) can only use up to 1 energy.

EXAMPLE: If a result of 1/2 were achieved, then the HF torpedo would lose one point of warhead strength for every second hex traveled.

(FPN100.215) REDUCE SUSCEPTIBILITY TO DAMAGE: A unit can allocate up to two points of energy to a HF torpedo to reduce the Loss to Fire (LtF) of its warhead. See the Hellfire Torpedo chart for the effect. The result depends on the energy for the LtF and the number of turns of arming. The result is expressed in the number of points of warhead strength lost for every point of "phaser" damage received by the torpedo. The hellblazer variant (FPN100.6) can only use up to 1.5 energy.

EXAMPLE: If a result of two were achieved, the torpedo would lose two points of warhead strength for each point of "phaser" damage it receives.

(FPN100.216) All of these modifications, except for the warhead, see (FN100.312), can be installed in any turn during the Energy Allocation phase or with reserve power, up to and including the moment of launch, even if the torpedo had been held from previous turns.

(FPN100.22) HOLDING: A HF Torpedo cannot be held until it is fully armed. Only torpedoes which have been armed for four turns may be held. The cost for holding a HF after that point is equal to 25% of the total energy put in the warhead during the arming turns. If this energy is not paid the Torpedo must be ejected immediately (this must be announced as well as the energy lost).

EXAMPLE: If two points of power were put into the warhead in each of four turns the Torpedo could be held for (8x0.25 =) 2 points of power.

(FPN100.221) Once an HF torpedo is held no more energy can be added to its warhead, but energy can be used to add other abilities listed in (FPN100.21).

(FPN100.222) Damaged HF launchers (FPN100.121) cannot hold torpedoes.

(FPN100.23) RESERVE POWER: See (FPN100.216) for using reserve power to arm a HF.

(FPN100.24) WEAPON STATUS: At Weapons Status–0, no energy is accumulated in the HF launcher. At Weapons Status–I, three points are accumulated in each HF launcher which are assumed to have gone through one turn of arming. At Weapons Status–II, six points of energy are accumulated in each HF launcher which are assumed to have gone through two turns of arming. At Weapons Status–III, nine points are accumulated in each HF launcher which are assumed to have gone through three turns of arming.

(FPN100.241) The energy accumulated in the launchers at each weapon status can be placed in any abilities rather than the warhead, but note that at least one point of energy must be put in the warhead during each turn of arming, see (FPN100.31). No more than 2.5 points of energy may be put into the warhead for each prior turn of arming

(FPN100.242) The owning player can, at his option, reduce the level of arming of his launcher(s).

(FPN100.243) See (FPN100.516) for holding pseudoes.

(FPN100.3) LAUNCHING

(FPN100.31) PROCEDURE: A HF torpedo can be launched during the Launch Plasma Torpedoes step of the Seeking Weapons Stage (6B6) of any impulse if armed.

(FPN100.311) To launch a HF torpedo the only energy needed is warhead energy, see (FPN100.21).

(FPN100.312) The target must be in the tracking arc of the launcher for a torpedo to be launched at it, see (FP3.0).

(FPN100.32) INFORMATION: Information can be gained on a HF once it is placed on the board.

(FPN100.321) A ship must be within 35 hexes of a hellfire torpedo to gain any information on it, and the only information gained is the warhead strength and its speed.

(FPN100.322) If a lab is used for information on the HF torpedo, using the procedures and limits of (G4.23), the launching unit must disclose the torpedo's target, its Loss to Fire (LtF) (FPN100.215), and its Rate of Loss (RoL) (FPN100.214). Note that this information must be provided under the rules and procedures for any means of identifying seeking weapons as listed in (F1.4).

(FPN100.323) The Rate of Loss (RoL) (FPN100.214) of a torpedo is known as soon as it loses a point of warhead due to movement.

(FPN100.324) The Loss to Fire (LtF) (FPN100.215) of a torpedo is known as soon as it loses a point of warhead due to damage.

(FPN100.33) SAME HEX: An HF torpedo can be launched at a target, if in arc, in the same hex as the launching unit, but this will produce feedback damage using the same procedures and damage calculation as (FP1.86).

(FPN100.34) LAUNCHING A TORPEDO AFTER DESTRUCTION OF THE LAUNCHER: A HF torpedo is lost with the destruction of the launcher (FPN100.123). Note that it takes two hits to destroy a HF launcher, see (FPN100.12).

(FPN100.35) CONTROL: An HF torpedo is controlled like a plasma torpedo (FP4.0), but does not have the (FP4.3) built-in ECCM, see (FPN100.52).

(FPN100.36) HELLFIRE TORPEDO TABLES: See SSDs for hellfire torpedo tables.

(FPN100.4) DAMAGING A HELLFIRE TORPEDO

(FPN100.41) PHASER DAMAGE: The only weapons capable of damaging a HF torpedo are weapons that do "phaser" damage. Find the Loss to Fire (LtF) of the torpedo (FPN100.215) and reduce the warhead strength according to that number.

(FPN100.42) SYSTEMS AND TERRAIN: An HF torpedo is considered a plasma torpedo for interactions with other systems [i.e., it cannot be tractored (G7.0) or transported (G8.0), but can be displaced (G18.0)] not otherwise provided herein. It is also treated as a plasma torpedo for terrain interactions not otherwise specified in these rules. Note that ring, asteroid, and dust damage is treated as "phaser" damage (FP1.613).

(FPN100.43) SPEED 48 AND 64: A speed 48 HF torpedo moves every impulse, and moves twice on impulses where speed 16 also moves. A speed 64 HF will always move twice in every impulse. See (FPN100.213) for creating such fast torpedoes.

(FPN100.44) SPECIAL FUNCTION: There is no overload, enveloping, shotgun, or bolt function of the HF torpedo. There is a direct fire capacity, see the Hellfire Blaster (EN105.0). See (FPN100.21) for other options.

(FPN100.45) ECCM: An HF torpedo has no built-in ECCM, but it does benefit from the ECCM of its controlling ship.

(FPN100.46) RATE OF ARMING: A given HF launcher can only arm one HF torpedo at a time. Only after launching (or firing or discharging) the HF Torpedo can a launcher, on the next Energy Allocation phase, start arming a new Torpedo.

(FPN100.47) DISTRACTION: A HF Torpedo can be distracted just like a plasma torpedo.

(FPN100.49) DURATION: An HF torpedo once launched remains on the board until its warhead is reduced to zero.

HELGARDIAN PROTECTORATE VANGUARD CRUISER

CREW UNITS: * 10 20 30

BOARDING PARTIES: 8

PROBES: 1 5 / 2 5

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

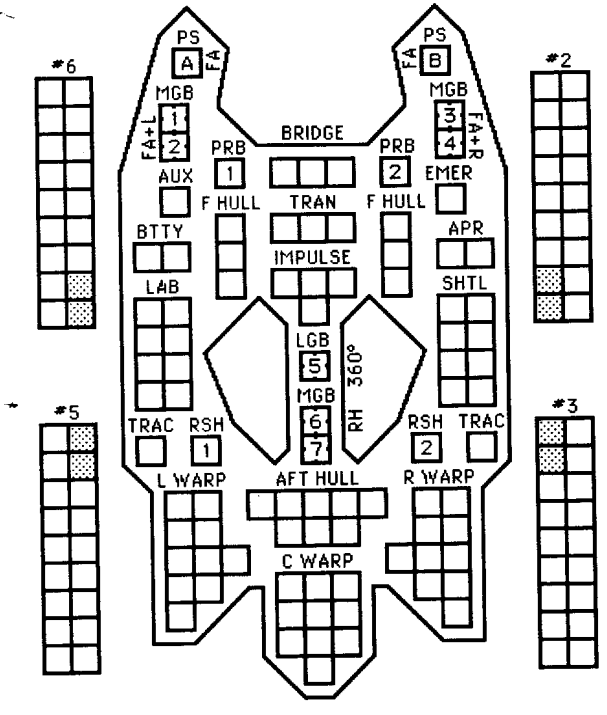
TRANSPORTER BOMBS: D D D D

SHIP DATA TABLE		
TYPE	=	C
POINT VALUE	=	130
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN100.1
Y120 REFIT	=	+10
Y154 REFIT	=	+2

SENSOR/ SCANNER (ECM): 0 1 2 3 4 5 6 7 8 9

CNTR

SHIELD #1



DAM CON: 4 4 2 2 2 0

EX DAM

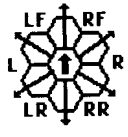
SHIELD #4

SHADED BOXES ARE THE Y120 REFIT.

FOR Y154 REFIT SEE (RN100.R2).

LIGHT GRAVITON BEAM — ARMING COST = 0.25.

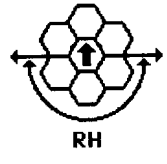
DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0



TURN MODE	SPEED
B 1	2-5
2	6-10
HET 3	11-15
4	16-21
BD 5	22-28
6	29+

MEDIUM GRAVITON BEAM — ARMING COST = 0.5

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0



HEAVY GRAVITON BEAM — ARMING COST = 1

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2
1 (ST)		
2 (ST)		
3 (RE)		
4 (RE)		

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
MOVEMENT COST = 1
HET COST = 5
EM COST = 6

PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

HELGARDIAN PROTECTORATE PROTECTOR HEAVY CRUISER

CREW UNITS

		*					10
							20
							30

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

SHIP DATA TABLE

TYPE	=	CA
POINT VALUE	=	135
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN100.2
Y120 REFIT	=	+12
Y154 REFIT	=	+5

BOARDING PARTIES [ ][ ][ ][ ][ ][ ][ ][8]

TRANSPORTER BOMBS [ ][ ][ ][ ] [D][D][D][D]

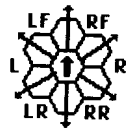
PROBES

1					5
2					5

LIGHT GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

ARMING COST = 0.25.

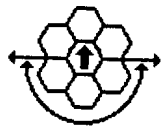


TURN MODE	SPEED
B 1	2-5
2	6-10
3	11-15
HET 4	16-21
5	22-28
BD 6	29+

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

ARMING COST = 0.5



HEAVY GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

ARMING COST = 1

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS#2
1 (ST)	[ ][ ][ ]	[ ][ ][ ]
2 (ST)		
3 (RE)	[ ][ ]	[ ][ ]
4 (RE)		

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR

MOVEMENT COST = 1
HET COST = 5
EM COST = 6

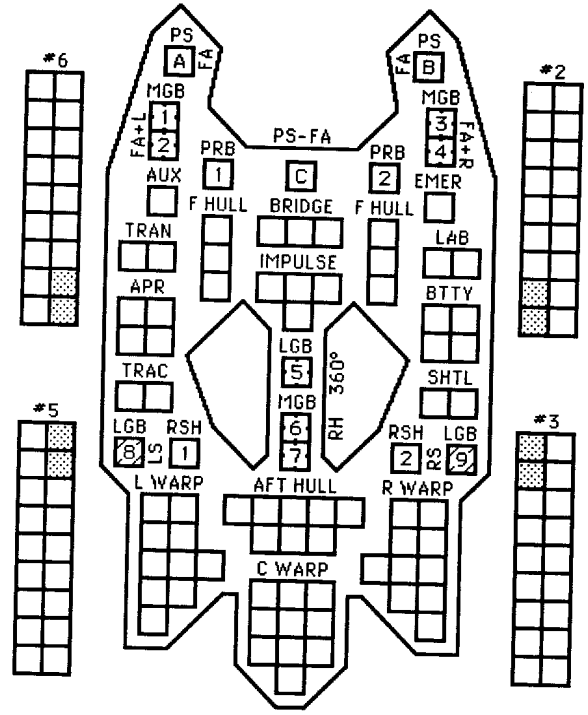
SENSOR/ SCANNER (ECM) 0 1 2 3 4 5 6 7 8 9

CNTR

SHIELD #1 [ ][ ][ ][ ][ ][ ][ ][ ]

DAM CON 4 4 2 2 2 2 0

EX DAM [ ][ ][ ][ ][ ]



SHIELD #4 [ ][ ][ ][ ][ ][ ][ ][ ]

▒ SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

▨ ADDED BY Y154 REFIT. SEE (RN100.R2).

PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

HELGARDIAN PROTECTORATE GUARDIAN LIGHT CRUISER

CREW UNITS: * 10 20 30

BOARDING PARTIES: 8

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS: D D D D

SHIP DATA TABLE		
TYPE	=	CL
POINT VALUE	=	93
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN100.3
Y120 REFIT	=	+10
Y154 REFIT	=	+4

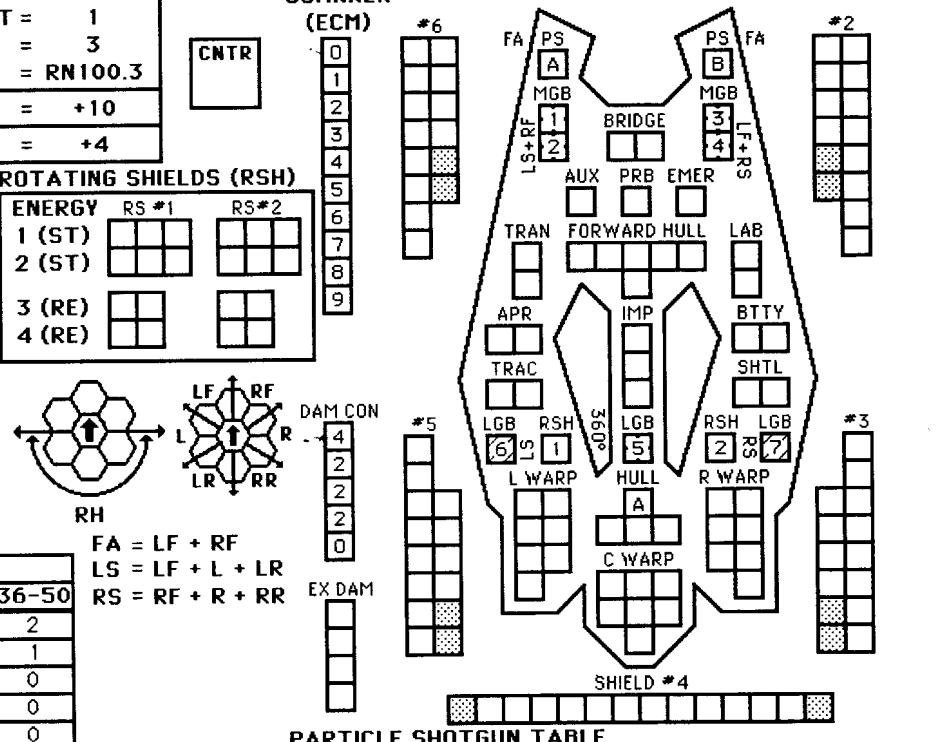
PROBES: 5

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2
1 (ST)		
2 (ST)		
3 (RE)		
4 (RE)		

SENSOR/SCANNER (ECM): 0 1 2 3 4 5 6 7 8 9

CNTR



DAM CON: 4 2 2 2 0

EX DAM

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR

LIGHT GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

ARMING COST = 0.25.

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

ARMING COST = 0.5

HEAVY GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

ARMING COST = 1

PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

TURN MODE		SPEED
B	1	2-5
	2	6-10
HET	3	11-15
	4	16-21
BD	5	22-28
	6	29+

SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

ADDED BY Y154 REFIT. SEE (RN100.R2).

WARP ENERGY MOVEMENT COST = 2/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	20	20
Fract.	⅔	1⅓	2	2⅔	3⅓	4	4⅔	5⅓	6	6⅔	7⅓	8	8⅔	9⅓	10	10⅔	11⅓	12	12⅔	13⅓	14	14⅔	15⅓	16	16⅔	17⅓	18	18⅔	19⅓	20

HELGARDIAN PROTECTORATE DEFENDER DESTROYER

CREW UNITS — 10 / 20

BOARDING PARTIES — 6

PROBES — 5

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS — D D

SHIP DATA TABLE

TYPE	=	DD
POINT VALUE	=	77
BREAKDOWN	=	5-6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN100.4
Y120 REFIT	=	+10
Y154 REFIT	=	+3

CNTR

SENSOR/ SCANNER (ECM): 0 1 3 5 7 9

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2
1 (ST)		
2 (ST)		
3 (RE)		
4 (RE)		

LIGHT GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

ARMING COST = 0.25.

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

ARMING COST = 0.5

HEAVY GRAVITON BEAM

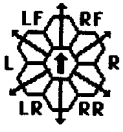
DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

ARMING COST = 1

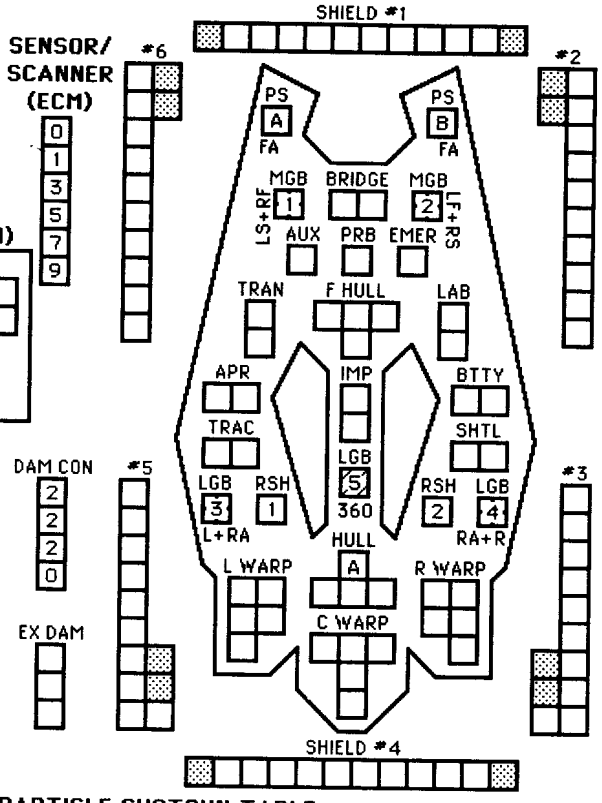
GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

TURN MODE		SPEED
A	1	2 - 6
HET	2	7 - 12
	3	13 - 19
BD	4	20 - 26
	5	27+



FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR



SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

ADDED BY Y154 REFIT. SEE (RN100.R2).

PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

WARP ENERGY MOVEMENT COST = 1/2 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15
Fract.	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½	13	13½	14	14½	15

HELGARDIAN PROTECTORATE LIBERATOR FRIGATE

CREW UNITS

			*						10
									20

BOARDING PARTIES

				5

PROBES

				5

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS						NOTES

TRANSPORTER BOMBS

		D	D

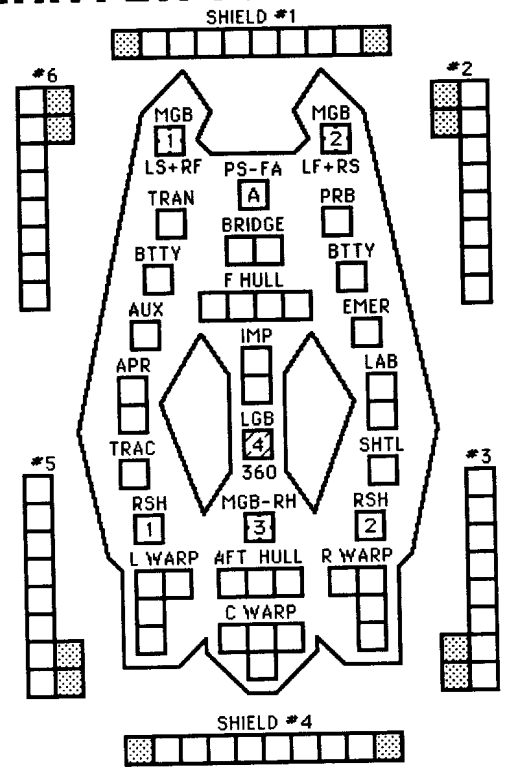
SHIP DATA TABLE

TYPE	=	FF
POINT VALUE	=	60
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN100.5
Y120 REFIT	=	+8
Y154 REFIT	=	+3

CNTR

SENSOR/ SCANNER (ECM)

0
1
3
5
7
9



LIGHT GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

ARMING COST = 0.25.

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

ARMING COST = 0.5

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2
1 (ST)		
2 (ST)		
3 (RE)		
4 (RE)		

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RX = L + LR + RR + R

DAM CON

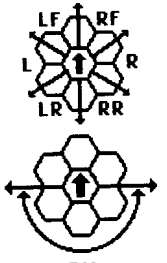
2
2
0

EX DAM

HEAVY GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

ARMING COST = 1



PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

TURN MODE		SPEED
A	1	2 - 6
HET	2	7 - 12
	3	13 - 19
BD	4	20 - 26
	5	27+

SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

ADDED BY Y154 REFIT. SEE (RN100.R2).

