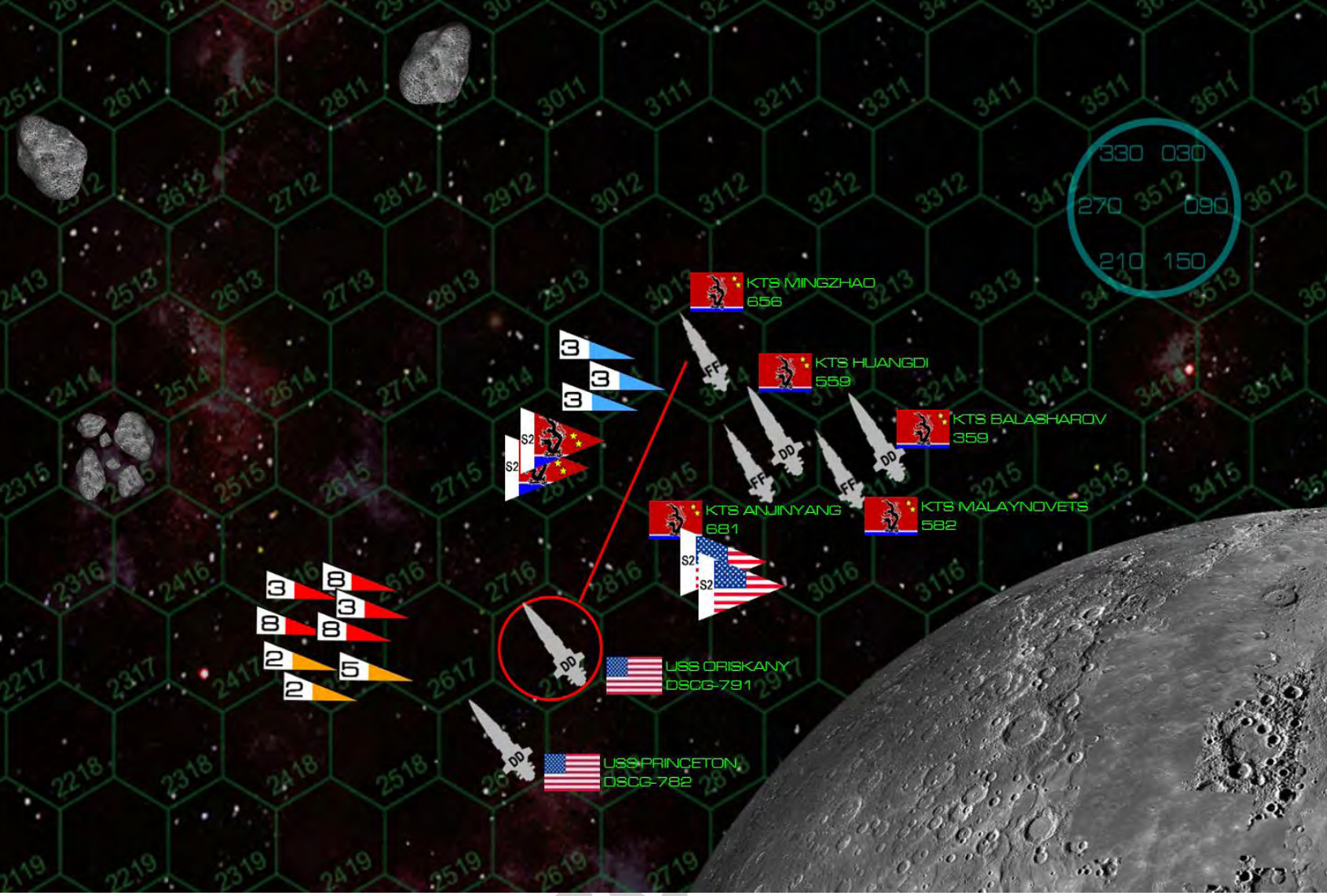

DARKSTAR
TACTICAL STARSHIP COMBAT
IN THE 26TH CENTURY
v1.1



SECTION THREE - FUNDAMENTALS OF PLAY

INTRODUCTION

Darkstar is science fiction tactical wargame depicting starship combat between interstellar navies of the far future.

Each piece on the board represents a combat starship, a group of aerospace craft (typically "fighters" or "bombers"), an installation, or an astrophysical body like asteroids, moons, or small planets.

Each player (or team of players) commands their starships, using the game mechanics in their attempts to maneuver into advantageous firing positions, employ their weapons against available targets, and avoid sustaining too much damage in turn.

Ships can be destroyed either by explosions or collisions with astrophysical bodies. They can also be crippled, after which they might be recovered, destroyed by enemy ships, scuttled by their crews, captured by enemy boarding parties, or lost forever in the abyss of space. Ships can also be forced to break off from a battle after taking a certain amount of critical damage.

The game ends after a preset number of turns. Victory is determined either by comparing how many ships are "lost" in the action (destroyed, crippled, or broken off), or how many ships *remain* in the designated battle space.

Darkstar is a game played in turns, each turn carefully and clearly divided into a number of phases. These phases are played in a set order. Care should be taken by players to stick to the turn sequence, as it is designed to keep the game fun, clear, smooth, and realistic.

This reference will cover the basics of how to run a tactical wargame in the *Darkstar* universe. It will by no means cover everything that the *Darkstar* setting has to offer. Certain options, factions, starship types, and specific types of engagements won't be covered in this initial reference. Instead, this reference covers the basics on how the *Darkstar* wargame system actually works, and additional options may be covered in future supplements.

Disclaimer: *Darkstar* is not a game for the faint of heart. Games take two to three hours *minimum*, and for your first few plays of even moderate-sized scenarios, expect four hours or more. It also asks a lot from its players in terms of components, interpreting dice results, consultation of charts, detailed tactics, record keeping, and long-range planning. It is an "old school" 1980s wargame. But if your have what it takes and are still interested, glory and conquest awaits you among the stars.

3.1 COMPONENTS

Here are the things you'll need to play a game of *Darkstar*.

1. A hex grid map, measuring somewhere around 40 x 40 hexes. Any square or rectangle shape will work, so long as it is covers roughly 1500-2000 total hexes.

A. Commercial game mats are a great option, but any kind of paper print out or computerized hex grid in a virtual game board would work as well.

B. If you use a physical, printed hex grid, it's a good idea to have the hex sixe be at least 1.5 inches or 3 cm. This way you have enough space in each hex for your ships, aerospace craft, and other units.

2. Game pieces for your starships. These can be hand-cut cardboard counters, models, miniatures, or graphics in a virtual game board environment. Any of these options are admissible (based on player preference), so long as they meet the following criteria:

A. The pieces must clearly designate the ship's heading (i.e., which hex side they are facing).

B. The pieces must clearly identify which piece represents which ship (a simple numbering system would suffice).

C. Three starship pieces must be able to fit with reasonable ease in a game board hex.

3. Game pieces for units of aerospace craft. Again, any kind of pieces the players like to use would work fine here, so long as they meet the following criteria:

A. They should be stackable, or have some kind of option for indicating how many aerospace craft are in the unit being represented.

B. Many players use counters that can easily stacked 2, 5, or even 10 in a hex. The counters can have different numbers on them, like 1, 2, 5, 10, etc., allowing a player to easily "make change" and put the exact number of aerospace craft in the proper hex.

C. Some players use d20 dice, with the number showing the number of planes in the hex. This is fine, but care has to be taken not to bump the table or knock over the dice.

D. Aerospace units have no specific facing in game play, so the counter / playing piece can be any shape.

E. The aerospace playing pieces should clearly indicate the type of craft in the unit (bombers, fighters, scouts, assault boats). This can be a letter code or a certain color.

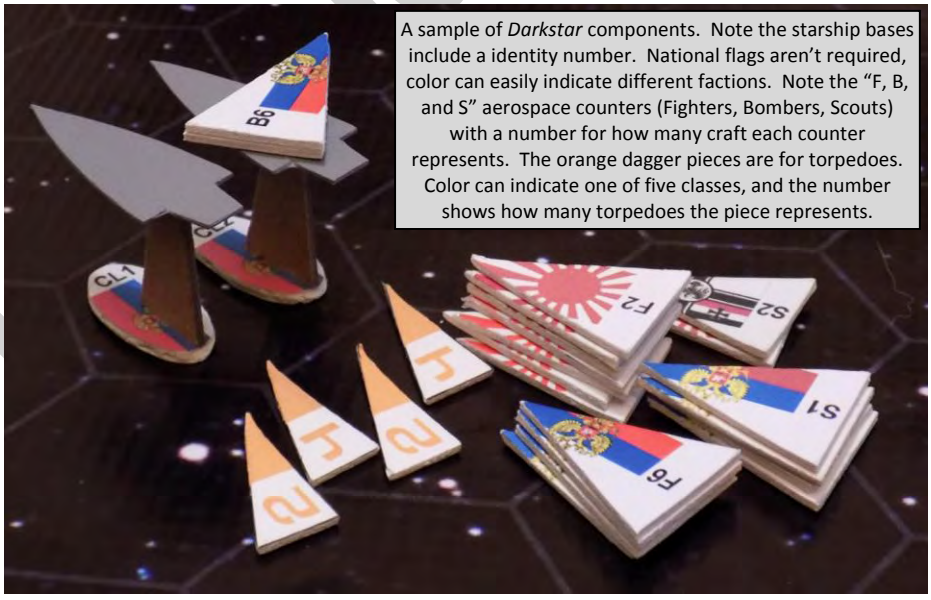
F. The aerospace playing pieces should clearly indicate which faction they belong to.