WARP ENERGY MOVEMENT COST = 1/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10
Fract.	1/3	2/3	1	1 1/3	1 2/3	2	2 1/3	2 2/3	3	3 1/3	3 2/3	4	4 1/3	4 2/3	5	5 1/3	5 2/3	6	6 1/3	6 2/3	7	7 1/3	7 2/3	8	8 1/3	8 2/3	9	9 1/3	9 2/3	10

HELGARDIAN PROTECTORATE AVENGER DREADNOUGHT

CREW UNITS

			*						10
									20
									30
									40

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

BOARDING PARTIES

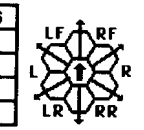
									10

TRANSPORTER BOMBS

D	D	D	D	D	D

PROBES

				5



FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR

SHIP DATA TABLE

TYPE	=	DN
POINT VALUE	=	188
BREAKDOWN	=	3-6
SHIELD COST	=	1+3
LIFE SUPPORT	=	1+1/2
SIZE CLASS	=	2
REFERENCE	=	RN100.6
Y120 REFIT	=	+19
Y154 REFIT	=	+5

TURN MODE		SPEED
D	1	2-4
	2	5-8
HET	3	9-12
	4	13-17
BD	5	18-24
	6	25+

LIGHT GRAVITON BEAM

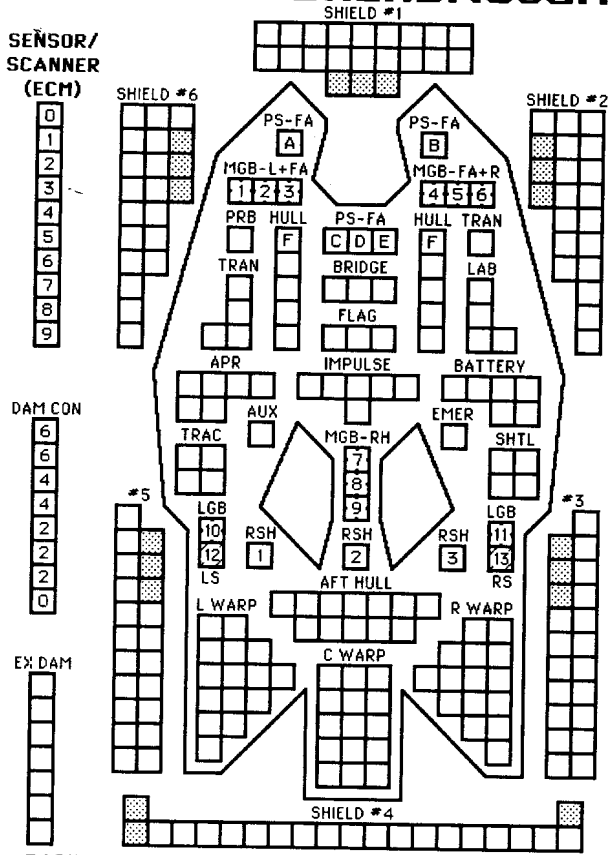
DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
	ARMING COST = 0.25								
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
	ARMING COST = 0.5											
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

HEAVY GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
	ARMING COST = 1												
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0



PARTICLE SHOTGUN TABLE

RANGE	0	1-2	3-5	6-8	9-15	16-30	# OF HITS
TO HIT #S	-	-	-	6	6	5-6	0
	-	6	5-6	4-5	4-5	3-4	1
	5-6	5	4	3	2-3	1-2	2
	4	4	3	2	1	-	3
	3	3	2	1	-	-	4
	2	2	1	-	-	-	5
	1	1	-	-	-	-	6

ARMING COST: STANDARD 3+3, OVERLOAD 3+5
STANDARD LOAD CANNOT SCORE MORE THAN THREE HITS.
OVERLOAD LIMITED TO RANGE EIGHT. EACH HIT = 4 DAMAGE POINTS.

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2	RS #3
1 (ST)			
2 (ST)			
3 (RE)			
4 (RE)			

SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

ADDED BY Y154 REFIT. SEE (RN100.R2).

WARP ENERGY MOVEMENT COST = 1 + 1/2 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	2	3	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	39	41	42	44	45
Fract.	1½	3	4½	6	7½	9	10½	12	13½	15	16½	18	19½	21	22½	24	25½	27	28½	30	31½	33	34½	36	37½	39	40½	42	43½	45

HELGARDIAN PROTECTORATE SPOTTER SCOUT

CREW UNITS

			*						10
									20
									30

BOARDING PARTIES

							8

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS

				D	D	D	D

SHIP DATA TABLE

TYPE	=	SC
POINT VALUE	=	128/98
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN100.7
Y120 REFIT	=	+6
Y154 REFIT	=	+4

LIGHT GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8
1	2	2	2	2	2	2	1	1	1
2	2	2	2	2	1	1	1	1	0
3	2	2	2	1	1	1	1	0	0
4	2	2	2	1	1	1	0	0	0
5	2	2	1	1	1	0	0	0	0
6	2	1	1	1	0	0	0	0	0

ARMING COST = 0.25.

PROBES

				5

LS = LF + L + LR
RS = RF + R + RR

ROTATING SHIELDS (RSH)

ENERGY	RS #1	RS #2
1 (ST)		
2 (ST)		
3 (RE)		
4 (RE)		

MEDIUM GRAVITON BEAM

DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35
1	6	4	4	4	4	3	3	2	2	2	1	1
2	5	4	4	3	3	3	2	2	2	1	1	0
3	4	4	3	3	2	2	2	2	1	1	1	0
4	4	3	3	2	2	2	2	1	1	1	0	0
5	3	3	2	2	2	2	1	1	1	0	0	0
6	2	2	2	2	1	1	0	0	0	0	0	0

ARMING COST = 0.5

HEAVY GRAVITON BEAM

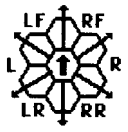
DIE ROLL	RANGE 0	1	2	3	4	5	6	7	8	9-12	13-20	21-35	36-50
1	10	8	7	7	6	6	4	4	3	3	2	2	2
2	9	7	7	6	6	5	3	3	3	2	2	2	1
3	9	7	6	6	5	4	3	3	3	2	2	2	0
4	8	7	6	5	4	4	2	2	2	2	2	1	0
5	7	6	5	5	4	4	2	2	2	2	1	0	0
6	6	5	5	4	4	3	2	1	1	1	0	0	0

ARMING COST = 1

GRAVITON RULES SUMMARY

CAN FIRE ONCE IN ANY EIGHT CONSECUTIVE IMPULSES. BURST RATE OF FIRE DOUBLES ARMING COST BUT ALLOWS WEAPON TO FIRE EVERY SECOND IMPULSE. WEAPON CAN FIRE IN FOCUS MODE ONCE PER TURN. THIS REDUCES THE RANGE BY 9 (TO A MINIMUM OF 3). WEAPON CAN BE OVERLOADED; THIS FIRES ONCE PER TURN. LIGHT USES MEDIUM TABLE; MEDIUM USES HEAVY. WHEN FIRED AT SIZE-6/7 TARGETS AT RANGE 0-2, DOUBLE THE AMOUNT OF DAMAGE SHOWN.

TURN MODE		SPEED
B	1	2-5
	2	6-10
HET	3	11-15
	4	16-21
BD	5	22-28
	6	29+



SENSOR/ SCANNER (ECM)

0
1
2
3
4
5
6
7
8
9

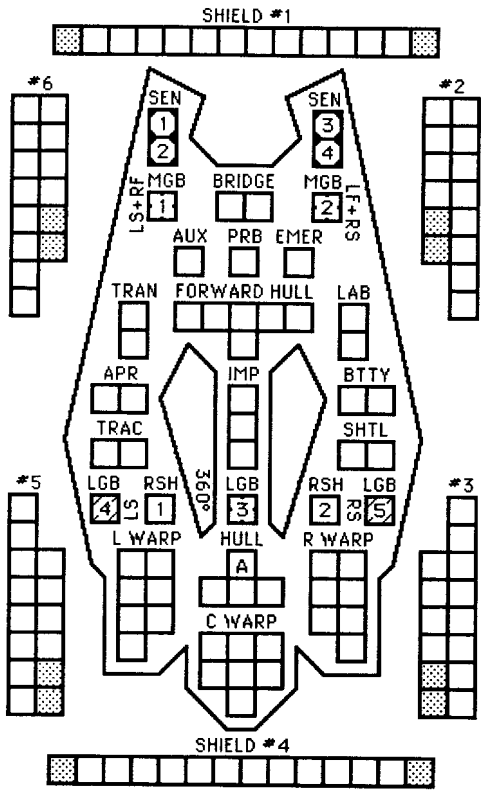
EX DAM

DAM CON

4
2
2
2
0

▩ SHADED BOXES ARE THE Y120 REFIT. SEE (RN100.R1).

▨ ADDED BY Y154 REFIT. SEE (RN100.R2).



SCOUT FUNCTIONS SUMMARY

21	LENDING ECM OR ECCM
22	BREAKING LOCK-ONS
23	ATTRACTING DRONES
24	CONTROLLING SEEKING WEAPONS
25	IDENTIFYING DRONES
26	DETECTING MINES
27	GATHERING SCIENCE INFORMATION
28	SELF-PROTECTION JAMMING
29	TACTICAL INTELLIGENCE

SPECIAL SENSORS ARE DESTROYED ON "TORPEDO" DAMAGE POINTS.

WARP ENERGY MOVEMENT COST = 2/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	20	20
Fract.	⅔	1⅓	2	2⅔	3⅓	4	4⅔	5⅓	6	6⅔	7⅓	8	8⅔	9⅓	10	10⅔	11⅓	12	12⅔	13⅓	14	14⅔	15⅓	16	16⅔	17⅓	18	18⅔	19⅓	20

WORLDS OF UNIONS DRAGON HEAVY CRUISER

CNTR

CREW UNITS

		✱						10
								20
								30
								40

BOARDING PARTIES

								10

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS - NO TRANSFERS

PROBES

				5

TRANSPORTER BOMBS

				D	D	D	D

SHIP DATA TABLE

TYPE	=	CA
POINT VALUE	=	114
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN101.1
Y63 REFIT	=	+2
Y120 REFIT	=	+27
Y154 REFIT	=	+3

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

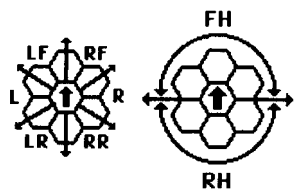
SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

ER PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

TURN MODE		SPEED
D	1	2 - 4
	2	5 - 8
	3	9 - 12
HET	4	13 - 17
	5	18 - 24
BD	6	25+



HELLFIRE TORPEDO DATA

	TURNS	0	0.5	1.0	1.5	2.0
SPEED OF HELLFIRE TORPEDO	1-2	20	24	32	48	64
	3-4	16	20	24	28	32
WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	1-2	2	—	1	0.5	0.33
	3-4	4	—	3	2	1
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	1-2	2	—	1	0.5	0
	3-4	3	—	2	1	0.5

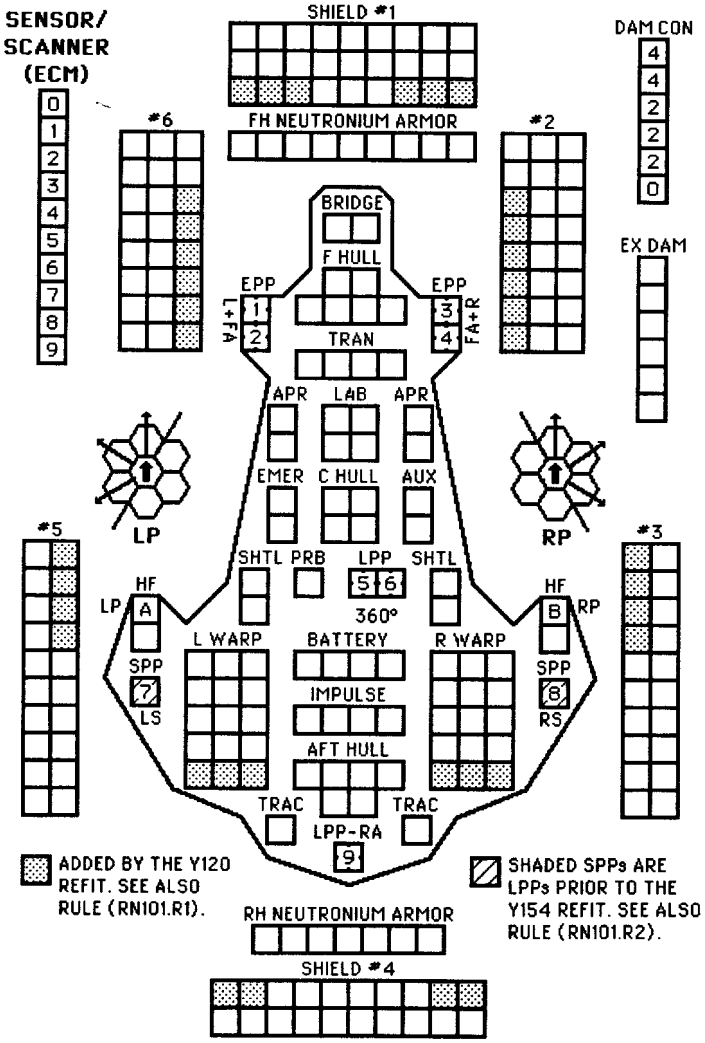
FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR

HELLFIRE TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2.5 POINTS PER TURN				

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			



ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN101.R1).

SHADED SPPs ARE LPPs PRIOR TO THE Y154 REFIT. SEE ALSO RULE (RN101.R2).

MOVEMENT COST = 1
HET COST = 5
EM COST = 6

WORLDS OF UNIONS
ICE DRAGON
HEAVY CRUISER

CNTR

CREW UNITS

			X					10
								20
								30
								40

BOARDING PARTIES

								10

PROBES

				5

TRANSPORTER BOMBS

				D	D	D	D	

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS - NO TRANSFERS

SHIP DATA TABLE

TYPE	=	CAB
POINT VALUE	=	118
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN101.2
Y120 REFIT	=	+27
Y154 REFIT	=	+3

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

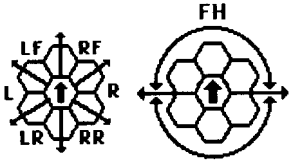
SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

LR PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

TURN MODE	SPEED
D 1	2-4
2	5-8
3	9-12
HET 4	13-17
5	18-24
BD 6	25+



FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR

HELLBLAZER TORPEDO DATA

SPEED OF HELLFIRE TORPEDO	TURNS	0	0.5	1.0	1.5
	1-2	24	32	48	64
	3-4	20	24	28	32

HELLBLAZER TORPEDO ROL

WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	TURNS	0	0.5	0.75	1.0
	1-2	3	2	1	0.5
	3-4	4	3	2	1.5

HELLBLAZER TORPEDO LTF

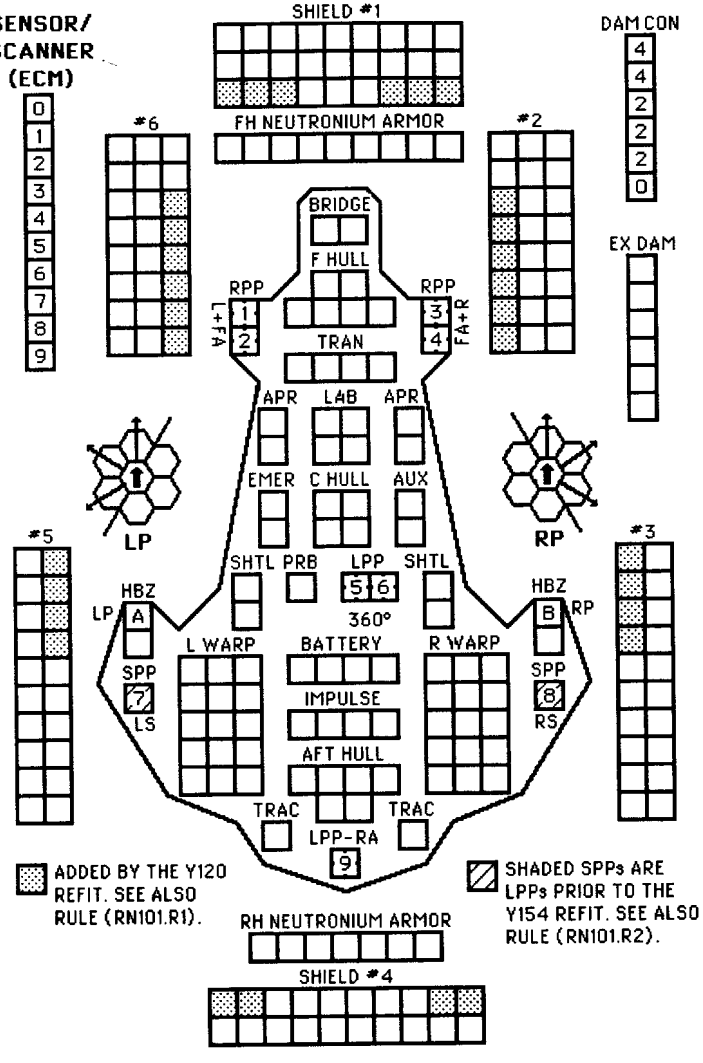
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	TURNS	0	0.5	1.0	1.5
	1-2	2	1	0.5	—
	3-4	3	2	1	0.5

HELLBLAZER TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2 POINTS PER TURN				

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			



ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN101.R1).

SHADED SPPs ARE LPPs PRIOR TO THE Y154 REFIT. SEE ALSO RULE (RN101.R2).

MOVEMENT COST = 1
HET COST = 5
EM COST = 6

WORLDS OF UNIONS COCKATRICE DESTROYER

CREW UNITS [*] 10 20

BOARDING PARTIES 6

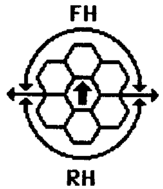
PROBES 5

ADMINISTRATIVE SHUTTLE

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS D D

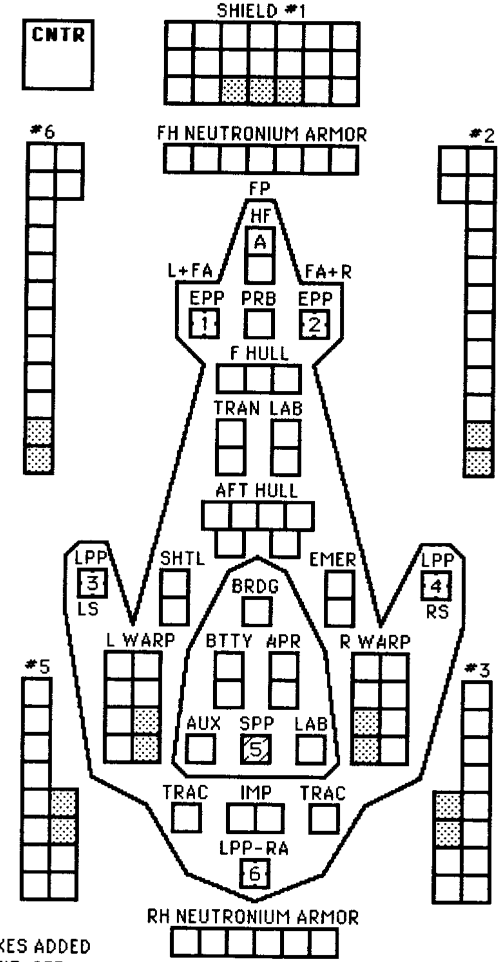
SHIP DATA TABLE		
TYPE	=	DD
POINT VALUE	=	62
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN101.3
Y63 REFIT	=	+1
Y120 REFIT	=	+17
Y154 REFIT	=	+3



SENSOR/ SCANNER (ECM) 0 1 3 5 7 9

DAM CON 2 2 2 0

EX DAM



SHIELD #4

SPP/LPP #5 HAS A 360° FIRING ARC.

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

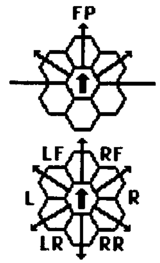
SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

ER PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

TURN MODE		SPEED
C	1	2-4
	2	5-9
HET	3	10-14
	4	15-20
BD	5	21-27
	6	28+



FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR

THE Y63 REFIT ADDS THE HELLFIRE BLASTER AND PSEUDO HF ABILITIES.

HELLFIRE TORPEDO DATA

	TURNS	0	0.5	1.0	1.5	2.0
SPEED OF HELLFIRE TORPEDO	1-2	20	24	32	48	64
	3-4	16	20	24	28	32
WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	1-2	2	—	1	0.5	0.33
	3-4	4	—	3	2	1
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	1-2	2	—	1	0.5	0
	3-4	3	—	2	1	0.5

HELLFIRE TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2.5 POINTS PER TURN				

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			

[shaded box] SHADED BOXES ADDED BY Y120 REFIT. SEE RULE (RN101.R1).

[hatched box] SHADED BOXES ARE LPPs PRIOR TO Y154 REFIT. SEE ALSO (RN101.R2).

WARP ENERGY MOVEMENT COST = 1/2 ENERGY POINT PER HEX [5] = HET COST (6) = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	(6)	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15
Fract.	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2	13	13 1/2	14	14 1/2	15

WORLDS OF UNIONS
GRYPHON FRIGATE

CREW UNITS [ ][ ][ ][*][ ][ ][ ][ ][10] / [ ][ ][ ][ ][ ][ ][ ][ ][20]

BOARDING PARTIES [ ][ ][ ][4]

PROBES [ ][ ][ ][ ][5]

ADMINISTRATIVE SHUTTLE

IDENT	HIT POINTS	NOTES
	[ ][ ][ ][ ][ ]	

TRANSPORTER BOMBS [ ][ ] [D][D]

SHIP DATA TABLE		
TYPE	=	FF
POINT VALUE	=	49
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN101.4
Y63 REFIT	=	+1
Y120 REFIT	=	+17
Y154 REFIT	=	+3

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

FH / RH

SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

ER PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

TURN MODE		SPEED
B	1	2-5
	2	6-10
	3	11-15
HET [ ]	4	16-21
	5	22-28
BD [ ][ ]	6	29+

FP

LF RF / L R / LR RR

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR

HELLFIRE TORPEDO DATA

	TURNS	0	0.5	1.0	1.5	2.0
SPEED OF HELLFIRE TORPEDO	1-2	20	24	32	48	64
	3-4	16	20	24	28	32
WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	1-2	2	—	1	0.5	0.33
	3-4	4	—	3	2	1
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	1-2	2	—	1	0.5	0
	3-4	3	—	2	1	0.5

HELLFIRE TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2.5 POINTS PER TURN				

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			

SENSOR/SCANNER (ECM) [0][1][3][5][7][9]

CNTR

DAM CON [2][2][0]

EX DAM [ ][ ][ ][ ]

SHIELD #1 [ ][ ][ ][ ][ ][ ]

FH NEUTRONIUM ARMOR [ ][ ][ ][ ][ ][ ]

#6 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

#2 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

FP
HF [A]
L+FA FA+R
EPP [1] PRB EPP [2]
F HULL [ ][ ]
TRAN LAB [ ][ ]
AFT HULL [ ][ ][ ]
SHTL [ ] TRAC [ ]
BRDG [ ]
LPP [3] LPP [4]
LS RS
BTTY [ ] APR [ ]
L WARP [ ][ ][ ][ ] R WARP [ ][ ][ ][ ]
AUX [ ] SPP [5] LAB [ ]
EMER [ ] IMP [ ] EMER [ ]

#5 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

#3 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

RH NEUTRONIUM ARMOR [ ][ ][ ][ ]

SHIELD #4 [ ][ ][ ][ ][ ][ ]

THE Y63 REFIT ADDS THE HELLFIRE BLASTER AND PSEUDO HF ABILITIES.