G. Preferably the aerospace playing pieces should be flexible in regards to quantity, either through "making change" or removing counters or changing the number on the playing piece. Aerospace units can range from 1 to 100 individual craft (in extreme cases), and these units of aerospace craft take incremental damage as craft are shot down by enemy fire.

4. Game pieces for torpedo spreads. Again, any piece the players like to use would work fine here, so long as they meet the following criteria:

A. As discussed with aerospace craft, torpedo spreads in *Darkstar* can be represented by any kind of counter or playing piece with which the players are comfortable, so long as they can clearly indicate a flexible number, easily fit in a hex, and indicate which faction controls them and which kind of torpedo they are (there are five general types). Color usually works best for type of torpedo, with a 1-10 to indicate number of torpedoes in the spread.

B. Torpedo spreads have no facing in *Darkstar*, so as long as the piece meets the criteria above and can easily fit in a hex, they should work fine.



A sample of *Darkstar* components. Note the starship bases include a identity number. National flags aren't required, color can easily indicate different factions. Note the "F, B, and S" aerospace counters (Fighters, Bombers, Scouts) with a number for how many craft each counter represents. The orange dagger pieces are for torpedoes. Color can indicate one of five classes, and the number shows how many torpedoes the piece represents.

5. Dice. Players will need many dice, including d4s, d6s, and especially d10s. The more dice you have, the smoother and faster the game will run.

A. Between the two players, try to have at least ten d6, twenty d10s, and at least a handful of d4s.

6. Warship Record Sheets. Players will need the ship record sheets for the warships participating in the scenario being played.

A. Each warship or installation gets its own record sheet.

B Aerospace units never need record sheets.

C. Warship record sheets (WRS) are

prepared in advance. In addition to the ships weapons, defensive systems, movement characteristics, engineering information, small craft (including aerospace fighters, bombers, and scouts) and name, fields are provided for "background" information like mass, commander's name, and crew complement.

D. Warship record sheets also have a damage chart on them, which allows players to quickly and easily mark out exactly where enemy weapons have hit the ship, where armor has been damaged, and where ships systems have been effected.

e. It is recommended that "permanent" information be printed or written on your warship record sheets. Then, insert the sheet into a clear plastic document sleeve, and use thin dry erase markers to indicate "tracking" information like velocity per turn, initiative scores per turn, and damage sustained. This way, this information can be quickly cleaned off for the next battle.

F. Alternatively, the sheets can be used with simple pencil. Just keep the marks a little light as you'll be erasing much of this information later, or you can just use another sheet.

G. Blank sample warship record sheets are included in this reference. Also, a selection of record sheets has been filled out that list some of the common warship classes found in the navies of the *Darkstar* universe (**Section 6**).

7. Quick Reference Sheets. The vast majority of the actual gameplay can be driven from the **Turn Sequence Sheet** and the **Quick Reference Sheet** (**QRS**) included in this reference. Other charts are also included and will also come in handy, but it is recommended that a few copies of the Turn Sequence and Quick Reference Sheet be printed out for easy use at the table during an actual game.

3.2 CATEGORY, TYPE, CLASS

Listed below are a few fundamental concepts that should be understood before getting into the details of play. This isn't about background, setting, or "color" of the *Darkstar* universe, other sections of this book cover that in greater detail. These are definitions and terms that deal specifically with the rules and procedures of *Darkstar* gameplay.

1. Warships: Combat units in *Darkstar* are grouped by three general classifications: **Categories**, **Types**, and **Classes**.