▒ SHADED BOXES ADDED BY Y120 REFIT. SEE RULE (RN101.R1).

▨ SHADED BOXES ARE LPPs PRIOR TO Y154 REFIT. SEE ALSO (RN101.R2).

WARP ENERGY MOVEMENT COST = 1/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10
Fract.	1/3	2/3	1	1 1/3	1 2/3	2	2 1/3	2 2/3	3	3 1/3	3 2/3	4	4 1/3	4 2/3	5	5 1/3	5 2/3	6	6 1/3	6 2/3	7	7 1/3	7 2/3	8	8 1/3	8 2/3	9	9 1/3	9 2/3	10

WORLDS OF UNIONS
BEHEMOTH DREADNOUGHT

CREW UNITS

		*							10
									20
									30
									40
									50

BOARDING PARTIES

									10

PROBES

1					5

PROBES

2					5

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS; NO (J1.59) TRANSFERS.

TRANSPORTER BOMBS

						D	D	D	D	D	D

SHIP DATA TABLE

TYPE	=	DN
POINT VALUE	=	160
BREAKDOWN	=	2-6
SHIELD COST	=	1+3
LIFE SUPPORT	=	1+1/2
SIZE CLASS	=	2
REFERENCE	=	RN101.5
Y120 REFIT	=	+36
Y154 REFIT	=	+4

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

ER PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

FH

RH

TURN MODE		SPEED
E	1	2 - 3
	2	4 - 6
	3	7 - 10
HET	4	11 - 14
	5	15 - 20
BD	6	21 - 29
	7	30+

▩ SHADED BOXES ADDED BY Y120 REFIT. SEE RULE (RN101.R1).

▨ SHADED BOXES ARE LPPs PRIOR TO Y154 REFIT. SEE ALSO (RN101.R2).

HELLFIRE TORPEDO DATA

	TURNS	0	0.5	1.0	1.5	2.0
SPEED OF HELLFIRE TORPEDO	1-2	20	24	32	48	64
	3-4	16	20	24	28	32
WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	1-2	2	—	1	0.5	0.33
	3-4	4	—	3	2	1
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	1-2	2	—	1	0.5	0
	3-4	3	—	2	1	0.5

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			

HELLFIRE TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2.5 POINTS PER TURN				

LF RF L R LR RR

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR

SENSOR/ SCANNER (ECM)

0 0 1 2 3 4 5 6 7 8 9

DAM CON

6 4 4 2 2 2 0

EX DAM

CNTR

SHIELD #1

SHIELD #2

SHIELD #3

SHIELD #4

SHIELD #5

SHIELD #6

FH NEUTRONIUM ARMOR

RH NEUTRONIUM ARMOR

BRIDGE

L+FA F HULL FA+R

EPP 1 2 3

EPP 4 5 6

TRAN

FLAG LAB TRAC

EMER APR AUX

LP

RP

LP HF A PRB 1 SHTL

SHTL LPP-360° 7 8 9 10 PRB 2 RP HF B

BATTERY

L WARP R WARP

SPP 11 12 LS

RS SPP 13 14

AFT HULL

IMPULSE

SPP-RA 15 16

WARP ENERGY MOVEMENT COST = 1 + 1/2 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	2	3	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	39	41	42	44	45
Fract.	1½	3	4½	6	7½	9	10½	12	13½	15	16½	18	19½	21	22½	24	25½	27	28½	30	31½	33	34½	36	37½	39	40½	42	43½	45

WORLDS OF UNIONS
BASILISK SCOUT

CREW UNITS

									10
			✱						20

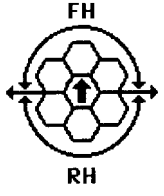
ADMINISTRATIVE SHUTTLE

IDENT	HIT POINTS	NOTES

BOARDING PARTIES: [ ][ ][ ][ ][ ] 6

TRANSPORTER BOMBS: [ ][ ] [D][D]

PROBES: [ ][ ][ ][ ] 5



LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0

SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

ER PULSE PHASER (ARMING = 1)

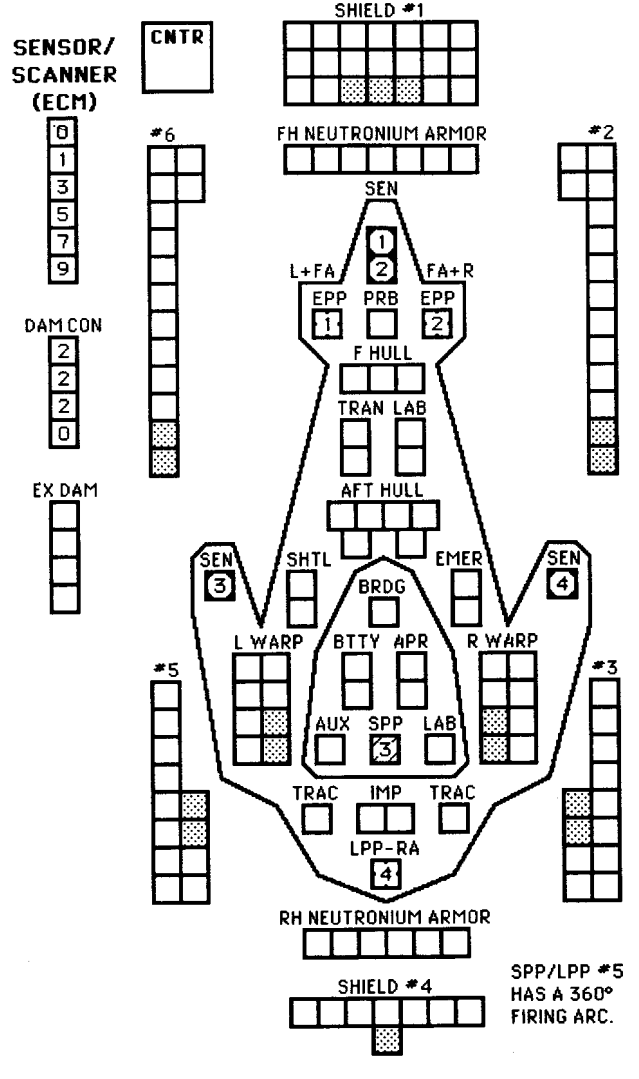
RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

SHIP DATA TABLE

TYPE	=	SC
POINT VALUE	=	100/70
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN101.6
Y120 REFIT	=	+17
Y154 REFIT	=	+3

TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET	4	15-20
	5	21-27
BD	6	28+

FA = LF + RF
RA = LR + RR



SPP/LPP #5 HAS A 360° FIRING ARC.

SCOUT FUNCTIONS SUMMARY

21 LENDING ECM OR ECCM
22 BREAKING LOCK-ONS
23 ATTRACTING DRONES
24 CONTROLLING SEEKING WEAPONS
25 IDENTIFYING DRONES
26 DETECTING MINES
27 GATHERING SCIENCE INFORMATION
28 SELF-PROTECTION JAMMING
29 TACTICAL INTELLIGENCE

SPECIAL SENSORS ARE DESTROYED ON "TORPEDO" DAMAGE POINTS.

▒ SHADED BOXES ADDED BY Y120 REFIT. SEE RULE (RN101.R1).

▨ SHADED BOXES ARE LPPs PRIOR TO Y154 REFIT. SEE ALSO (RN101.R2).

WARP ENERGY MOVEMENT COST = 1/2 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15
Fract.	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½	13	13½	14	14½	15

WORLDS OF UNIONS
WYVERN LIGHT CRUISER

CREW UNITS

									10
			✱						20
									30

BOARDING PARTIES

							8

PROBES

				5

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS, NO TRANSFERS.

TRANSPORTER BOMBS

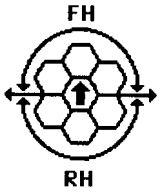
				D	D	D	D

SHIP DATA TABLE

TYPE	=	CL
POINT VALUE	=	88
BREAKDOWN	=	5-6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN101.7
Y63 REFIT	=	+2
Y120 REFIT	=	+19
Y154 REFIT	=	+3

LIGHT PULSE PHASER (ARMING = 0.5)

RANGE	0	1	2	3-6	7-10
2-4	5	4	4	2	1
5-6	4	4	4	1	0
7	4	4	4	0	0
8-9	4	4	3	0	0
10-12	4	3	2	0	0



SR PULSE PHASER (ARMING = 1)

RANGE	0	1	2	3	4	5	6-8	9-25
2-4	13	12	10	6	4	3	2	1
5-6	11	10	8	5	4	2	1	1
7	8	7	6	4	3	1	1	0
8-9	7	6	5	3	2	0	0	0
10-12	6	5	5	2	1	0	0	0

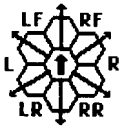
ER PULSE PHASER (ARMING = 1)

RANGE	0	1-2	3-5	6-8	9-12	13-20	21-40	41-75
2-4	10	9	7	6	4	2	1	1
5-6	9	8	5	5	3	2	1	0
7	8	6	4	4	3	1	0	0
8-9	5	4	3	3	2	1	0	0
10-12	4	4	3	3	1	0	0	0

TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET	4	15-20
	5	21-27
BD	6	28+

HELLFIRE TORPEDO DATA

	TURNS	0	0.5	1.0	1.5	2.0
SPEED OF HELLFIRE TORPEDO	1-2	20	24	32	48	64
	3-4	16	20	24	28	32
WARHEAD STRENGTH LOST FOR EACH HEX MOVED BY TORPEDO	1-2	2	—	1	0.5	0.33
	3-4	4	—	3	2	1
WARHEAD STRENGTH LOST FOR EACH POINT OF PHASER DAMAGE	1-2	2	—	1	0.5	0
	3-4	3	—	2	1	0.5



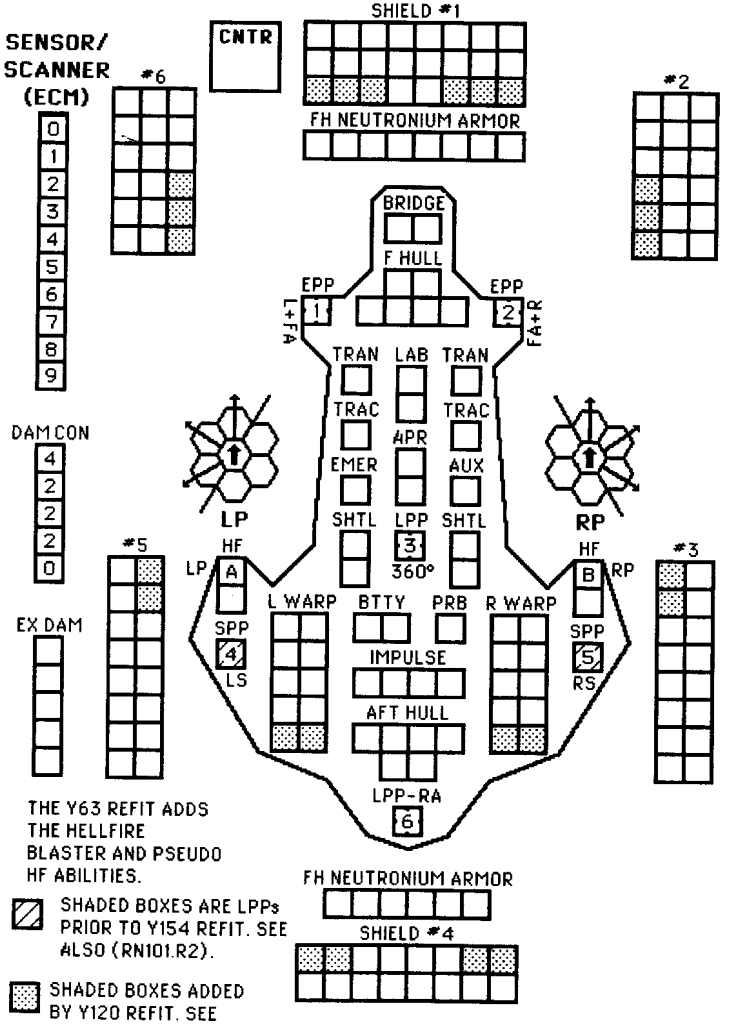
FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR

HELLFIRE TORPEDO TABLE

ARMING TURNS	1	2	3	4
DAMAGE MULTIPLE	4	5	6	6
MAXIMUM = 2.5 POINTS PER TURN				

HELLFIRE BLASTER TABLE

RANGE AT IMPACT	0-5	6-10	11-20
HIT PROBABILITY	1-4	1-3	1-2
DAMAGE MULTIPLE	0.5	0.33	0.2
WARHEAD X MULTIPLE = DAMAGE			



THE Y63 REFIT ADDS THE HELLFIRE BLASTER AND PSEUDO HF ABILITIES.

SHADED BOXES ARE LPPs PRIOR TO Y154 REFIT. SEE ALSO (RN101.R2).

SHADED BOXES ADDED BY Y120 REFIT. SEE RULE (RN101.R1).

WARP ENERGY MOVEMENT COST = 2/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	20	20
Fract.	⅔	1⅓	2	2⅔	3⅓	4	4⅔	5⅓	6	6⅔	7⅓	8	8⅔	9⅓	10	10⅔	11⅓	12	12⅔	13⅓	14	14⅔	15⅓	16	16⅔	17⅓	18	18⅔	19⅓	20

MALLARAN EMPIRE RAGE HEAVY CRUISER

CNTR

CREW UNITS

			*						10
									20
									30

BOARDING PARTIES

									10

DECK CREWS

	2

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS — NO TRANSFERS

TRANSPORTER BOMBS

				D	D	D	D

PROBES

				5

SHIP DATA TABLE

TYPE	=	CA
POINT VALUE	=	126
BREAKDOWN	=	6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN102.1
Y44 REFIT	=	+2
Y120 REFIT	=	+27
Y154 REFIT	=	+4

RAM MISSILE TABLE

IMPULSE	1	2	3	4	5	6	7	8	9	10
SPEED	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLE BEGINS AT SIX. DAMAGE = MULTIPLE X SPEED AT POINT OF IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE.

SHORT-RANGE RAM MISSILE

IMPULSE	1	2	3	4	5
SPEED	1	2	3	2	1

DAMAGE MULTIPLE BEGINS AT FOUR. THE DAMAGE = MULTIPLE x SPEED AT IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE POINT.

RAM TORPEDO AMMUNITION

1					
2					

MPDS AMMUNITION

1						
2						

PROTON PULSE EMITTER B

DIE ROLL	RANGE				
	0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

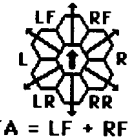
PROTON PULSE EMITTER D

DIE ROLL	RANGE								
	0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

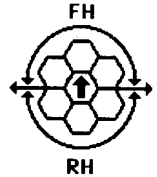
TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET	4	15-20
	5	21-27
BD	6	28+

PLASMATRON

DIE ROLL	RANGE					
	0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

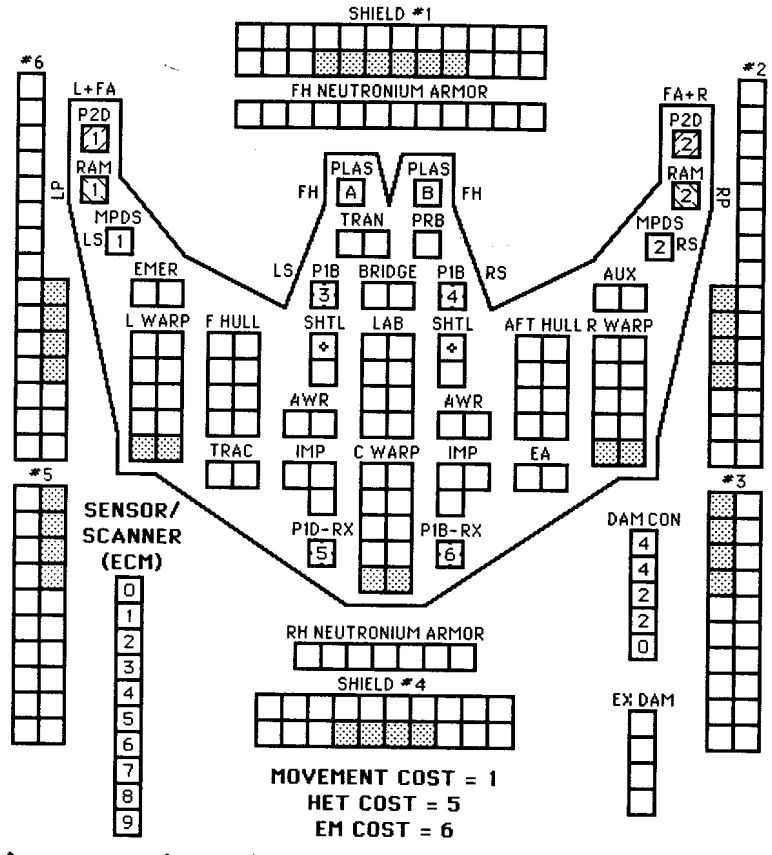


FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR
RX = L + LR + RR + R

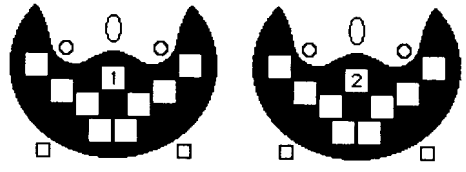


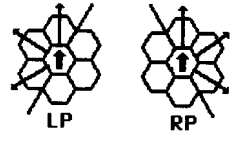
VIPER-1
1xP1B-FA
DFR = 3
CRIPPLED = 6
SPEED = 12

VIPER-2
1xP2B-FA
DFR = 4
CRIPPLED = 6
SPEED = 15



MOVEMENT COST = 1
HET COST = 5
EM COST = 6





▨ REPLACED BY PLASMATRON F&A+L AND F&A+R PRIOR TO Y44 REFIT. SEE ALSO RULE (RN102.R1).

▩ ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN102.R1).

▨ PRIOR TO Y154 THESE ARE P1Ds. SEE ALSO RULE (RN102.R2).

MALLARAN EMPIRE ANGER LIGHT CRUISER

CREW UNITS

									10
			*						20

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS						NOTES

BOARDING PARTIES

									10

TRANSPORTER BOMBS [ ] [ ] [ ] [ ] [D] [D] [D] [D]

DECK CREWS [ ] [2]

PROBES [ ] [ ] [ ] [ ] [5]

SHIP DATA TABLE

TYPE	=	CL
POINT VALUE	=	94
BREAKDOWN	=	6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN102.2
Y44 REFIT	=	+2
Y120 REFIT	=	+19
Y154 REFIT	=	+2

RAM MISSILE TABLE

IMPULSE	1	2	3	4	5	6	7	8	9	10
SPEED	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLE BEGINS AT SIX. DAMAGE = MULTIPLE X SPEED AT POINT OF IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE.

SHORT-RANGE RAM MISSILE

IMPULSE	1	2	3	4	5
SPEED	1	2	3	2	1

DAMAGE MULTIPLE BEGINS AT FOUR. THE DAMAGE = MULTIPLE x SPEED AT IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE POINT.