2. Categories. These are the most basic classifications of combat units in *Darkstar*.

A. Warships: The actual heavy starships that engage in combat and make up the navies of the *Darkstar* universe. They are the larger ships from which smaller fighters, bombers, scouts, and assault boats are launched. They carry heavy guns, weigh tens or hundreds of thousands of tons, and carry hundreds or thousands of crewmembers. They are the primary unit at the core of the *Darkstar* universe and gameplay. Warships cannot enter most planetary atmospheres (outside of the uppermost layers of gas giants, etc.) and so rely on aerospace complements for operations deeper in terrestrial atmospheres.

B. Aerospace units: These are the fighters, bombers, scouts, and assault boats that different warships carry in different numbers and configurations. In large numbers (or with elite crews) they can be extremely powerful units in their own right. Even the mightiest battleship ignores attacking fighters and bombers at her peril. However, these small aerospace craft carry no effective shields against enemy fire, and are never FTL capable. Thus, they are entirely dependent on warships or installations as a base of operations.

C. Installations: Either in orbit or on the surface of planets, moons, or asteroids - these are permanent, fixed facilities that are often the "objective" of a given scenario as well as active combatants. They are usually built for a civilian, commercial, or industrial purpose as well as for military defense. Because they don't have to move, they have more power to invest in weapons, shields, and large fighter bays for protection. They may be "floating" or "sitting targets," but they are always very heavily defended and not to be attacked lightly.

3. Warships Types: Below are the general **Types** of warship in *Darkstar*, listed from smallest to largest. Please note that these are the basic warship descriptions by size, within each of these types would be designs for aerospace carriers, planetary assault ships, or other mission-specific profiles.

A. Gunboat: 5,000+ tons, 10+ crew. These are the smallest "warship" that typically carries its own FTL drive.

B. Corvette: 10,000+ tons, 50+ crew. Includes torpedo attack raiders, privateers, patrol carriers, scouts.

C. Frigate: 25,000+ tons, 120+ crew. Includes escort carriers, blockade runners, monitors, escort ships.

D. Destroyer: 40,000+ tons, 250+ crew. Includes light carriers, light planetary assault ships.

E. Light Cruiser: 75,000+ tons, 400+ crew. Includes light fleet carriers, medium planetary assault ships.

F. Heavy Cruiser: 100,000+ tons, 600+ crew. Includes fleet carriers, heavy planetary assault ships.

G. Battleship: 300,000+ tons, at least 1,500 crew. This type also includes superdreadnoughts, supercarriers, pocket battleships, and battle cruisers.

4. Aerospace Types:

A. Fighters: Light, fast, and heavily armed, these are one-

or two-seat "attack planes" are primarily used to engage other aerospace craft. However, they can also carry one aerospace missile attack, and can strafe warships and installations.

B. Bombers: Larger, slower, these two-, three-, or four-seat craft carry either five missile attacks or two torpedo attacks for use against enemy warships, installations or even ground targets in rare cases. They also carry *some* guns for defense and strafing, but are usually easy meat for enemy fighters.

C. Scouts: Very light and very fast, these carry no ordinance at all, and only very light guns for defense or strafing. In combat they have almost no effect, but almost all warships carry at least a pair of them for daily operations. Also, in some battles they can make just enough of an impact against heavily damaged or crippled enemy ships, or even help defend their mother ship against enemy torpedoes.

D. Assault Boats: These are only used in "advanced" *Darkstar* games, the rules for which will be covered in future supplements. They carry no ordinance but pack a very powerful array of guns, as well as a platoon of troops, two tanks or APCs, or four support vehicles (or some mixture thereof). They can deliver these assault forces onto the surface of enemy planets, or even dock with enemy warships or installations so specialized marines can board and capture them as prizes.

E. Non-combat aerospace craft: Almost all warships and installations also carry at least a few cutters, launches, and yachts. These are basically "shuttles" that help the ship conduct routine business. They also act as lifeboats in an emergency, and with powerful FTL drives they can also serve as couriers. They are included primarily for color and do not participate in tabletop wargame play.

5. Installation Types: These are the "weight / size" categories of installations, listed from smallest to largest. Detailed rules for these will be covered in a future reference.

A. Beacon: Equivalent to a Gunboat, these are often automated communications hubs for minefields, with some guns for defense.

B. Waypoint: Equivalent to a corvette. Often used as navigational or surveillance stations in the outer "Kuiper Belts" of star systems.