PLASMATRON

DIE ROLL	RANGE					
	0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

PROTON PULSE EMITTER B

DIE ROLL	RANGE				
	0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

PROTON PULSE EMITTER D

DIE ROLL	RANGE								
	0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET [ ]	4	15-20
	5	21-27
BD [ ] [ ]	6	28+

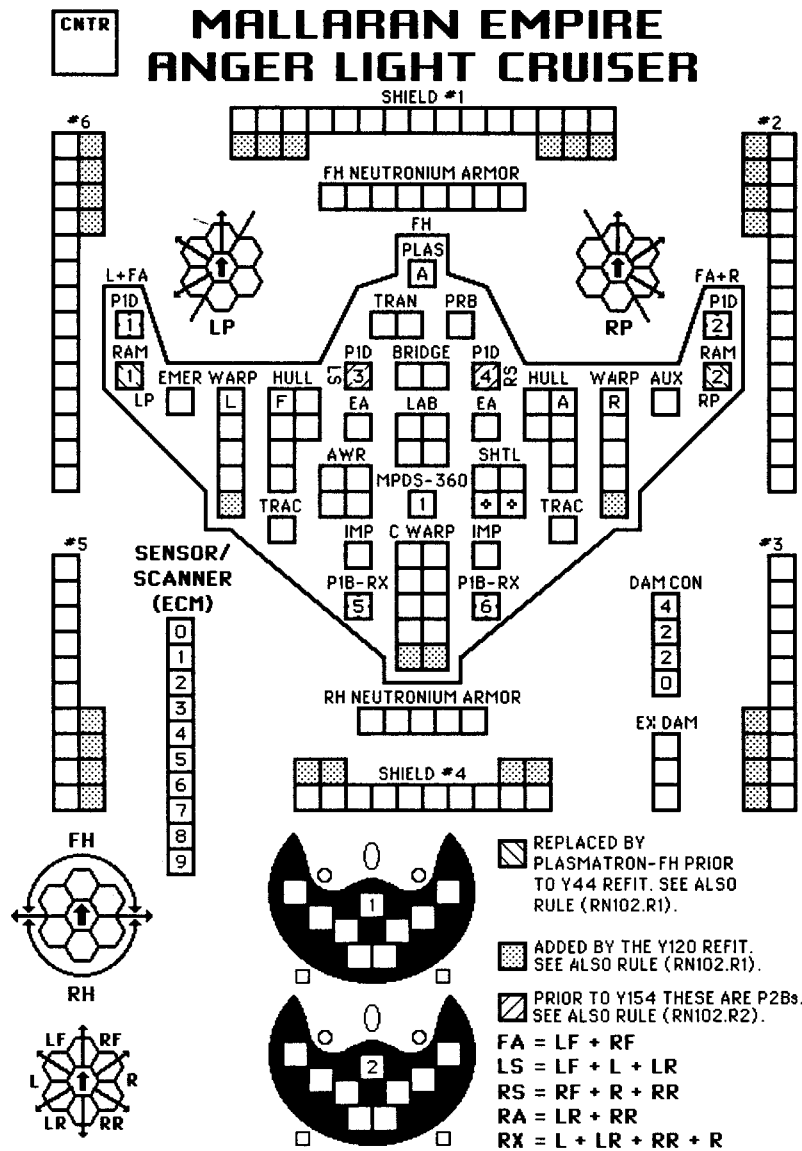
MPDS AMMUNITION [1] [ ] [ ] [ ] [ ] [ ] [ ]

RAM TORPEDO AMMUNITION

1					
2					

VIPER-1
1xP1B-FA
DFR = 3
CRIPPLED = 6
SPEED = 12

VIPER-2
1xP2B-FA
DFR = 4
CRIPPLED = 6
SPEED = 15



WARP ENERGY MOVEMENT COST = 2/3 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	20	20
Fract.	⅔	1⅓	2	2⅔	3⅓	4	4⅔	5⅓	6	6⅔	7⅓	8	8⅔	9⅓	10	10⅔	11⅓	12	12⅔	13⅓	14	14⅔	15⅓	16	16⅔	17⅓	18	18⅔	19⅓	20

MALLARAN EMPIRE ENRAGE DESTROYER

CNTR

CREW UNITS 10

BOARDING PARTIES 6

DECK CREWS 2

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS D D

PROBES 5

SHIP DATA TABLE

TYPE	=	DD
POINT VALUE	=	71
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN102.3
Y44 REFIT	=	+2
Y120 REFIT	=	+15
Y154 REFIT	=	+2

RAM MISSILE TABLE

IMPULSE	1	2	3	4	5	6	7	8	9	10
SPEED	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLE BEGINS AT SIX. DAMAGE = MULTIPLE X SPEED AT POINT OF IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE.

SHORT-RANGE RAM MISSILE

IMPULSE	1	2	3	4	5
SPEED	1	2	3	2	1

DAMAGE MULTIPLE BEGINS AT FOUR. THE DAMAGE = MULTIPLE x SPEED AT IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE POINT.

PLASMATRON

DIE ROLL	RANGE					
	0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

PROTON PULSE EMITTER B

DIE ROLL	RANGE				
	0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

PROTON PULSE EMITTER D

DIE ROLL	RANGE								
	0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

TURN MODE		SPEED
B	1	2-5
	2	6-10
	3	11-15
HET	4	16-21
	5	22-28
BD	6	29+

MPDS AMMUNITION 1

RAM TORPEDO AMMUNITION 1 2

VIPER-1
1xP1B-FA
DFR = 3
CRIPPLED = 6
SPEED = 12

VIPER-2
1xP2B-FA
DFR = 4
CRIPPLED = 6
SPEED = 15

FH

RH

LF RF L R LR RR

REPLACED BY PLASMATRON-FH PRIOR TO Y44 REFIT. SEE ALSO RULE (RN102.R1).

ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN102.R1).

PRIOR TO Y154 DELETE THIS P1B. SEE ALSO RULE (RN102.R2).

FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR
RX = L + LR + RR + R

WARP ENERGY MOVEMENT COST = 1/2 ENERGY POINT PER HEX [5] = HET COST ⑥ = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	⑥	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15
Fract.	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½	12	12½	13	13½	14	14½	15

MALLARAN EMPIRE IRRITATE FRIGATE

CREW UNITS ☐☐☐☐*☐☐☐☐☐10

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

BOARDING PARTIES ☐☐☐☐5

TRANSPORTER BOMBS ☐☐ D D

SHIP DATA TABLE		
TYPE	=	FF
POINT VALUE	=	55
BREAKDOWN	=	6
SHIELD COST	=	1/2+1/2
LIFE SUPPORT	=	1/2
SIZE CLASS	=	4
REFERENCE	=	RN102.4
Y44 REFIT	=	+2
Y120 REFIT	=	+16
Y154 REFIT	=	+2

RAM MISSILE TABLE

IMPULSE	1	2	3	4	5	6	7	8	9	10
SPEED	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLE BEGINS AT SIX. DAMAGE = MULTIPLE X SPEED AT POINT OF IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE.

RAM TORPEDO AMMUNITION

1 ☐☐☐☐
2 ☐☐☐☐

MPDS AMMUNITION

1 ☐☐☐☐☐☐☐

PLASMATRON

DIE ROLL	RANGE 0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

PROTON PULSE EMITTER B

DIE ROLL	RANGE 0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

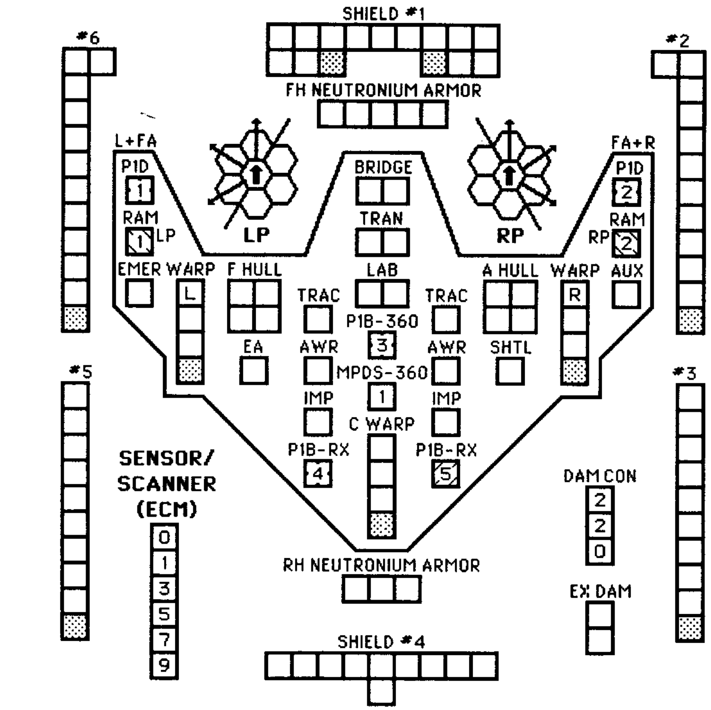
RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

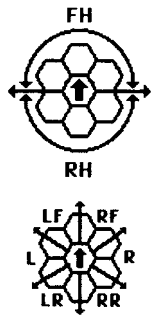
CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

PROTON PULSE EMITTER D

DIE ROLL	RANGE 0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

TURN MODE		SPEED
A	1	2 - 6
HET ☐	2	7 - 12
	3	13 - 19
BD ☐☐	4	20 - 26
	5	27+





FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR
RX = L + LR + RR + R

▧ REPLACED BY PLASMATRON-FH PRIOR TO Y44 REFIT. SEE ALSO RULE (RN102.R1).

▩ ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN102.R1).

▨ PRIOR TO Y154 DELETE THIS P1B. SEE ALSO RULE (RN102.R2).

WARP ENERGY MOVEMENT COST = 1/3 ENERGY POINT PER HEX [5] = HET COST (6) = ERRATIC MANEUVER WARP COST

SPEED	1	2	3	4	[5]	(6)	7	8	9	10	11	12	13	14	15
Standard	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5
Fract.	⅓	⅔	1	1⅓	1⅔	2	2⅓	2⅔	3	3⅓	3⅔	4	4⅓	4⅔	5

SPEED	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Standard	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10
Fract.	5⅓	5⅔	6	6⅓	6⅔	7	7⅓	7⅔	8	8⅓	8⅔	9	9⅓	9⅔	10

MALLARAN EMPIRE CLOSE RAGE HEAVY PLASMATRON CRUISER

CNTR

CREW UNITS

			*						10
									20
									30

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TWO BAYS, NO TRANSFERS.

BOARDING PARTIES

									10

TRANSPORTER BOMBS

				D	D	D	D

DECK CREWS

			4

PROBES

				5

SHIP DATA TABLE

TYPE	=	CAP
POINT VALUE	=	126
BREAKDOWN	=	6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN102.5
Y120 REFIT	=	+29
Y154 REFIT	=	+4

SHORT-RANGE RAM MISSILE

IMPULSE	1	2	3	4	5
SPEED	1	2	3	2	1

DAMAGE MULTIPLE BEGINS AT FOUR. THE DAMAGE = MULTIPLE x SPEED AT IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE POINT.

MPDS AMMUNITION

1							
2							

PROTON PULSE EMITTER B

DIE ROLL	RANGE				
	0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

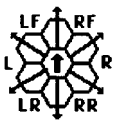
PROTON PULSE EMITTER D

DIE ROLL	RANGE								
	0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

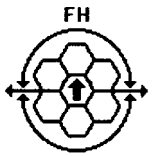
TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET	4	15-20
	5	21-27
BD	6	28+

PLASMATRON

DIE ROLL	RANGE					
	0	1	2-3	4-8	9-15	16-30
1	14	14	13	10	8	4
2	14	14	12	7	6	2
3	14	13	11	4	3	1
4	13	12	10	2	1	0
5	11	10	7	1	0	0
6	10	7	4	0	0	0

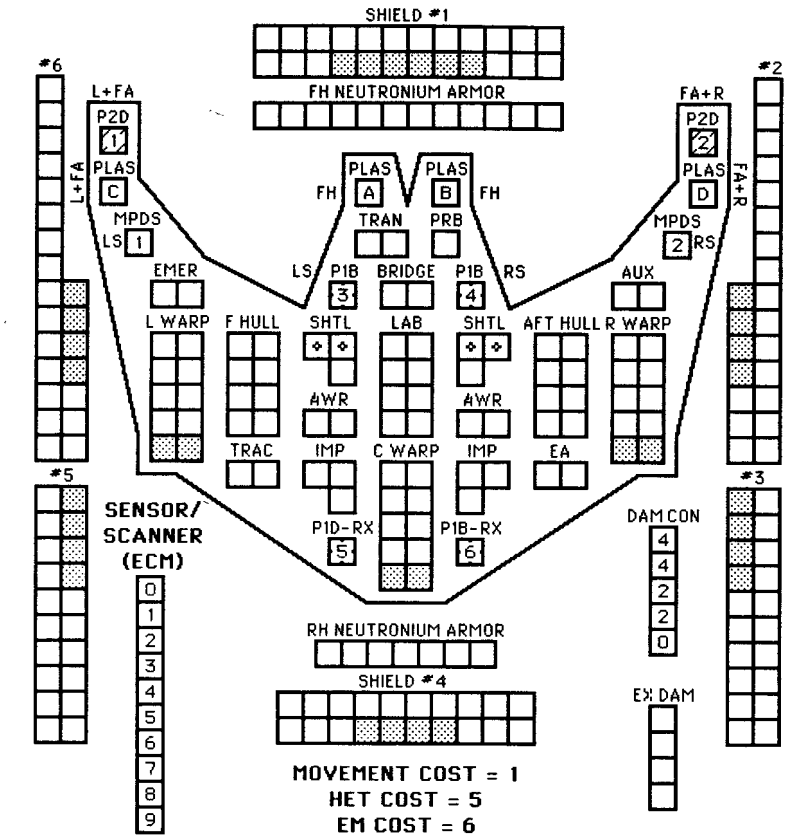


FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR
RX = L + LR + RR + R

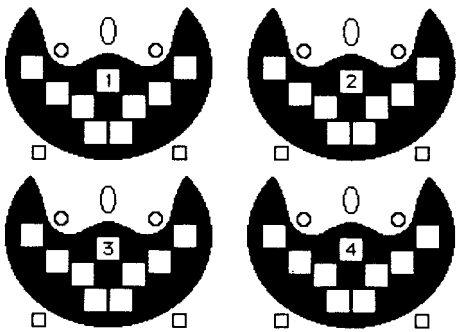


VIPER-1
1xP1B-FA
DFR = 3
CRIPPLED = 6
SPEED = 12

VIPER-2
1xP2B-FA
DFR = 4
CRIPPLED = 6
SPEED = 15



MOVEMENT COST = 1
HET COST = 5
EM COST = 6



ADDED BY THE Y120 REFIT. SEE ALSO RULE (RN102.R1).

PRIOR TO Y154 THESE ARE P1Ds. SEE ALSO RULE (RN102.R2).

MALLARAN EMPIRE RAM CRUISER CATAPULT

CNTR

CREW UNITS

		*					10
							20
							30

BOARDING PARTIES

							10

ADMINISTRATIVE SHUTTLES

IDENT	HIT POINTS	NOTES

TRANSPORTER BOMBS

				D	D	D	D

PROBES

					5

SHIP DATA TABLE

TYPE	=	CAR
POINT VALUE	=	131
BREAKDOWN	=	6
SHIELD COST	=	1+1
LIFE SUPPORT	=	1
SIZE CLASS	=	3
REFERENCE	=	RN102.7
Y120 REFIT	=	+25
Y154 REFIT	=	+4

RAM MISSILE TABLE

IMPULSE	1	2	3	4	5	6	7	8	9	10
SPEED	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLE BEGINS AT SIX. DAMAGE = MULTIPLE X SPEED AT POINT OF IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE.

SHORT-RANGE RAM MISSILE

IMPULSE	1	2	3	4	5
SPEED	1	2	3	2	1

DAMAGE MULTIPLE BEGINS AT FOUR. THE DAMAGE = MULTIPLE x SPEED AT IMPACT. EVERY TWO POINTS OF PHASER DAMAGE REDUCE THE MULTIPLE BY ONE POINT.

MPDS AMMUNITION

1							
2							

RAM TORPEDO AMMUNITION

1							
2							
3							
4							

PROTON PULSE EMITTER B

DIE ROLL	RANGE				
	0	1	2	3-4	5-8
1	7	5	4	3	1
2	6	5	4	2	0
3	5	4	3	1	0
4	4	4	2	0	0
5	4	4	1	0	0
6	4	3	0	0	0

MULTI-PURPOSE DAMAGE SYSTEM

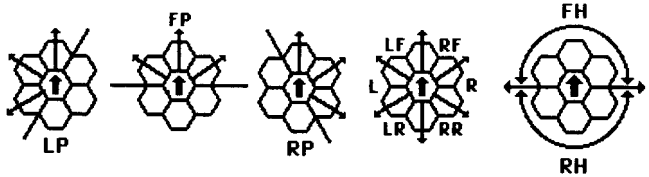
RANGE	0	1	2	3	4
TO HIT	1-2	1-3	1-5	1-3	1-2
DAMAGE, SC 1-5	2	2	2	2	2
DAMAGE, SC 6	4	4	4	4	4
DAMAGE, SC 7	8	8	8	8	8

CAN FIRE ONCE EVERY FOUR CONSECUTIVE IMPULSES. ACTIVATION COST IS 0.1 ENERGY POINTS PER SHOT. MPDS LAUNCHER ACTIVATION IS 0.25 POINTS PER LAUNCHER.

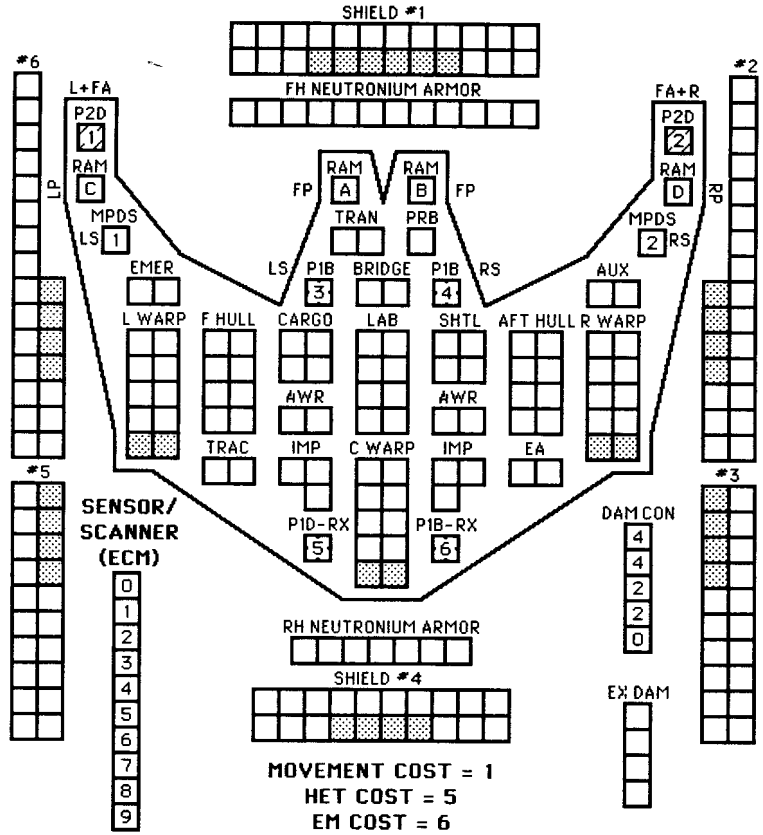
PROTON PULSE EMITTER D

DIE ROLL	RANGE								
	0	1	2	3-4	5-8	9-15	16-25	26-40	41-50
1	10	9	8	7	5	2	2	1	1
2	10	8	7	6	4	2	1	1	0
3	10	8	7	6	3	1	1	0	0
4	9	7	6	5	3	1	0	0	0
5	8	6	5	4	2	1	0	0	0
6	7	6	5	4	1	0	0	0	0

TURN MODE		SPEED
C	1	2-4
	2	5-9
	3	10-14
HET	4	15-20
	5	21-27
BD	6	28+



FA = LF + RF
LS = LF + L + LR
RS = RF + R + RR
RA = LR + RR
RX = L + LR + RR + R



(FPN100.5) PSEUDO HELLFIRE AND HELLBLAZER TORPEDO

(FPN100.51) ARMING: A pseudo HF or HBZ (FPN100.6) can be armed in a two-box launcher.
(FPN100.511) It cost four points of energy from any source to create a pseudo HF or HBZ. A HF or HBZ launcher cannot create a pseudo if it is arming a real torpedo or already holding a real or pseudo HF or HBZ torpedo.
(FPN100.512) HF and HBZ pseudoes can only be armed in a single turn, they cannot be armed over multiple turns.
(FPN100.513) HOLDING: A pseudo HF or HBZ can be held at a cost of 0.5 energy from any source during Energy Allocation. If the holding energy is not paid during a given Energy Allocation Phase the pseudo is lost immediately, but this is not announced.
(FPN100.514) If a launcher is damaged, i.e., has the first of two "torpedo" damage points allocated to it (FPN100.21) while holding or arming a pseudo, the pseudo is lost immediately, but the loss of a pseudo is not announced.
(FPN100.515) Holding a pseudo will not affect the arming of a real torpedo.
(FPN100.516) At Weapons Status–I, –II, or –III, a pseudo can be held in each HF or HBZ launcher.

(FPN100.52) EFFECT: A pseudo HF or HBZ can be created to simulate any possible type of real torpedo (FPN100.21), at the player's option at the moment of launching.
(FPN100.521) The only way to differentiate a pseudo HF or HBZ from a real one is by the effect of its impacting its target.
(FPN100.522) A pseudo HF or HBZ cannot score any damage against any target, not even a drone or mine.

(FPN100.6) HELLBLAZER TORPEDO

(FPN100.61) DEFINITION: The Hellblazer Torpedo (HBZ) is a variant of the Hellfire Torpedo. It can only be launched from Hellblazer Torpedo launchers, not from a standard hellfire launchers. On the SSD a Hellblazer Torpedo is designated HBZ.

(FPN100.62) OPERATION: A HBZ torpedo operates exactly like a HF torpedo using all of the above rules except that you must refer to the Hellblazer Torpedo Table in place of the HF table.

(FPN100.63) WARHEAD: A HBZ torpedo cannot be armed with more then two points of energy for its warhead each turn. This gives a HBZ torpedo a maximum warhead of 48.

(FPN100.64) OTHER ABILITIES: See the Hellblazer Chart for the abilities. Note that less power can be allocated to a hellblazer torpedo than a hellfire torpedo, see the Hellblazer torpedo charts (FPN100.65).

(FPN100.65) HELLBLAZER TORPEDO CHART: See SSDs.

(FSN100.0) RAM TORPEDO

The Ram torpedo (Ram) is the primary weapon on most Mallaran ships. Normally a ship will carry two Rams. The Ram does damage by creating a subspace wake close by the target without actually hitting it. The wake disrupts the target's warpfield causing damage in proportion to the speed of the Ram Torpedo.

(FSN100.1) DESIGNATION

(FSN100.11) SSD: A Ram launcher is designated RAM on the SSD, and is marked 1, or 2, or 3, etc.

(FSN100.12) DESTRUCTION: Ram torpedo launchers are destroyed on "drone" damage points. Ram launchers cannot fire torpedoes after they are destroyed. The rack and every Ram torpedo loaded on it are destroyed at the same time. The reloads are destroyed with the last excess damage box of the unit.

(FSN100.13) REPAIR: It requires four repair points to repair a destroyed launcher. The rack is repaired with the launcher but is empty and must be reloaded (FSN100.72).

(FSN100.14) TECHNOLOGY RESTRICTION: RAM Torpedoes are Triangulum technology and cannot be used in option mounts outside of simulators.

(FSN100.15) TACTICAL INTELLIGENCE: RAM torpedo launchers are distinguished at Level G (D17.4). The arming status of a Ram launcher is known at Level L.

(FSN100.16) SEEKING WEAPON RULES: The Ram torpedo is a seeking weapon and follows the normal rules for seeking weapons (F0.0), unless otherwise provided for in these rules.

(FSN100.2) ARMING

(FSN100.21) PROCEDURE: A Ram torpedo is armed over two turns by applying one point of warp energy (H2.0) to a Ram torpedo in a rack on each of two consecutive turns. Power cannot be allocated to a Ram torpedo launcher that has no Ram torpedoes loaded, see (FSN100.7).

(FSN100.22) HOLDING: Armed Ram torpedoes cannot be held as some weapons can, but the arming process can be extended. If the weapon is not launched by the end of the second turn of arming, the player must allocate one unit of warp power on the next turn or the energy is lost. If power is allocated, that turn is treated as the second turn of arming. The procedure of extending the arming of a Ram torpedo by rolling delay can be continued indefinitely, and is not limited to a single turn.

(FSN100.23) RESERVE POWER: Using the procedures in (H7.53) a Ram can begin arming with reserve power.

(FSN100.24) WEAPON STATUS: At any Weapons Status except Weapons Status–III the rack is always full but no Ram torpedo is armed. At Weapons Status–III one Ram torpedo in each rack is presumed to have completed one turn's arming.

(FSN100.3) LAUNCHING

(FSN100.31) LAUNCHING: A Ram torpedo can be launched during the Launch Plasma Torpedoes step of the Seeking Weapons Stage (6B6) of any impulse if armed.
(FSN100.311) The target must be in the tracking arc of the launcher for a Ram torpedo to be launched at it, see (D2.34).

(FSN100.32) INFORMATION: At the moment that a Ram torpedo is placed on the board the launching ship must announce the target of the Ram.

(FSN100.33) MYOPIC ZONE: A Ram torpedo cannot be launched at a target in the same hex as the launching ship.

(FSN100.4) DAMAGE

(FSN100.41) PROCEDURE: Ram damage is applied to the target in the Resolve Damage From Seeking Weapons Not Resolved Above step of the Damage During Movement Stage (6A3) of the impulse the Ram torpedo enters its hex.

(FSN100.42) DAMAGE CALCULATION: Take the speed of the Ram torpedo at the moment of passage and multiply it by the current adjusted damage multiplier. The basic multiplier is 5 prior to the Y120 refit which increased it to 6, and this can be reduced by "phaser" damage points (FSN100.62). The result is the number of damage points applied to the target's shield facing the hex side from which the Ram torpedo entered its hex.

EXAMPLE: If the speed of the torpedo at the moment of passage is two and the damage multiplier is 6, (2x6 =) 12 damage points would be applied to the target's facing shield.

(FSN100.5) RAM TORPEDO MOVEMENT

(FSN100.51) MOVEMENT: Ram torpedoes move as seeking weapons except for their speed. The speed is expressed in the number of hexes moved per impulse, not per turn.
(FSN100.511) To determine the Ram torpedo's speed look at Ram torpedo table; the impulse the Ram is launched is considered to be Impulse #0. The next consecutive impulse is Impulse #1 and its speed is one, this means that the Ram Torpedo will move one hex in that impulse. In the second impulse the speed is two and the Ram will move two hexes in that impulse, etc. See (FSN100.84).
(FSN100.512) A Ram torpedo cannot HET or turn. It can only move forward or sideslip (C4.0).

(FSN100.52) DURATION: If a Ram torpedo does not reach its target at the end of the Voluntary Movement Stage (6A2) of its tenth impulse of movement, it is removed from the board.

(FSN100.6) DAMAGING A RAM TORPEDO

(FSN100.61) PHASER DAMAGE: Only weapons capable of doing "phaser" damage affect a Ram torpedo.

(FSN100.62) DAMAGE: Every second point of "phaser" damage applied to a Ram torpedo reduces its damage multiplier by one. So 12 points of "phaser" damage are required to eliminate a Ram torpedo, if only 11 points of damage are scored the torpedo would still have a multiplier of one.

(FSN100.63) FIRING: Players may fire normally at a Ram torpedo each impulse during the Direct-Fire Segment (6D). This is done based on the hex the Ram torpedo is occupying after movement of that impulse, it cannot be stopped in mid-movement to allow it to be fired on at optimum ranges.

(FSN100.7) RAM LAUNCHER

(FSN100.71) RACK: Every Ram launcher is equipped with a rack that is capable of loading four Ram torpedoes.
(FSN100.711) Only one Ram torpedo per launcher can be armed and fired at a time.

(FSN100.72) RELOADING: It takes one complete turn to reload two Ram torpedoes in a rack. This must be marked on the energy form with an "R". The launcher is taken out of service for the entire turn. A torpedo must be in the rack to be armed or fired.

(FSN100.8) CONDITIONS AND RESTRICTIONS

(FSN100.81) TERRAIN: A Ram Torpedo interacts with all terrain types as if it is a plasma torpedo, except that it cannot damage anything on a planet or in an atmosphere.

(FSN100.82) CONTROL: A Ram torpedo must be guided by a controlling ship under the provisions of (F3.0), they have no self-guidance and thus cannot be released to their own control and go inert if no unit is guiding them.

(FSN100.83) LAUNCHING RATE: Only one Ram torpedo can be armed and launched from a launcher on any turn. A Ram torpedo in a given launcher cannot begin arming on the same turn that another torpedo is launched by that launcher.

(FSN100.84) RAM TORPEDO TABLE

Impulse	1	2	3	4	5	6	7	8	9	10
Speed	1	2	2	3	3	2	2	2	1	1

DAMAGE MULTIPLIER, NORMAL = 6

Prior to the Y120 refit Ram torpedoes have a damage multiplier of only 5.

(FSN100.85) ESGs AND SUBSPACE ENERGY FIELDS: A Ram torpedo is damaged by an ESG field as if that field was producing "phaser" damage, the ESG is reduced by the same procedure as if the Ram was a drone. Subspace Energy Fields treat Ram torpedoes under (OG14.311), i.e., they inflict four points of damage to the torpedo each impulse it is in one.

(FSN100.86) OTHER SYSTEMS: Tractor beams (G7.0), Transporters (G8.0), Stasis Field Projectors (G16.0), and Displacement Devices (G18.0), cannot affect a launched Ram torpedo, but can affect the target of such a torpedo or its controlling unit.

(FSN100.87) DISTRACTION: Ram torpedoes can be distracted in the same manner and by the same means as plasma torpedoes, i.e., wild weasels (J3.0), wild SWACS (J9.0), Wild PF Scouts (K1.756).

(FSN101.0) SMALL RAM

The small Ram (SRam) was developed to mount on Mallaran fighters. It is a scaled-down Ram Launcher canister that can be carried and fired by a fighter.

(FSN101.1) DESIGNATION

(FSN101.11) SSD: On fighter SSDs, a small circle designates a SRam; the number of these circles is the number of SRams the fighter can carry.

(FSN101.2) ACTIVATION

(FSN101.21) COST: It costs 0.5 point of energy (from any source) to activate an SRam. The SRam will remain active on the fighter for 15 turns, if not launched by that time the SRam goes inert. A fighter carrying SRams cannot activate them by itself, only the host ship can. The energy must be paid before the SRam canister is loaded onto the fighter, but can be paid any time before the deck crew loads the canister onto the fighter, even with reserve power (H7.0) during a turn.

(FSN101.3) LAUNCHING

(FSN101.31) PROCEDURE: A fighter can launch one SRam per turn, but cannot launch one within eight impulses of launching one on a previous turn.

(FSN101.32) CONTROL: A fighter can control a maximum of two SRams. These SRams must come from the fighter. An EWF could take control of up to six SRam launched from its squadron, if it is within ten hexes of the SRam and the target. A ship can take control of an SRam launched by a fighter, if it is within 35 hexes of the SRam and the target.

(FSN101.33) RANGE: A fighter cannot launch a SRam at a target at more than ten hexes true range (D1.4), and the target must be in the fighter's FA arc. See (FSN101.52).

(FSN101.4) LOADING A SRAM ON A FIGHTER

(FSN101.41) LOADING: It takes one deck crew action to load a SRam on a fighter.

(FSN101.42) READY RACKS: A fighter box marked by a "+" has a ready rack that can hold four SRam canisters and one Plasmatron charge (EN108.62), at no energy cost. Note that energy must be paid to arm the weapons in the racks.

(FSN101.43) RELOAD: A ship equipped with fighters has a stockpile of 24 SRams per fighter. This stockpile is lost with the last "Excess Damage" damage point.

(FSN101.44) LAUNCH RESTRICTIONS: A fighter cannot launch a SRam until 16 impulses after it has launched.

(FSN101.5) CONDITIONS AND RESTRICTIONS

(FSN101.51) All other rules applying to a Ram torpedo apply to the SRam if not covered in these rules.

(FSN101.52) SMALL RAM TABLE

Impulse	1	2	3	4	5
Speed	1	2	3	2	1

DAMAGE MULTIPLIER = 3 until the Y120 refit, 4 thereafter.

(GN100.0) ROTARY SHIELDING

The Rotary Shield (RSH) is a defensive system used by the Helgardians to produce a very effective (if somewhat porous) form of specific reinforcement. A second advantage is that this shielding can be rotated from one shield to another (hence its designation as "rotary" shielding). The Helgardians do not have very good shielding on their ships so this device is very useful. It has its limitations, however, such as in a fleet battle where enemy fire might come from more than one direction.

(GN100.1) DESIGNATION

(GN100.11) SSD: On the SSD the rotary shield generator is designated RSH and is marked by a 1, 2, 3, etc. to indicate how much power it can use (GN100.21).

(GN100.12) DESTRUCTION: Rotary shield generators and their associated capacitors (GN100.4) are destroyed on "drone" damage points. Any operating energy and or energy stored in the capacitor is lost with the rotary shield generator.

(GN100.2) ACTIVATION

(GN100.21) LEVEL: There are three levels at which a rotary shield can operate: Inactive, Standard, and Reinforced.
(GN100.211) STANDARD: One or two points of energy can be allocated to a rotary shield at the basic level. Each point produces three shield boxes for a maximum of six shield boxes per rotary shield generator at that level.

(GN100.2111) There is no delay in the activation of a rotary shield between turns at the standard level. If the rotary shield was operating on Impulse #32 of Turn #1, there is no delay imposed on its being activated (or continuing its activation with new energy) during Energy Allocation of Turn #2 and blocking damage on Impulse #1 of that turn.

(GN100.212) REINFORCED: One or two points of energy can be added to a rotary shield already operating at the maximum standard level to create the reinforced level. These two points of energy will only add two shield boxes each for a maximum of ten shield boxes for a fully reinforced RSH (with one point of reinforcement energy, the shield would have a strength of eight).

(GN100.2121) A rotary shield used at reinforced levels cannot be operated at all on the subsequent turn, it must cool down. No energy can be allocated to the RSH or its capacitor during the cool down turn. Any energy remaining in the capacitor at the end of a period of reinforced level is lost if it was not used.

(GN100.2122) A rotary shield operating at standard level can be upgraded to reinforced level even if it has been dropped by previous damage during that turn. The intention to increase a rotary shield to reinforced level must be announced the impulse prior to its taking effect during the Operate Shields Step of the Marines Activity Stage (6B7) of the Sequence of Play, and the power to reinforce the RSH must be paid at that time with energy from its capacitor (or from reserve power allocated to the capacitor). The RSH becomes reinforced on the following impulse during the same step.

EXAMPLE: Helgardian player decides on Impulse #15 to raise an RSH to reinforced level. He makes the announcement, and determines the power he must apply to the RSH. On Impulse #16 the RSH will assume the new status and remain so for the remainder of the turn unless cancelled, dropped, destroyed, or otherwise reduced to zero.
(GN100.213) INACTIVE: The RSH capacitor is powered, but the RSH has not been raised.

(GN100.22) ACTIVATION: A rotary shield can be activated at either standard or reinforced level during the Energy Allocation phase or during the turn in the Operate Shields Step of the Marines Activity Stage (6B7) of the Sequence of Play.
(GN100.221) If activated during Energy Allocation, there is no delay although the status of the RSH, including its facing, must be announced at the same point where shields are announced as active or not in the Energy Allocation Phase.
(GN100.222) If activated during a turn, the announcement of activation must be made in the Operate Shields Step of the Marines Activity Stage (6B7) of the Sequence of Play. The RSH will become active on the impulse following the announcement in the same step of the Sequence of Play.

(GN100.23) DURATION: An RSH once activated remains active until the end of the turn in which it was activated.
(GN100.231) Whether it was activated at the start of the turn, or in mid-turn, its effect ends, if not dropped voluntarily or by damage earlier, during the Energy Allocation Phase of the subsequent turn, unless it is again activated.
(GN100.232) Each time an RSH is activated, it appears with the number of shield boxes for the level at which it is powered (GN100.21). This is irrespective of how many shield boxes remained at the end of its last activation period. If an RSH continues to be activated from a previous turn, the new energy applied to continue the activation restores any RSH shield boxes lost due to damage on the previous turn (depending on the new level at which it is activated).
(GN100.233) If an RSH shield is reduced to zero strength, but still active, it can still be upgraded to reinforced level, but will only gain the additional shield boxes that reinforced level gains, not restore the previously lost shield boxes. Note that this is true even if the RSH shield has not been reduced to zero level.

(GN100.24) COMBINATION: RSH shields cannot themselves be reinforced with normal shield reinforcement (D3.342), they can only use their own reinforcement procedure (GN100.212).
(GN100.241) If the ship is operating General Reinforcement (D3.341), this reinforcement operates normally, i.e., all General Reinforcement must be destroyed or dropped before any damage can strike the RSH shield.
(GN100.242) A shield facing protected by an RSH can receive normal specific shield reinforcement (D3.342). Such reinforcement operates normally, i.e., is treated as if it were part of that shield for all purposes, and cannot be applied unless at least one non-RSH shield box remains active on that shield facing.
(GN100.243) RSH shields cannot be used if the ship is only using Minimum Shields (D3.33).
(GN100.244) RSHs operate with armor (D4.12) normally, e.g., any damage which penetrates the RSH (and any other shielding) must first strike any armor behind the shield before it can strike other systems on that unit.
(GN100.245) RSHs cannot be combined with Andromedan power absorber panels or used by units that do not normally operate normal shields such as Souldra (OG9.0) and the RYN, but could be combined (in simulators) with the shields of the Sigvirions (OG2.0) or of Magellanic ships.

(GN100.25) SPECIAL WEAPONS: Some weapons have some unique interactions with RSH shields.

(GN100.251) Hellbores in enveloping mode (E10.0) treat RSHs as part of the normal shields when determining the "weakest shield(s)." Because of the somewhat porous nature of RSHs (GN100.35), a shield facing with one or more RSHs might actually be weaker (in terms of the number of damage points that would have penetrated as internals) than a shield facing without one, but as the hellbore counts total shield boxes to determine the weakest shield, it may wind up expending its strongest damage against a stronger shield.
(GN100.252) Non-hellbore enveloping weapons such as PPDs (E11.0), enveloping plasmas (FP5.0), enveloping hypercannon shells (OE16.0), energy howitzers (OE14.0), etc. treat RSHs normally, except that some of their damage on any given shield facing may leak through (GN100.35).
(GN100.253) Penetrating weapons such as spearfish drones (FD14.0) and kinetic cannon (E53.0) penetrating ammunition only count half the boxes of RSHs (rounding fractions up) to determine their penetration, i.e., if an RSH has seven shield boxes the penetrating round only counts four of them. If there are two RSHs covering a given arc, they are combined for this purpose.
(GN100.254) Seltorian Shield Crackers (E16.0) affect rotary shields as if they were normal shields.
(GN100.255) Expanding Sphere Generators (G23.0) treat RSHs as if they were normal shields, i.e., the ESG will destroy all boxes on the RSH facing it interacts with before affecting any shield boxes behind the RSH and so on.

(GN100.3) OPERATION

(GN100.31) SHIELD ARC: The shield created by a given Rotary Shield can only protect one shield arc at a time. At the start of each turn the owning player must select and record which shield arc each of his rotary shields will protect. This can be altered during the turn (GN100.33), or during subsequent Energy Allocation Phases. However the initial facing of each RSH and the impulse of any changes in the facing of a given RSH must be announced. The announcement is made at the start of the turn during the Energy Allocation Phase (1) and during a turn during the Operate Shields Step of the Marines Activity Stage (6B7) of the Sequence of Play.

(GN100.32) INDEPENDENT: Each RSH is independent from any another for the purposes of rotation and operation. Not all RSHs need to face the same direction, rotate on the same impulse, or be active at the same time. If more then one RSH is active and facing the same shield arc they are combined if they were only a single RSH with the combined strength of both for purposes of (GN100.35).
(GN100.321) Not all rotary shields need be at the same place. The position and operation of a rotary shield does not affect the position and operation of the other rotary shields on that unit. Any number of rotary shields, up to the limit of that unit, can be placed in a particular arc.
(GN100.322) If a unit has more than one RSH, it can face both (or all) in the same direction with the intent to activate the second after the first one is knocked down, or deactivated, or have both (or all, or any combination) active or down at the same time.
(GN100.323) It is legal for one RSH facing a given direction to be deactivated on the same Operate Shields step that another RSH facing the same direction is activated, this is the normal sequence of play for shields.

(GN100.33) ROTATION: A rotary shield can only be rotated from one shield arc to an adjacent shield arc and must remain in its new arc for a minimum of eight impulses before it can be rotated again.
(GN100.331) To move one or more rotary shields the player must announce his intention in the Operate Shields step, during the Marine Activity stage, of the impulse prior to the RSH being moved, i.e., he must announce it on Impulse #4 in order to rotate it on Impulse #5.
(GN100.332) The announcement can be made in the last impulse of the eight impulse delay period, e.g., if an RSH was rotated on Impulse #1, the player can announce a new rotation on Impulse #8 which takes effect on Impulse #9.
(GN100.333) The new facing of the RSH must be recorded at the time of the announcement, but is not revealed until the RSH actually rotates.
(GN100.334) A rotary shield can cover an arc where the non rotary, i.e., normal shield has been reduced to zero strength.
(GN100.335) It is possible for a given shield to be "dropped" and then have a rotary shield rotate over that shield facing, or one already facing that shield be activated (this will require an activation, or rotation, or perhaps both, announcement on a previous impulse), on the same or a subsequent impulse.

EXAMPLE: A given ship decides to conduct a hit-and-run raid on Impulse #12. He announces that he will rotate an RSH on his #2 shield facing to his #1 shield facing, then drops (on the same impulse) his #1 shield and conducts the hit-and-run. On Impulse #13 the RSH rotates to cover the dropped #1 shield.
(GN100.336) BASE ROTATION: As a special function, one or more (or all) RSHs on a base can be designated at the start of a turn to rotate at a fixed rate consistent with (and counter to) the base's rotation rate (C3.7). Thus if the base is rotating at a rotation rate of four, the RSH(s) will rotate on Impulses #4, #12, #20, and #28, maintaining in effect a constant facing (presumably in the direction of any enemy attack force). If the base had a rotation rate of three, the RSH(s) would rotate on Impulses #7, #17, and #28. The adoption of this system must be announced during Energy Allocation when shield strengths are announced for any applicable RSH, and cannot be changed for the duration of that entire turn.

(GN100.34) INACTIVE ROTATION: If a rotary shield is not active, all its shield boxes have been destroyed, or it is in cool down, the owning player must still track which shield arc is covered by that (and indeed, each) rotary shield using the procedures in (GN100.33).
(GN100.341) If a destroyed RSH is repaired, the facing of that RSH can be determined as part of the Repair Stage (8A) of the Record Keeping Phase, in which the repairs are completed, This allows it to be activated facing that direction during the subsequent Energy Allocation Phase.

(GN100.35) DAMAGE ALLOCATION: When a ship equipped with rotary shields receives damage on a shield facing with an active RSH in place, use this damage procedure:
(GN100.351) Half of the damage (round up) from the volley is scored on the rotary shield (up to the strength of the RSH at that time, if the damage is higher then the RSH strength add the remaining damage to the second half, i.e., it hits the normal shields or becomes internals on the unit), the other half is scored normally on the non-rotary shield. If two or more RSHs are active on the same shield facing, this damage is divided evenly between them with any odd points scored as the owning player decides. However, each active RSH on a given shield facing must be damaged as evenly as possible for each volley of damage.

EXAMPLE: Two RSHs are covering a given shield arc. A volley of ten points strikes them, they stop five with one taking two points of damage and the other three points, while the remaining five points strike the shield behind them. If a second volley of ten points were to strike the same shields on the same, or any subsequent impulse of the turn that they are

active, the RSH that previously received two points would have to take the odd point of damage so that both are reduced equally even though they are combined.

(GN100.352) If the damage scored is sufficient to overwhelm the shield behind the RSH, that damage will be resolved against the unit normally (this can happen if the RSH is stronger than the shield it is covering), but the remaining RSH boxes will protect the ship from subsequent damage (provided the RSH itself is not destroyed by such internal damage or subsequently dropped).

(GN100.353) If an RSH is protecting a down shield, the above damage procedure (GN100.351) is still used, but the half of the damage which penetrates the RSH will all be resolved as internal damage.

(GN100.36) DROPPING: A Rotary Shield can be dropped in the Operate Shields step, during the Marine Activity stage at the same time as normal shields, but the operating energy is lost (energy still in the RSH's capacitor remains), and it cannot be raised again during the remainder of the turn. If dropped voluntarily (as opposed to being dropped by damage), it cannot be raised on a subsequent turn until at least eight impulses have passed since it was dropped. This may delay the raising of the RSH on a subsequent turn.

(GN100.37) RESTRICTIONS: A Rotary Shield can only be raised or dropped (GN100.36) once per turn. Energy can be added to an active Rotary Shield even if it has been totally destroyed by previous damage and is not operating at reinforced level (GN100.212). A maximum of four points of energy can be added to a Rotary Shield during a turn, but all such power must first flow through its capacitor (GN100.4), see also (GN100.21).

(GN100.4) CAPACITOR

(GN100.41) AVAILABILITY: Every Rotary Shield is equipped with its own capacitor capable of storing up to four points of power. Power to activate or reinforce a Rotary Shield must come from its capacitor. Power in the capacitor cannot be used for any purpose other than to operate that rotary shield.

(GN100.42) SOURCE: Any power source is acceptable to put power in a capacitor. Exception: Energy cannot be placed in a capacitor if the applicable RSH is operating at reinforced level, or during the cool down turn, see rule (GN100.2121).

(GN100.43) TIME: Energy placed in a Rotary Shield capacitor can be held, at no cost, for up to 15 turns, if not used in that time it is lost.

(GN100.44) DESTRUCTION: The capacitor associated with any given rotary shield is destroyed if that rotary shield generator is destroyed, and repaired as part of the repairs to that rotary shield generator. Any power in the capacitor at the time it is destroyed is lost.

(GN100.5) CONDITIONS AND RESTRICTIONS

(GN100.51) WEAPON STATUS: At Weapons Status-0 or -I no energy is stored in the capacitor. At Weapons Status-II, two points of power are stored in the capacitor system. At Weapons Status-III the capacitor system will contain four points of energy.

(GN100.52) REPAIR: Rotary shields are repaired by 12 repair points. There is no hasty repair function.

(GN100.53) TERRAIN AND INTERACTION: For terrain effects and interaction with other non-weapon systems treat the shield generated by a rotary shield as if it was specific reinforcement (D3.342) on the shield facing it is protecting except as provided by (GN100.35), e.g., it will block transporter operations as a shield.

(GN100.54) TACTICAL INTELLIGENCE: The presence of an RSH shield and its strength can be detected at Tactical Intelligence Level A if the shield is operating (D17.4). The presence of an RSH generator can be detected at Tactical Intelligence Level F whether the RSH shield is active or not. The amount of energy stored in an RSH capacitor is not known at any range.

(GN100.55) SURPRISE: RSH shields cannot be activated on a unit that is surprised until it becomes Active (D18.3).

(GN100.56) BREAKDOWN: If a ship with RSH shields suffers a breakdown (C6.5) for any reason (e.g., HET, collision with a web, etc.) any active RSHs become inactive (after resolving any impact damage in the case of a web collision). The ship cannot activate another RSH until eight impulses after the breakdown occurred, or in the case of tumbling (C6.55) until eight impulses after the tumbling has stopped.

(GN100.57) HIDDEN DEPLOYMENT: The activation or rotation of an RSH will not reveal the presence of a unit using hidden Deployment (D20.0).

(HN100.0) ENERGY ABSORBER

The Mallarans, and some other races, use the Energy Absorber (EA) for the same purposes as batteries. It can store up to four points of energy, but only for a limited time. Except as otherwise provided below, the EA otherwise operates in all respects as a battery.

(HN100.1) DESIGNATION

(HN100.11) SSD: On the SSD the energy absorber is designated "EA".

(HN100.12) DESTRUCTION: EAs are destroyed by "battery" damage points.

(HN100.13) REPAIR: An EA requires five repair points to be repaired. There is no hasty repair available.

(HN100.14) TECHNOLOGY RESTRICTION: EAs are Triangulum technology and cannot be used in option mounts outside of simulators.

(HN100.15) DETECTION: EAs are a passive system and cannot be detected by Tactical Intelligence normally. However if an EA bleeds any energy off (HN100.24) this can be detected at Tactical Intelligence Level A and will reveal the presence of such batteries.
(HN100.151) The loss of energy from an EA will reveal the presence of a hidden (D20.0) ship.
(HN100.152) The loss of energy from an EA will not void a cloak or improve chances for retention or regaining of lock-ons to a cloaked unit.

(HN100.2) CAPACITY

(HN100.21) CAPACITY: An Energy Absorber can store up to four points of energy.
(HN100.211) EAs on uncontrolled units (G2.2) can only function as normal batteries, i.e., they cannot hold or be allocated more than one point of power. Any power excess to this limit at the start of a turn that a ship is uncontrolled is lost.

(HN100.22) USING AN ENERGY ABSORBER: A ship can retrieve any amount of energy, even fractional amounts, from energy currently stored in its Energy Absorber as if it were battery power.

(HN100.23) USES: Energy from an Energy Absorber can be used for any function that energy from a battery can be used for.
(HN100.231) For reserve warp power (H7.0) and reserve impulse power (H7.47) the Energy Absorber functions as a battery but is able to hold up to four points of reserve warp and/or impulse power.

(HN100.24) LOSSES: During the Final Activity phase of the turn check the number of points of energy stored in each Energy Absorber.
(HN100.241) If an Energy Absorber has more than one point it loses one point of energy. If this would reduce it to less than one point of energy, instead reduce it to just one point.

EXAMPLE: If during the Final Activity phase there were 1.33 points of energy in an Energy Absorber, it would lose only .33 point because it cannot be reduced below one point by this procedure.
(HN100.242) While energy can be removed from EAs in any manner the owning player chooses, it is not possible to balance the energy in the EAs during the Final Activity Phase as this can only be done at the start of a turn under the procedures of (H5.6). It is, however, perfectly legal to transfer excess power (any over one point) in the EAs that would be lost into any other convenient holding system (phaser or other capacitor, battery on a ship with batteries) on Impulse #32 provided there is space for the energy in the system and other rules allow. An example of an unallowed transfer would be to try to begin recharging a weapon that fired on the same turn. EA energy not transferred to a holding system, i.e., allocated to tractors or transporters, and not used is treated as having drained into space for purposes of (HN100.151).
(HN100.243) Critical hit #3 (D8.2-3) causes the immediate loss of all energy currently in the EA systems of the unit and prevents any more energy being placed into the EAs until it is repaired (D8.3).

(HN100.25) WEAPON STATUS: At any weapon status, including "surprised" (D18.0) each Energy Absorber has one point of energy stored.

(HN100.26) CREW AND OFFICER QUALITY: Super-Intelligent Battle Computers (G11.0), Outstanding Crews (G21.2), and Legendary Officers (G22.0) have no effect on the ability of EAs to hold or discharge power. Poor Crews (G21.1) can only put a maximum of three points of power into their EAs.

(JN100.0) MALLARAN BLUR DEVICE

The blur device is a special fighter pod (J11.0) used exclusively by the Mallaran Viper Class fighters to protect themselves from damage. The pod allows the fighters to be used for assault or to retreat effectively.

(JN100.1) AVAILABILITY

(JN100.11) LIMITATION: Only Mallaran Viper Class fighters can use the blur device.
(JN100.111) The blur device is very expensive, and no Mallaran unit will have more than one such pod for each fighter in its stockpile (J4.75).
(JN100.112) Additional blur devices can be purchased as Commander's Option items at a cost of three BPV each, no unit can purchase more blur devices than one half the total number of Viper fighters it is able to operate.
(JN100.113) Units with Poor Crews (G21.1) halve the number of blur devices available under the above rules. There is no additional benefit for an Outstanding Crew (G21.2) or for Legendary Officers (G22.0).

(JN100.12) ACTIVATION: A manned Viper fighter carrying a blur device pod has the option of turning it on or off once per turn during any impulse of the turn.
(JN100.121) To activate or deactivate the pod of a given fighter the player must announce his intention to do so during the Final Functions Stage (6B11) of the impulse preceding the activation of the blur device, the device actually activates at the same point on the following impulse.
(JN100.122) The blur device can only be activated once per turn and once deactivated (whether by voluntarily deactivating it or because it reached the end of its operational period) it must remain deactivated for eight impulses in order to cool down.
(JN100.123) A blur device can operate for a maximum of eight impulses each time it is activated.
(JN100.124) Blur devices are loaded onto Viper fighters as a single deck crew action from a ready rack. They can be loaded onto fighters by the Kzinti Weight Lifting Team rule (J4.8962) if the ready rack is not able to reload a particular fighter, but the energy to charge the pod must have been paid beforehand (JN100.14).

(JN100.13) DEACTIVATION: The blur device can be voluntarily deactivated but the player must announce his intention to do so during the Final Functions Stage (6B11) of the preceding impulse, the device is then deactivated at the same point in the following impulse.

(JN100.14) ENERGY COST: A blur device must have a half-point of energy allocated to it by the carrier to charge it for operation. This must be done while the device is in the fighter ready rack. This cost must be paid each time a fighter with a blur pod is launched, or the pod will not operate (any energy remaining in the pod is automatically discharged as a safety factor as part of the shuttle landing procedure). Note that this requires such pods be removed from the fighter to be charged.

(JN100.2) EFFECT

(JN100.21) EFFECT: An activated blur device has the following effects:

(JN100.211) No seeking weapon (F0.0) can be launched at a fighter with an active blur device. Seeking weapons already targeted on the fighter will continue to track it normally.
(JN100.212) No ADD (E5.0) or MPDS (EN104.0) can be fired at a fighter with an active blur device.
(JN100.213) Other direct-fire weapons can be fired at a fighter with an active blur device normally, but are penalized by eighteen points of natural ECM. The natural ECM bonus cannot be combined with the ECM effect generated by erratic maneuvers (C10.0).

(JN100.22) CHAFF: A fighter with an active blur device may use chaff (D11.0) normally.

(JN100.23) PILOT QUALITY: Considerable skill is required of a pilot to fully benefit from a blur device. The effects listed in (JN100.21) are for average pilots (J6.21).
(JN100.231) Green pilots (J6.22) only gain the benefit of fifteen points of natural ECM from a blur device.
(JN100.232) Ace pilots (J6.23) gain the benefit of twenty points of natural ECM from the blur device.
(JN100.233) Legendary Ace Pilots (J6.4) gain the benefit of twenty two points of natural ECM from the blur device.

(JN100.3) PENALTY

(JN100.31) FIRING: A fighter with an active blur device cannot fire, launch, or guide any weapon. If it does not transfer control of any seeking weapons it is guiding prior to the device becoming active [this can be during the same impulse so long as it is before the Final Functions Stage (6B11)] the weapons are lost unless they are capable of and have achieved their own lock-ons (F3.5).

(JN100.32) LENT EW: A fighter with an active blur device cannot receive lent EW whether from an EW fighter, its carrier, or a scout.
(JN100.321) An EW fighter that activates a blur pod would benefit from any EW it was generating in addition to that provided by the pod, but would be unable to lend any EW to other fighters.
(JN100.322) It benefits from any EW generated by EW pods it might be carrying.

(JN100.33) CARRYING THE BLUR DEVICE: A blur device pod can be carried in place of one of a Viper fighter's SRams (FSN101.0), or on one of its two rails under (J11.111) at the cost of reducing its speed and dogfight rating.
(JN100.331) A fighter can carry more than one blur device, but cannot have more than one active at any one time. It is legal to announce the activation of a second such pod as the first such pod is about to be deactivated (either voluntarily or because it has reached its eight impulse limit) in order to be continuously under their protection.

(JN100.34) LOSS: As with any pod, if the fighter is crippled, the pod is jettisoned into space (and the fighter loses all of its benefits and penalties). Pods jettisoned into space, whether because the fighter was crippled or because the pilot voluntarily dropped the pod, are lost and cannot be recovered by any means.

(JN100.35) TRACTORS: If a Viper fighter is held in a tractor beam, it gains no benefit from the blur device (the tractor points directly to its position) from the unit which it holding it. Note that in most cases a fighter will execute an HET to break such a tractor link, but it can happen that a fighter will be going too slow (G7.55) to execute the breakaway maneuver. Activating the blur device before such an eventuality might

prevent such a tractor link, but failing that, the tractoring unit will have a relatively clear shot at such a fighter.

(JN100.36) GROSS AND NATURAL DAMAGE: Blur devices provide no protection from, and no reduction of, damage caused by ESGs and mine or ship explosions. The blur device provides no protection from terrain effects including but not limited to collisions with asteroids (including Chlorophon spore casters), dust, gravity waves, and other terrain effects. Blur devices will not prevent a fighter from being trapped by a Tholian web or an Alunda Host attraction/repulsion field.

(JN100.37) DETECTION: The activation of a blur device can be detected at Tactical Intelligence Level A, but the presence of the device cannot be detected by any means unless it is activated. The fighter will be noted as carrying undifferentiated pods or SRams until the pod is activated.

(JN100.38) MONSTERS: Blur devices provide no defense against MCIDS (E6.0) of "living" monsters (Annex #12), or any other weapons operated by such monsters. It will operate normally against monsters defined as "ships".

(RN100.0) THE HELGARDIAN PROTECTORATE

The Helgard system was the core of a peaceful empire. The government was under the rule of the Council of Wise Ones. But one day, without any warning, the entire solar system, with its planets and the Helgardian Ringworld, disappeared and then reappeared in the Triangulum galaxy. After some research, it was determined that this was a different dimension. They searched for a way to return to their own dimension for more then three hundred years without any success. After that time it was decided to accept this as a challenge and to try to recreate their empire in the Triangulum galaxy. They started to build new ships and to explore their surrounding space.

The Helgardians are the longest living sentient creature in the Triangulum Galaxy, living an average of a thousand years. They procreate at a very low rate so their population increases fairly slowly. They create new colonies at about the same rate as the population climbs, so they only colonize a few planets per century. After 1000 years in the Triangulum Galaxy, their new empire is nothing close to the size of the Empire they spent 10,000 years building in their previous dimension.

An average Helgardian stands about seven feet tall. They are humanoid in shape except that they have four arms and four eyes (two in the front and two in the back of the head). Their skin is dark and scaly. They are herbivorous by nature. Average in reflexes but stronger then a man of the same size. They are very slow to make a decision, but when it is taken they are single-minded and it is very difficult to dissuade them or change their minds.

The Helgardian nervous system produces an enzyme that kills any kind of parasite trying to attack it. This is why the Arachnids (RN101.0) cannot take control of any Helgardian. In fact, the bio-defense system of the Helgardians is so powerful that no case of any disease has ever been reported. An average Helgardian can recover from injuries that would kill a member of any other race.

Their technology does not advance as fast as the other sentient races of the galaxy. Indeed, for a thousand years they did not make any significant advances at all. But the pressure from the other empires has forced them to accelerate their technological pace. During the rise of the Young Races, they had lost their initial technological advantage, but were not falling behind.

When they encountered other races they started to forge alliances and commercial treaties. They also started to mark their frontier and to defend it against any incursion. The Helgardians are great diplomats and use this attribute to their advantage by creating useful alliances and splitting up their potential enemies. But the Helgardians made one major error when dealing with the other races they encountered: they sold them warp technology (small engines, about frigate-sized). They believed that the other races could not do much with that technology and never envisioned the speed at which the Young Races would reverse-engineer them. Those races started to build bigger and better engines within a decade. The Helgardian's slow pace of scientific development was completely overwhelmed. The Helgardians had given those races warp engines in exchange for exclusive trade rights and were hoping that this would improve commerce. But enmity between many of those races grew quickly. This was not what the Helgardian envisioned.

During the First Great Expansion War (FGEW) the Helgardians stayed mostly neutral, only helping one side or the other financially (depending on the situation of the moment) to try to keep a balance and maintain the status

(RN100.PF) FAST PATROL SHIPS

(RN100.PF0) The Helgardian never developed fast patrol ships.

(RN100.F) FIGHTERS

(RN100.F0) MRS SHUTTLE: The Helgardian never developed MRS shuttles.

(RN100.F1) FIGHTER: The Helgardian never developed fighters.

HELGARDIAN WARSHIPS

(RN100.1) VANGUARD (C): The Vanguard was the standard cruiser in the Helgardian fleet until the advent of the Protector during the First Great Expansion War (FGEW). The Vanguard is more suited to exploration and long border patrols then battle. Vanguards could be converted into Protectors, but this was very expensive and rarely done. The Vanguard continues to be used for various missions (patrol, exploration, diplomacy).

An SSD is included in this playtest package.

(RN100.2) PROTECTOR (CA): The Protector entered service in Y118, during the FGEW. The Council was worried about the war that was spreading all around them, and wanted a cruiser better suited for combat. The Protector is a heavily modified version of the Vanguard with more weapons and power.

An SSD is included in this playtest package.

(RN100.3) GUARDIAN (CL): The Guardian was the most numerous cruiser in the Helgardian fleet until the advent of the Demon Guardian during the Second Great Expansion War.

An SSD is included in this playtest package.

(RN100.4) DEFENDER (DD): The Defender DD was a capable ship and was almost as numerous as the Liberator.

An SSD is included in this playtest package.

(RN100.5) LIBERATOR (FF): The Liberator was the most numerous ship in the Helgardian fleet until the SGEW. It lacked punch (having only one particle shotgun) but could withstand a lot of damage due to its two rotary shields.

An SSD is included in this playtest package.

(RN100.6) AVENGER (DN): The Avenger was the only DN in the region until Y104 when the Mallaran first fielded a DN during the Fifth Khartax War. Two years later the Arachnid also fielded a DN. With access to the Avenger the Helgardian were able to maintain supremacy for many decades.

An SSD is included in this playtest package.

(RN100.7) SPOTTER (SC): The first Helgardian scout, developed after the Fourth Khartax War (which saw both the Mallaran and Arachnid fielding scouts). A variant of the Guardian, it proved more effective than its counterparts in the Arachnid and Mallaran fleets due to its larger size.

An SSD is included in this playtest package.

(RN101.0) THE WORLDS OF UNIONS (The Arachnids)

The Arachnids are a race that has the appearance of little transparent spiders (about 0.5 inch, 13mm, in size). They can take control of a humanoid host by entering its body and attaching to the cerebral cortex. They have total control of the body and the mind of their host; they can even recall his memories. A new personality will emerge from this under the control of the Arachnid. A major drawback from this control is the body of the host will die of complete exhaustion after two or three years, at which time the Arachnid must find a new host. In the last moment before the host dies from exhaustion, the Arachnid divides itself in two new Arachnids, both retaining the memories and experiences of all previous hosts. Another advantage is that every Arachnid is connected to every other Arachnid by a psychic link.

The Arachnids came from a planet that does not exist any more; it was totally destroyed when their sun went supernova. They escaped their annihilation by taking control of an exploration ship sent by a nearby race, the Aloola, in Y24. After a decade they took control of virtually the entire race with all their technological knowledge. The Arachnids had found their calling: to take control of the entire galaxy, to unify every race under a complete union of mind and body, and above all, to form the Worlds of Unions.

The Arachnids, after some initial problems with a shortage of viable bodies when the last generation of the first race they encountered was disappearing rapidly, found that the best way to use their hosts was to land some of them on planets they did not need and allow them to reproduce, only using a part of the population for replacement. Even with that method their needs are not met so they must continually capture new planets or let their numbers stagnate. This has the unfortunate effect of making the Arachnids enemies with most of their neighbors. But most of the time the Arachnids do not mind this because they want to unite them all under their rule, so they will need to fight, and beat, them all.

In Y60, the Arachnids first encountered the Mallaran Empire (RN102.0) and saw a great opportunity to take their cloning technology to help them in their conquest of the galaxy. So began the greatest war seen in the Triangulum Galaxy. The Arachnids had found a match for their military prowess; to this day no peace treaty has been signed between the Arachnids and Mallarans (beyond a few short-lived ceasefire agreements).

In Y65, one of the Arachnid Scouts first encountered a Helgardian ship. They tried to take control of the ship by surprise, but failed. The Arachnid that tried to take control of a Helgardian, after rejection from the host, died after ten minutes of agonizing pain. This was the first time that an Arachnid had been rejected by a potential host. The Arachnid reaction was a total hatred for the Helgardians, but after suffering a major defeat by a superior Helgardian fleet, the Arachnids resolved to forget, or at least ignore, the Helgardians. But to this day they have never entirely trusted this race, regarding them as malevolent evil. They always suspect, sometime with reason, treachery from the Helgardians. Their suspicions were proven right when the Helgardians made a surprise attack in Y122 during the First Great Expansion War (FGEW), and afterwards when they took into their protection some of the races the Arachnids wanted to finish off.

Most of the time the Worlds of Unions are at war with at least one of their neighbors. Among them are the Frigian, the Atrean, the Confederation, and Tragg's Realm (the remnants of the Aloola). On many occasions they have fought the Imperium, but never for long since they had other priorities, but when they saw the weakness of the Imperium during the FGEW, they did not lose at lot of time and took advantage of the situation.

(RN101.R1) Y63 REFIT: Prior to Y63, the Hellfire torpedo launcher cannot be fired as a HF Blaster and cannot create pseudoes. Reduce the BPV of the ship by two points for each Hellfire Torpedo launcher.

(RN101.R2) Y120 REFIT: In Y120 the Arachnids started to apply this refit to most of their ships. It took many years to refit all of the fleet. Use these limitations when a ship has not received this refit:

- Remove all the marked boxes.
- A maximum of two points of energy can be put in a HF torpedo warhead.
- If a unit has not received this refit it cannot receive the Y154 refit either, and would be affected by the limitations in (RN101.R3) also.

(RN101.R3) Y154 REFIT: In Y154 the Arachnids started to apply this refit to most of their ships. It took many years to refit all of the fleet. Use these limitations when a ship has not received this refit:

- Replace the marked PPEs by the appropriate type (see the SSD for more information).

(RN101.PF) FAST PATROL SHIPS

(RN101.PF0) The Arachnid PF will be seen in a later product.

(RN101.F) FIGHTERS

(RN101.F0) MRS SHUTTLE: The Arachnid never developed MRS shuttles.

(RN101.F1) FIGHTER: The Arachnid never developed fighters.

ARACHNID WARSHIPS

(RN101.1) DRAGON (CA): The Dragon is one of most powerful heavy cruisers of the Triangulum galaxy, mounting two hellfire torpedoes with a lot of power. An "anchor" by this ship is almost always fatal to its adversary. The versatility of the hellfire torpedo permits this ship to fight in many different ways.

An SSD is included in this playtest package.

(RN101.2) ICE DRAGON (CAB): As much energy as the Dragon had it still was not always enough to arm the power hungry hellfire torpedoes. This led to the hellblazer torpedo being developed and tested on a modified Dragon CA. Only three Dragons were converted into Ice Dragons but this proved the effectiveness of the hellblazer torpedo, which was mounted on later designs of the Arachnids.

An SSD is included in this playtest package.

(RN101.3) COCKATRICE (DD): The Cockatrice is very vulnerable to wild weasels due to the fact that it has only one torpedo. Even with its pseudo it can be stopped by two wild weasels. The "anchor" tactic can be very useful to the Cockatrice.

An SSD is included in this playtest package.

(RN101.4) GRYPHON (FF): The Gryphon should be used the same way as the Cockatrice. In fleet battles they can keep up a rolling barrage of hellfire torpedoes, which are very effective against bases.

An SSD is included in this playtest package.

(RN101.5) BEHEMOTH (DN): The massive Behemoth Dreadnought was built to overcome the major limitation of the Dragon, i.e., energy. It only mounts two hellfire torpedos, just like the Dragons and Wyverns, but has plenty of power to use them effectively.

An SSD is included in this playtest package.

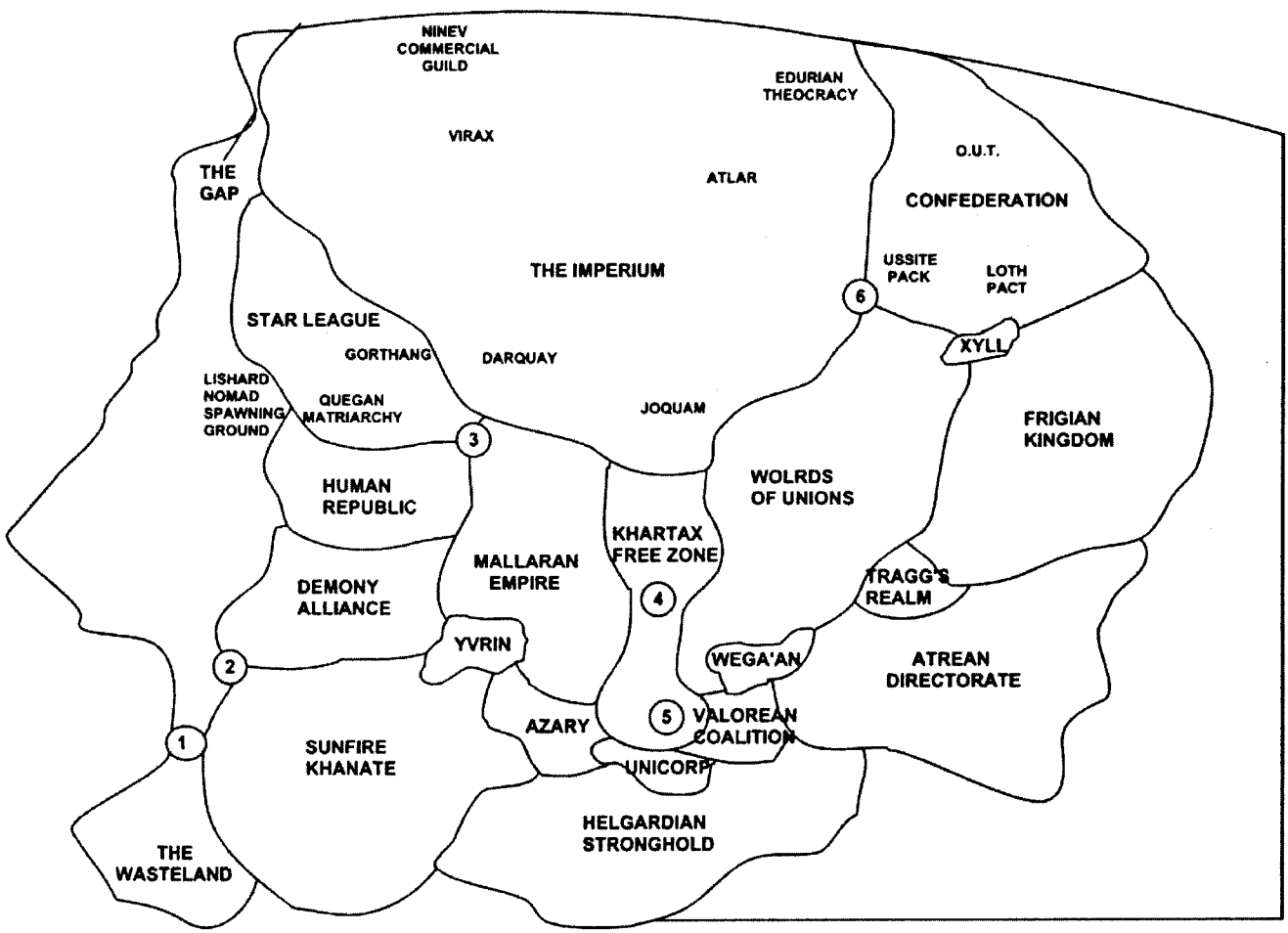
(RN101.6) BASILISK (SC): The Basilisk is a capable scout, with four special sensors and a good energy curve. First fielded during the Fourth Khartax War (in response to the deployment of the Mallaran scout) it would be the standard scout of the Arachnids until the Second Great Expansion War.

An SSD is included in this playtest package.

(RN101.7) WYVERN (CL): With two hellfire torpedoes the Wyvern ran short of power very quickly in combat. With more power it might have been a devastating combatant. Still, not many other light cruisers could face it one-on-one.

An SSD is included in this playtest package.

TRIANGULUM GALAXY Y118



1-DRAKNA' PRIVATEER
2-REMUDAN BUCCANEERS
3-JANDAR RAIDERS
4-PARTHEAN TRADING NETWORK
5-KHADIJ MERCENARIES
6-NEKRON CARTEL

(RN102.0) THE MALLARAN EMPIRE

The Mallarans are considered by other races to be a race of fanatical warriors, but that was not always the case.

In -Y15, the scientists of the planet Mallara created Overmind, an advanced artificial intelligence to help them against a strange virus that struck the entire population and left them sterile. Soon after that, Overmind took total control of the entire society. Overmind did not find any cure for the virus but developed a cloning process so the race could survive. Overmind was the only one who knew how to make clones, and with that knowledge it could stay in power by keeping it a secret and deciding who would and would not be cloned.

The second invention by Overmind was a Psychic Subspace Transmitter that was implanted in the brain of every citizen. With this transmitter implanted, Overmind would receive all of the experiences and memory of every member of its society when they died. Then Overmind could make an assessment on the life of each citizen to decide if the creation of a new clone for him was in order. With this system the clones were not only a copy of the body but also a copy of the mind. So cloning became a form of immortality. This was the last thing that Overmind needed to insure the loyalty of its people. If they wanted to be immortal, they had to do what Overmind wanted.

There was one problem with all of this. The cloning process had a detrimental effect on the genetic material after a couple of replications. Overmind found, after many trials, a method to overcome that problem: use the genetic material from other races to replace the faulty material. This had a major effect, changing the peaceful Mallarans into a warlike race. They had to acquire new genetic material and the only viable option was to take it by force.

Overmind decided, right from the beginning, to create a new class of clone: the starwarrior. With these warriors specially made for space travel and combat, Overmind thought it could overrun the entire galaxy.

During their expansion through space they encountered many minor races, and most of them were exterminated. The genetic material of these races still exist within the genetic structure of the Mallaran. Their first real problem came when they first encountered a ship from the Arachnids (RN101.0). This first encounter resulted in the loss of a frigate, due to an unknown, at that time, factor. An Arachnid had taken control of the captain. Since then they have found ways to defend themselves against that type of attack.

The two empires have not stopped fighting and skirmishing over planets in the Khartax Free Zone (KFZ). Neither of them accept the claim of anyone over most of the planets in that sector. Sometimes they would sign cease-fire treaties but never a formal peace treaty. Most of the time they would fire on each other on sight since neither can give the other the opportunity of firing first. The borders of the Khartax Free Zone change yearly depending on the result of those disputes. About half of the entire Mallaran fleet is in constant alert on this border. The Arachnids, you see, do not have a habit of declaring war, preferring the effect of surprise.

The Imperium has tried many times to play middleman to find suitable grounds for a peace treaty, but to no avail. On some occasions the Mallaran and Imperium have fought over territories in the Khartax Free Zone, but until the First Great Expansion War (FGEW) these were minor affairs. The Mallarans, with the help of the Star League, has sounded the end of the supremacy of the Imperium, which, until then, had ruled the region with some disdain for the capabilities of others.

With the Helgardian Protectorate, the situation is more complicated. Most of the time they ignore each other but at times they will ally to fight the Arachnids. At other times they will fight each other, most of the time over planets in the Khartax Free Zone, but sometimes on their common border.

The original appearance of the Mallarans has changed since they now include genetic material from other races.

(RN102.R1) Y44 REFIT: Ram torpedoes are replaced by Plasmatrons on ships prior to this refit. Viper-1 fighters do not have SRam torpedoes prior to this refit.

(RN102.R2) Y120 REFIT: In Y120, the Mallarans started to apply this refit to most of their ships. It took many years to refit all of the fleet. Use these limitations when a ship has not received this refit:

- Remove all the marked boxes.
- Plasmatrons cannot be overloaded.
- Ram and SRam lose one damage multiplier.
- If a unit has not received this refit it cannot receive the Y154 refit, and would be affected by the limitation in (RN102.R3) also.

(RN102.R3) Y154 REFIT: In Y154, the Mallarans started to apply this refit to most of their ships. It took many years to refit all of the fleet. Use these limitations when a ship has not received this refit:

- Replace the marked PPEs by the appropriate type (see the SSD for more information).

(RN102.PF) FAST PATROL SHIPS

(RN102.PF0) The Mallaran never developed fast patrol ships.

(RN102.F) FIGHTERS

(RN102.F0) MRS SHUTTLE: The Mallaran never developed MRS shuttles.

(RN102.F1) VIPER-1: The first fighter deployed by the Mallarans, the Viper-1 remained in service for many years after the more advanced Viper-2 was in widespread service in Y122. Viper-1s were still found on bases when stocks of Viper-2s were provided to ships as a first priority.

The Viper-1 has 2 pod rails (J11.111).
Speed: 12
Damage: 9
DFR: 3
Weapons: 1xP1B-FA.

There are two versions of this fighter differing only in their weaponry;

The Viper-1P is armed with one plasmatron charge-FA. Both can be rearmed in the same facility due to the flexible design of the Mallaran fighter ready racks. It cannot fire its plasmatron until a 1/4 turn after it was launched (or took off from an asteroid/planet).

the Viper-1R entered service in Y44 and is armed with two SRams-FA. The Viper-1R can launch both SRams in a single turn, but there must be a minimum of an eight impulse delay between launching each one, even if over a turn break. It cannot launch each SRam until 16 impulses after it launched (or took off from an asteroid/planet).

(RN102.F2) VIPER-2: The Viper-2 entered service in Y120 and was widely available in Y122.

The Viper-2 has 2 pod rails (J11.111).
Speed: 15
Damage: 9
DFR: 4

Weapons: 1xP2B-FA, 2xSRams-FA and 1xPlasmatron charge-FA.

There is only one version of the Viper-2. Its weapons are under the same restrictions as the Viper-1R and -1P, except that it can fire its plasmatron charge on the same impulse it launches one of its SRams, or during any intervening impulse.

MALLARAN WARSHIPS

(RN102.1) RAGE (CA): The Rage heavy cruiser is a sleek and powerful ship. Best used in a standoff position to take advantage of the Ram torpedo's range and to support its Viper fighters. Before the installation of the Ram torpedo the overrun is the best option of the Rage CA.

An SSD is included in this playtest package.

(RN102.2) ANGER (CL): The Anger light cruiser should use the same tactics as the Close Rage heavy cruiser but it has only one plasmatron to deter overruns, which is probably not enough.

An SSD is included in this playtest package.

(RN102.3) ENRAGE (DD): The Enrage destroyer must use its fighters to defend against being overrun. It should try to stay away from its opponent and pester it with Ram torpedoes.

An SSD is included in this playtest package.

(RN102.4) IRRITATE (FF): With no fighters or plasmatrons the Irritate frigate is very vulnerable to overrun and is better used in fleet battles where it can use its Ram torpedoes to support the fleet.

An SSD is included in this playtest package.

(RN102.5) CLOSE RAGE (CAP): With four Plasmatrons and four Viper fighters the Close Rage is a worthy opponent. You can either follow the fighters in or lead them in, both options are viable and difficult to defend against.

Note: The class designation is "Close Rage", it is not a typo of "Close Range".

An SSD is included in this playtest package.

(RN102.6) FURY (DN): The Fury dreadnought was probably one of the most fearsome of its type in the Triangulum Galaxy. Armed with four plasmatrons, two Rams and four Viper fighters, it was probably the dreadnought best equipped for solo missions. In fleet battles it was able to operate either in the forefront of the action, or in support from the rear.

An SSD for this ship will be posted on the SFB web site.

(RN102.7) CATAPULT (CAR): The Catapult, a rare variant of the Rage heavy cruiser, is fearsome in fleet engagements where it can stay behind and use its four Ram torpedoes to bombard its target. In one-on-one battles do not let your opponent get close or you will suffer the consequences.

An SSD is included in this playtest package.

(RN102.8) ANNOY (SC): The Annoy scout was the first scout fielded in the Triangulum Galaxy and proved unequal to the task, with only three channels and not enough energy to use them effectively.

An SSD for this ship will be posted on the SFB web site.

(SHN100.0) DISPUTE AT KIRYNA

(Y135) *by Francois Angers, Quebec*

After the First Great Expansion War, all parties were economically exhausted. All sides were trying to rebuild their economies. Both the Mallaran and Arachnid took notice of a new Helgardian colony on a mineral rich planet in the Khartax Free Zone, Kiryna.

In Y135, both Empires kept a CA on patrol in the sector and at one point the Mallaran Captain thought the Arachnid were going for the colony and decided to intervene. The Arachnid then made their move for the colony.

(SHN100.1) NUMBER OF PLAYERS: 3; the Mallaran player, the Arachnid player, and the Helgardian player.

(SHN100.2) INITIAL SET UP

TERRAIN: Class M planet (P2.21) Kiryna in hex 2215.

MALLARAN: CA *Provocateur* in hex 0101, initial heading at the player's option, speed max, WS–III. The *Provocateur* is carrying two Viper-1 fighters; both can be equipped with Blur pods.

ARACHNID: CA *Submission* in hex 4216, initial heading at the player's option, speed max, WS–III.

HELGARDIAN: C *Watcher* sets up anywhere within three hexes of Kiryna, initial heading at the player's option, speed 5, WS–II.

Small agro-station on Kiryna located at 2215-D (use the standard small Agro-station replacing the phaser-3 with a LGB), WS–I.

(SHN100.3) LENGTH OF SCENARIO: The scenario continues until only forces from one side remain on the map.

(SHN100.4) SPECIAL RULES

(SHN100.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Mallaran units can only disengage from 01xx map edge. The Arachnid units can only disengage from 42xx map edge. The Helgardian units can only disengage from the xx30 map edge. Units which disengage in unauthorized directions are considered destroyed.

(SHN100.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs.

(SHN100.421) No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, each ship may be presumed to have one.

(SHN100.422) There are no EW fighters in this scenario. In a variant in which EW fighters are present, use the standard deployment patterns (one EWF for each squadron of eight or more fighters) for EW fighters.

(SHN100.423) There are no PFs in this scenario.

(SHN100.43) COMMANDER'S OPTION ITEMS

(SHN100.431) The following ships have the following special equipment in lieu of purchasing Commander's Option Items: Each has three T-bombs and associated dummies.

(SHN100.432) The races that are involved in this scenario do not use drones. In a variation where a drone-armed race is used, all drones are "slow," i.e., speed–8. Type-II and type-V drones (speed 12) are not available for purchase as special drones.

Drone-armed ships in a variation cannot purchase any special drones.

(SHN100.433) Prime Teams (G32.0) are not available in this scenario.

(SHN100.44) REFITS: All units involved in this action had received their respective Y120 refits.

(SHN100.45) REINFORCEMENT: At the start of Turn #8, the Helgardian receives a DD and an FF arriving anywhere along xx30 mapedge, heading at the player's option, speed max, WS–III. These reinforcements are forfeited if the agro-station has been captured or destroyed by any means, even if it was subsequently recaptured.

(SHN100.46) NEUTRALITY: The Mallaran and Arachnid units cannot fire on the Helgardian units before the first impulse of Turn #3 unless the Helgardian ship fires first or moves more than ten hexes from the planet. For this purpose, if the Helgardian ship tractors a non-Helgardian unit, or uses a transporter to place a T-bomb (whether real or a dummy) directly in the path of a unit belonging to one of the other two races constitutes firing on them.

(SHN100.5) VICTORY CONDITIONS: If either the Mallaran player or the Arachnid player is the last one on the map, he achieves a Decisive Victory while the other two players suffer a Brutal Defeat.

If the Helgardian player is the last player on the map, he achieves a Tactical Victory and the other players suffer a Marginal Defeat.

Reduce the Victory level by one if the victorious ship is crippled, only the "at start" ship is considered for this purpose.

If all ships are destroyed or disengaged at the end of the scenario, the Helgardian player "wins" if the station was not destroyed (although a posthumous victory if his ship was destroyed).

(SHN100.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SHN100.61) Any three contiguous races could be substituted in place of the Mallaran, Arachnid and Helgardian

(SHN100.62) Replace the Helgardian C with a Corsair CA or CM. (The Corsairs of the Khartax Free Zone will be presented in a future product).

(SHN100.63) Substitute a DD, or FF instead of CA for all three races

(SHN100.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following:

(SHN100.71) Replace a CA with a CL.

(SHN100.72) Remove one or more T-bombs from any of the ships.

(SHN100.73) Delete the Y120 refit from one or more of the ships, or add a later refit.

(SHN100.8) TACTICS

MALLARAN: Try to use your Ram torpedo and Viper-1 fighters to absorb as much damage as possible in the first couple of turns since you will need to be able to beat the Helgardian player after the Arachnid player is eliminated.

ARACHNID: Keep the Mallaran at bay with the long range fire of your Hellfire torpedo. Do not get engaged in a knifefight since that would probably mean that you will not be able to fight the Helgardian.

MALLARAN AND ARACHNID: Remember that you are better off if the Helgardian player wins instead of the other guy.

HELGARDIAN: Take it slow for the first couple of turns and ally yourself to the player who seems to be behind in the battle without getting too involved. You will have to be able to chase away your "ally" afterward.

(SHN100.9) PLAYTESTERS COMMENTS: We are waiting!

HISTORICAL OUTCOME: The Mallaran and Arachnid ships attacked each other, forgetting the presence of the Helgardian ship. The *Submission* sustained major damage in the first pass. At this point the Arachnid captain decided to ally with the *Watcher* to repel the *Provocateur*. After the *Provocateur* withdrew, the *Submission* also withdrew rather than try to fight the relatively unscathed *Watcher*.

(SHN101.0) INFORMATION GATHERING

(Y115) *by Francois Angers, Quebec*

Just prior to the beginning of the First Great Expansion War, the Arachnid created a line of bases with the purpose of gathering information on Mallaran fleets and activities. These bases were small, using terrain for protection and using only passive sensors to gather information. One of these bases was located in an asteroid field in the Khartax Free Zone.

By luck the Mallaran heavy cruiser *Eternal Hatred* detected this base during a routine inspection of that asteroid field. The captain of the Mallaran ship then decided to capture the base. An Arachnid Destroyer, the *Galactic Harmony*, was also stationed in the asteroid field and had remained undetected by the *Eternal Hatred*.

(SHN101.1) NUMBER OF PLAYERS: 2; the Mallaran player and the Arachnid player.

(SHN101.2) INITIAL SET UP

TERRAIN: Use the Asteroid Belt map (#4) from Captain's Module B, also found in Module S1. Mark hexes 2319 and 3126 as asteroids. If you do not have this map, you can approximate the situation by taking a standard blank map and marking all hexes from xx12 to xx24 inclusive as asteroids except 2122-2124, 2219-2224, 2322, 2119, 2017-2019, 1917, 1817, 1714-1717, 1614-1616, 1512-1515, 1412-1414.

MALLARAN: CAR *Eternal Hatred* in hex 1501, heading D, speed max, WS–III.

ARACHNID: DD *Galactic Harmony*, set up in any asteroid hex of the map, using Hidden Deployment (D20.0), initial heading at the Player's option, speed 0, WS–III.

Small Ground Warning Station is placed in hex 1219 on a large asteroid (P3.4) (use the standard Small Ground Warning Station but replace the phaser-3 with a P1A), WS–III. See (SHN101.46).

(SHN101.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

(SHN101.4) SPECIAL RULES

(SHN101.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Mallaran units can only disengage from xx01 map edge. The Arachnid units can only disengage from xx30 map edge. Units which disengage in unauthorized directions are considered destroyed.

(SHN101.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs.

(SHN101.421) No ship in this scenario is qualified to carry an MRS shuttle, but in a variant of the scenario where that is possible, one might be added to the CAR, perhaps as a balance factor.

(SHN101.422) There are no EW fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one EWF for each squadron of eight or more fighters) for EW fighters.

(SHN101.423) There are no PFs in this scenario.

(SHN101.43) COMMANDER'S OPTION ITEMS

(SHN101.431) The following ships have the following special equipment in lieu of purchasing Commander's Option Items: The Arachnid DD has two T-bombs and associated dummies and can place them on the map before the start of the scenario, at the player's option.

(SHN101.432) The races that are involved in this scenario do not use drones. In a variation where a drone-armed race is used, all drones are "slow," i.e., speed–8. Type-II and type-V drones (speed 12) are not available for purchase as special drones.

Drone-armed ships cannot purchase special drones.

(SHN101.433) Prime Teams (G32.0) are not available in this scenario.

(SHN101.44) REFITS: The Arachnid DD has received the Y63 refit. The Mallaran CAR has not been refitted.

(SHN101.45) REINFORCEMENT: At the start of Turn #4, the Arachnid receives a FF as a reinforcement. It arrives anywhere between hexes 1530 and 2830, initial heading at the player's option, speed max, WS–III. This reinforcement is forfeited if the Small Ground Warning Station has been captured or destroyed.

(SHN101.46) STATION RESTRICTIONS: The station can only use its special sensor to self-lend ECM. The station cannot self-destruct, but the Arachnid destroyer can destroy it. To capture the information on the station the Mallaran player must be in control of the station for an entire turn, i.e., from one Energy Allocation Phase to another, not 32 consecutive impulses.

(SHN101.5) VICTORY CONDITIONS: If the Mallaran player can steal the information from the station and disengage, it is a Decisive Victory for him and a Brutal Defeat for the Arachnid player.

If the station is destroyed without the Mallaran player stealing the information it is a Marginal Victory for the Mallaran and a Marginal Defeat for the Arachnid.

Any other result is a Decisive Victory for the Arachnid and a Brutal Defeat for the Mallaran.

Reduce the Victory Level by one if the victorious ship is crippled or destroyed. The Arachnid FF does not count for this purpose.

(SHN101.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SHN101.61) Replace the two belligerents with any two races just prior to a major war.

(SHN101.62) Reverse the sides, replacing the Mallaran CA with an Arachnid CA and the Arachnid DD and FF with a Mallaran DD and FF.

(SHN101.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following:

(SHN101.71) Replace the Mallaran CAR with a CL with no fighters.

(SHN101.72) Remove one or both the T-bombs from the Arachnid DD.

(SHN101.73) Add one or two extra boarding parties to the station.

(SHN101.8) TACTICS

MALLARAN: There is no time to waste, you must capture the station fast if you do not want him to destroy it.

Try to give him a bloody nose before starting to board the station or it will be too easy for him to destroy it.

ARACHNID: Use your T-bombs to block the easy approach and try to keep as many asteroid hexes between you and him when he has a Ram armed. Use your pseudo carefully since you probably will not have the luxury to arm a second one.

(SHN101.9) PLAYTESTERS COMMENTS: We are waiting.

HISTORICAL OUTCOME: After a quick and bloody exchange the Arachnid captain destroyed the base when it was in danger of capture by the Mallaran boarding parties and then fled.

(SHN102.0) MASSACRE OF 42

(Y42) *by Francois Angers, Quebec*

In Y42 the Mallaran Empire made the foolish decision of invading the Helgardian Protectorate in the hope of capturing their secrets. The Mallaran badly underestimated the capabilities of the Helgardian fleet; they had never seen a Helgardian DN and the pacifistic view of the Helgardian made them look weak in the eyes of the Mallaran. This error in judgement was paid in full, and in blood, in a single month.

The engagement presented here was the first counter-attack by the Helgardian after the invasion. As this battle occurred other elements of the Helgardian fleet were in the process of enveloping the whole of the invading fleet.

(SHN102.1) NUMBER OF PLAYERS: 2; the Mallaran player and the Helgardian player.

(SHN102.2) INITIAL SET UP

TERRAIN: Class M planet (P2.21) in hex 2215.

MALLARAN: CL, 3xDD, and 4xFF all within two hexes of the planet, heading C, speed 6, WS–III. All of the ships are carrying their full complement of Viper-1 fighters, blur pods are available.

HELGARDIAN: DN, 2xC, 2xCL, 2xDD, 2xFF, all set up between hexes 4225 and 4230 inclusive, all heading F, speed max, WS–III.

(SHN102.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

(SHN102.4) SPECIAL RULES

(SHN102.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Mallaran units can only disengage from the 01xx map edge. The Helgardian units can only disengage from the 42xx map edge. Units which disengage in unauthorized areas are considered destroyed.

(SHN102.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs.

(SHN102.421) 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 (SHN102.431).

(SHN102.422) There are no EW fighters in this scenario. In a variant in which EW fighters are present, use the standard deployment patterns (one EWF for each squadron of eight or more fighters) for EW fighters.

(SHN102.423) There are no PFs in this scenario.

(SHN102.43) COMMANDER'S OPTION ITEMS

(SHN102.431) 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. Note that whatever is spent here counts in the Standard Victory Conditions (S2.2) as victory points for the enemy.

(SHN102.432) The races that are involved in this scenario do not use drones. In a variation where a drone-armed race is used, all drones are "slow," i.e., speed–8. Type-II and type-V drones (speed 12) are available for purchase as special drones.

Each drone-armed ship can purchase special drones up to the historical racial percentages as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SHN102.433) Prime Teams (G32.0) are not available in this scenario.

(SHN102.44) REFITS: No refits had been applied to any of the ships involved in this battle.

(SHN102.45) PLANET: The planet was captured by the Mallaran in the initial phase of the invasion.

(SHN102.5) VICTORY CONDITIONS: Use the Standard Victory Conditions (S2.20). Any Mallaran units that disengage from the map uncrippled and through the 01xx map edge does not count towards Helgardian victory totals.

(SHN102.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SHN102.61) Replace the Mallaran forces with equivalent Arachnid forces as the Arachnid were also planning to execute such an attack.

(SHN102.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following:

(SHN102.71) Apply the Y120 refit to the Mallaran ships.

(SHN102.72) Delete the Helgardian DN.

(SHN102.73) Add a Mallaran DN (assume it was constructed prior to Y42) and a Mallaran CA to the Mallaran force.

(SHN102.8) TACTICS

HELGARDIAN: Try to cripple as many Mallaran as possible before they have a chance to disengage. Afterwards you can finish them off. The use of the DN's (and other ships') tractor beams to stop the Mallaran ships from disengaging can be useful. Use your speed advantage to catch them when they try to turn away.

MALLARAN: You should try to disengage as soon as possible, do not wait for cripples. Your situation is hopeless.

(SHN102.9) PLAYTESTERS COMMENTS: This scenario is best used as a training exercise. The less experienced player should play the Helgardian while the experienced one commands the Mallaran.

HISTORICAL OUTCOME: The Mallarans were taken completely by surprise by the ferocity of the Helgardian assault and were quickly dispatched. Only a frigate and a destroyer were able to escape the debacle undamaged. It was to no avail however, as both were later caught by the rest of the Helgardian fleet as it completed its envelopment and destroyed along with the rest of the invasion fleet. Not one Mallaran ship or crewman ever returned to Mallaran space, or was ever found in any other space, from this ill considered, ill-fated, expedition.

(SHN103.0) PRE-EMPTIVE STRIKE

(Y122) *by Francois Angers, Quebec*

In Y122, the situation looked bleak for the Atrean. They were facing the combined assault of the Valorean Coalition, the Frigian Kingdom, and the Arachnid. The Helgardian Council of Wise Ones came to the conclusion that the Protectorate could be in danger if the Atrean were annihilated since the allies of the Arachnid could then possibly be convinced to unite and attack the Helgardian. The Council made the decision to execute a pre-emptive strike on the Arachnid fleet preparing to invade Atrean space.

This was the first surprise attack of that campaign.

(SHN103.1) NUMBER OF PLAYERS: 2; the Arachnid player and the Helgardian player.

(SHN103.2) INITIAL SET UP

TERRAIN: Nine hex Large Gas Giant (P2.222) centered on hex 2215.

ARACHNID: DN, 2xCA, DD, 2xFF set up within two hexes of 3015, facing at the Player's option, speed zero, WS–0. These ships are Surprised and under all rules and procedures of (D18.0).

DD, 2xFF set up in any hex within five hexes inclusive of hex 3015, initial heading at the Player's option, speed 3, WS–II.

HELGARDIAN: CA, 2xCL, 2xDD, SC, set up anywhere between 2230 and 4230 inclusive, heading F, speed max, WS–III.

(SHN103.3) LENGTH OF SCENARIO: The scenario continues until all forces belonging to one side have been destroyed, captured, or have disengaged.

(SHN103.4) SPECIAL RULES

(SHN103.41) MAP: The map is fixed; it does not float. Any unit leaving the map has disengaged and cannot return. The Arachnid units can disengage from any map edge except the xx30 map edge. The Helgardian units can only disengage from the xx30 map edge. Units which disengage in unauthorized areas are considered destroyed.

(SHN103.42) SHUTTLES AND PFs: No shuttles or PFs have warp booster packs.

(SHN103.421) 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 (SHN103.431).

(SHN103.422) There are no fighters in this scenario. In a variant in which fighters are present, use the standard deployment patterns (one EWF for each squadron of eight or more fighters) for EW fighters.

(SHN103.423) There are no PFs in this scenario.

(SHN103.43) COMMANDER'S OPTION ITEMS

(SHN103.431) 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. Note that whatever is spent here counts in the Modified Victory Conditions (S2.2) as victory points for the enemy.

(SHN103.432) The races that are involved in this scenario do not use drones. In a variation where a drone-armed race is used, All drones are "slow," i.e., speed–8. Type-II and type-V drones (speed 12) are available for purchase as special drones.

Each drone-armed ship can purchase special drones up to the historical racial percentages as part of the Commander's Option Items. Note that (S3.2) allows drone ships extra points for this purpose.

(SHN103.433) Prime Teams (G32.0) are not available in this scenario.

(SHN103.44) REFITS: All ships on both sides have received the Y120 refit if one is available for them.

(SHN103.5) VICTORY CONDITIONS: Use the Modified Victory Conditions (S2.201). Any Arachnid unit that disengages from the map uncrippled does not count towards Helgardian victory totals.

(SHN103.6) VARIATIONS: The scenario can be played again under different conditions by making one or more of the following changes:

(SHN103.61) Replace the Arachnid forces by equivalent forces from any other race.

(SHN103.62) To make the scenario shorter and faster reduce the Arachnid forces to a CA, DD, and FF as the inactive ships and use only one active DD. Reduce the Helgardian force by a CL, 2xDD, and the SC.

(SHN103.7) BALANCE: The scenario can be balanced between players of different skill levels by one or more of the following:

(SHN103.71) Delete the CA (or one CL) from the Helgardian force.

(SHN103.72) Change the status of one of the Arachnid CAs from inactive to WS–II.

(SHN103.73) Change the Weapons Status of the active Arachnid ships to WS–III.

(SHN103.8) TACTICS

HELGARDIAN: Do not get distracted by the few active Arachnid ships, you must disable the majority of the Arachnid fleet before it becomes active.

ARACHNID: Use your active force to slow down the Helgardian and buy time to activate some of your ships. After that, your activation rolls will affect your strategy based on what the Helgardian have accomplished thus far.

(SHN103.9) PLAYTESTERS COMMENTS: We are waiting!

HISTORICAL OUTCOME: The Arachnids were taken completely by surprise. Never before had the Helgardian entered Arachnid territory. Few Arachnid ships survived this battle. The Arachnid destroyed only one Helgardian DD.

ANNEX #5: ABBREVIATIONS

ACCM.....Advanced Electornic Counter Counter-Measures.
BA.....Boarding Party with Battle Armor.
EA.....Energy Absorber.
GB.....Graviton Beam.
HB.....Hellblazer Torpedo.
HF.....Hellfire Blaster, direct-fire Hellfire Torpedo.
HF.....Hellfire Torpedo launcher.
HGB.....Heavy Graviton Beam.
LGB.....Light Graviton Beam.
MGB.....Medium Graviton Beam.
MPDS.....Multi-Purpose Defense Systems.
PLAS.....Plasmatron launcher.
PP.....Pulse Phasers, see rules for types.
PPE.....Proton Pulse Emitter, see rules for types.
PS.....Particle Shotgun launcher.
RAM.....Ram Torpedo launcher.
RSH.....Rotary Shield, Rotary Shield Generator.
SRAM.....Small Ram Torpedo.

ANNEX #6: COMMANDER'S OPTION ITEMS

ITEM OR FUNCTION.....VALUE
Convert BP to BA.....0.5 BPV
Extra BA.....1.0 BPV

ANNEX #7D: SYSTEMS DEFINED AS WEAPONS

ALWAYS:
Multi-Purpose Defense System
Ram Torpedo Launcher
Proton Pulse Emitters
Graviton Beams
Pulse Phasers
Particle Shotguns
Plasmatrons
Hellfire Torpedoes/Blasters
Hellblazer Torpedoes/Blasters

SAFETY:
Same list as above.

TACTICAL INTELLIGENCE:
Covered in the rules for each weapon.

ANNEX #7E: DAMAGE CONVERSION CHART

HIT FROM CHART.....SCORED ON
Drone.....Multi-Purpose Defense Systems, Ram Torpedo Launchers, Rotary Shield Generators.
Phaser.....Proton Pulse Emitters, Graviton Beams, Pulse Phasers.
Torpedo.....Particle Shotguns, Plasmatrons, Hellfire Torpedoes/Blasters, Hellblazer Torpedoes/Blasters .
Battery.....Energy Absorbers.

DAMAGE PRIORITY RULE UPDATE
(D4.3221) PHASERS: Special Sensor replacing phasers, SFG, BANK, Phaser 4, Proton Pulse Emitter F, Heavy Graviton Beam, Heavy Pulse Phaser, Heavy Laser, Proton Pulse Emitter E, Phaser-1, AFD, Medium Graviton Beam, Medium Laser, Proton Pulse Emitter D, Extended Range Pulse Phaser, Dual Pulse Phaser, Multi-Purpose Pulse Phaser, Medium Pulse Phaser, Short-Range Pulse Phaser, Phaser-G, Phaser-2, Proton Pulse Emitter C, Early Laser, Pulse-Phaser Emitter, Proton Pulse Emitter B, Twin Laser, Phaser-3 Light Graviton Beam, Gatling Pulse Phaser, Twin Pulse Phaser, Light Pulse Phaser, Proton Pulse Emitter A. Rankings between phasers of a given type are Alphan, PW, PP, PM, AP, PQ and PR from best to worst. Proton Pulse Emitters are further subdivided by mount type in each case with mount 4 being the best and mount 1 being the worst.

(D4.3222) TORPEDO: Special Sensor replacing torpedoes, Warp Railgun, Medium Railgun, Light Railgun, Plasma-R, Plasma-M, Plasma-A, Hellblazer Torpedoes, KWH, Particle Shotguns, Hellfire Torpedoes, Plasma-S, Fireball, Particle Beam, HEAT, Tachyon Beam, KKH, KKM, KKL, TRH, CPA, TRL, Photon, Plasmatrons, Tachyon Gun, Plasma-L, KWL, Plasma-G, Particle Cannon, Bioelectric Bolts, Disruptor-40, HCH, Disruptor-30, Implosion Bolt, Antimatter Cannon, Disruptor-22, Energy Howitzer, HCL, Disruptor-15, Disruptor-10, Axion Torpedo, Fusion Beam, Sting Torpedo, Plasma-F, Plasma-E, Plasma-D, Prospecting Cannon.
(D4.3223) DRONE: Special Sensor replacing drone, Implosion SH, Hyperdrone Magazine, PPD, Target Accentuators, Web Caster, Implosion-H, Flame Shield, Hellbore, ACG, Neutron Beam, Trans-Mortar, ESG, HCH, PA Panel, Bio-electric Bolts, Implosion M, Web Breaker, Ram Torpedo Launchers, Shield Cracker, Implosion-M, Subspace Coagulator, Magazine of D-Rack, Magazine of SCUD Launcher, Magazine of H-rack, Magazine of Class-III Mass Driver, Gx-Rack, Cx-Rack, Tachyon Rack-E, Tachyon Rack-D, Tachyon Rack-C, Tachyon Rack-B, Tachyon-Rack-A, G-Rack, Missile Rack, Class-II Mass Driver, B Rack, HCL, C-Rack, E-Rack, F-Rack, Class-I Mass Driver, A-Rack, Rotary Shield Generators, Multi-Purpose Defense Systems, Chaff Thrower, Starbase-ADD, Anti-Fighter Defense System, ADD-12, ADD-6.

ANNEX #7G: CARRIER INFORMATION

Race	CV	Ftrs	Admin	Bays	Store	DC
Mal	CA	2	2	2	48	2
	CAP	4	2	2	96	4
RN103.0	CL	2	2	1	48	2
	DD	2	1	1	48	2

Drone Storage is SRams.

ANNEX #8B: OPTIONAL WEAPONS COST CHART

The relevant rules for the costs for mounting Triangulum weapon systems into option mounts has not been created as of this time. This annex was not done to make room to fit Module E2, and will be complete in the final product.

ANNEX #9 COST OF REPAIR CHART

The rules for each weapon and system include the repair costs. This annex was not done to make room to fit Module E2, and will be complete in the final product.

ANNEX #10 TACTICAL INTELLIGENCE HULL TYPE CLASSIFICATIONS

HELGARDIA PROTECTORATE SHIPS

DN.....DN.
C.....C, CA.
CL.....CL, SC§.
DD.....DD.
FF.....FF.

WORLDS OF UNIONS SHIPS

DN.....DN.
CA.....CA, CAB.
CL.....CL.
DD.....DD, SC§.
FF.....FF.

MALLARAN EMPIRE SHIPS

CA.....CA, CAR§, CAP§.
CL.....CL.
DD.....DD.
FF.....FF.

§ - Major outward differences distinguishable at level D.

Ship Type	G9.0 Crew Units	D7.0 Brdg Prts	S2.1 BPV	C6.5 Break Down	C2.12 Move Cost	J1.42 Spare Shttl	R0.6 Size Class	C3.3 Turn Mode	Rule Nbr	Year in Srvc	C13.3 Dock Pts	D5.2 Explo Str	F&E Cmnd Ratng	Notes
HELGARDIA PROTECTORATE														
DN	45	14	188	3-6	1.50	2	2	D	6	0	9	28	10	
C	36	8	130	5-6	1.00	2	3	B	1	0	7	17	8	
CA	36	8	135	5-6	1.00	2	3	B	2	0	7	17	8	
CL	30	8	93	5-6	0.67	2	3	B	3	0	6	14	7	
SC	30	8	128/98	5-6	0.67	2	3	B	7	63	6	14	7	◆
DD	24	6	77	5-6	0.50	1	4	A	4	0	5	12	6	
FF	20	5	60	6	0.33	1	4	A	5	0	4	10	4	
THE WORLDS OF UNION														
DN	50	14	160	2-6	1.50	2	2	E	5	90	11	31	10	
CA	40	10	114	5-6	1.00	2	3	D	1	47	8	20	8	
CAB	40	10	118	5-6	1.00	2	3	D	2	105	8	20	8	
CL	30	8	88	5-6	0.67	2	3	C	7	26	7	16	7	
DD	24	6	62	6	0.50	2	4	C	3	47	6	14	6	
SC	24	6	100/70	6	0.50	2	4	C	6	105	6	14	6	◆
FF	20	4	49	6	0.33	2	4	B	4	26	5	12	4	
THE MALLARAN EMPIRE														
CA	33	14	126	6	1.00	1+1	3	C	1	0	8	18	8	
CAR	32	14	131	6	1.00	1+1	3	C	7	100	8	18	8	
CAP	33	14	126	6	1.00	1+1	3	C	5	100	8	18	8	
CL	24	12	94	6	0.67	1+1	3	C	2	0	7	15	7	
DD	18	6	71	6	0.55	1+1	4	B	3	0	6	13	6	
FF	15	5	55	6	0.33	1	4	A	4	0	4	11	4	

ANNEX #4 -- MASTER FIGHTER AND SHUTTLE CHART

Race	Type	Spd	Phaser	Missiles	Dmg	Special	BPV	Year	DFR	Ref
Mallaran	Viper-1	R12	1xP1B-FA	2xSRam-FA	9		9	44	3☆	102.F1
	Viper-1	P12	1xP1B-FA	--	9	1xPlasmatron-FA	9	0	3☆	102.F1
	Viper-2	15	1xP2B-FA	2xSRam-FA	9	1xPlasmatron-FA	12	122	4☆	102.F2

PUBLISHER'S NOTES: WHAT THIS IS, WHAT THIS IS NOT

This playtest pack covers the Triangulum Galaxy, a possible future series of SFB modules. As the Triangulum Galaxy has about as much material available as the Omega Sector, if published as formal modules, Triangulum could include five or six.

The E-series modules are *STAR FLEET EXPRESS,* so titled to distinguish them from the P-series modules, although they are more or less the same thing. The E-series "Express" modules are designed for sale by mail order, but stores can get Module E2 by special order through their wholesalers. Express Modules are printed in small quantities and are, we expect, only purchased by the elite among SFB players. Congratulations on being an elite player.

Because these are "express" modules, they come to you with information that is the best preliminary playtesting and thorough editing could make it, but the "presentation" will be somewhat lacking compared to "'regular" SFB products. These are "quick and dirty" in some regards, with no real effort to "prettify" them for general retail sales and they do not come with counters. No effort is made to print ships of the same race back-to-back (as players prefer) because we are not trying to give you a permanent working set of SSDs but the right ships to do the testing. If that means two enemies back-to-back, you'll have to forgive us. And some of the SSDs are rather crowded, but the data on them is ready to fly into combat.

One other aspect of this product is the future use of the Internet to distribute changes and additional material. If history is a guide, there will be a few minor rules changes and a host of answered questions within days of the release of this product, and these will be available from an Internet autoresponder (triangulum@starfleetgames.com). In time, we will offer a few extra ships and perhaps one of the minor races, and these will also be available on our web site and listed in the autoresponder. If Module E1 is any guide, we might offer a sample race in Captain's Log.

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