C. Outpost: Equivalent to a frigate, these are often found in asteroid belts near mining or manufacturing facilities.

D. Satellite Base: Equivalent to a destroyer, these are often found around large moons.

E. Planetary Base: Equivalent to a light cruiser, these are often the base and headquarters for a navy's defense of a relatively high-value planet.

F. System Port: Equivalent to a heavy cruiser, this is often the "capital" or headquarters of a colonized star system.

G. Star Fortress: Equivalent to a very heavy battleship, these are small cities in space that form the transport, communication, and command hubs for several key star systems (or one heavily populated one).

6. Warship classes: These are the specific designs by which a navy might build a series of warships, all from the same blueprints.

A. Warship classes usually carry the name of the first ship of their class. After that, each warship has her own name.

B. All warships of a given class "start out of the shipyard" with identical stats and capabilities. Of course, "veteran" ships can be upgraded with new equipment, better crews, or more skilled commanders.

i. Example: In *Star Trek*, USS *Enterprise* is a *Constitution* class cruiser. When *Enterprise* was first launched, she was probably no different than *Constitution*. However, it's safe to say that by the end of her career, *Enterprise* was a far more capable ship than *Constitution*. The same thing can happen in *Darkstar* (see **Rules Section 5.5**, **5.6**, and **5.7**).

7. Aerospace classes: Fighters, bombers, scouts, and assault boats also have classes. But these units are generalized for game play, and so different classes have no different game values. The class names are included only for color.

8. Examples of Class, Type, and Category. To bring all this together, here are some examples of how these terms and concepts stack together:

A. In *Darkstar*, the USS *Oriskany* is a *Valcour*-class destroyer. So *Valcour* is the **class**. Destroyer is the **type**. Warship is the **category** (as opposed to aerospace fighter or installation). The first destroyer of the *Valcour* class is USS *Valcour*. Other ships in the class include USS *Princeton* and USS *Valley Forge.*

B. The most famous British warship currently in service is probably the heavy cruiser HMS *Kraken*. She is an *Iron Duke* class heavy cruiser. (*Iron Duke* is the **class**, heavy cruiser is the **type**, and warship is the **category**).

C. The American Navy deploys the FS/A-81 "Corsair" as its standard Navy / Marine Corps fighter. FS/A-81 Corsair is the **class**. Fighter is the **type**. Aerospace is the **category**. The Holy Russian Empire deploys the MiG-103 Tunguska and the Royal Navy deploys the Supermarine Starfire. These are all **classes** of fighter, but in game terms they are essentially the same. Only the **type** (fighter) and **category** (aerospace) matters in game terms, unless a particular unit has been upgraded to "elite" status.

3.3 SCALES & READING THE MAP

This section describes the scale of the game, the map, and outlines how elements on the table can interrelate with one another. These principles are important to understand to envision what's happening in the battles being imagined, and can help players understand more detailed rule slater in this reference.

1. Hex Scale: Hexes are considered to represent 180 kilometers of empty space.

A. Warship playing pieces and hexes are *not* to scale with each other. The warship pieces usually extend across the length of the hex, this does not mean the ships are 180 kilometers long. The playing piece simply shows where the warship is and which direction is it facing.

B. This also means that players are free to use whatever playing pieces they want for their warships, so long as it's clear which hex it is in, which way it is facing, and three ships can be easily placed / stacked in a hex.

2. Time Scale: A turn (both players) is considered to take one minute of battle time.

A. This means that each velocity point of movement (each hex a warship or aerospace craft moves across the board) works out to 3 kilometers per second. So a ship with velocity of 10 (moving 10 hexes a turn) is currently moving at 30 km a second.

3. Stacking: Only three warships or installations are *ever* allowed in the same hex**. Collisions between ships and/or installations are never allowed.**

A. This includes warships from both sides. *Never* can there be more than three warships (and/or installations) in a hex - not only for the purposes of practical game play, but also the gravitic shield harmonics effects described in the *Darkstar* background.

B. There is no limit on stacking aerospace craft in a hex.

4. Line of Sight / Movement: Line of sight is determined by drawing a straight line from the **center** of the firing ship's hex to the **center** of the target ship's hex**.**

A. Warships or installations *never* block line of sight, no matter how big they are, and even is there are three ships and/or installations in a hex.

B. Space is three-dimensional, and strictly speaking these hexes actually represent a 180 km *sphere*. In game terms, ships of any class can always see around and "through" each other.

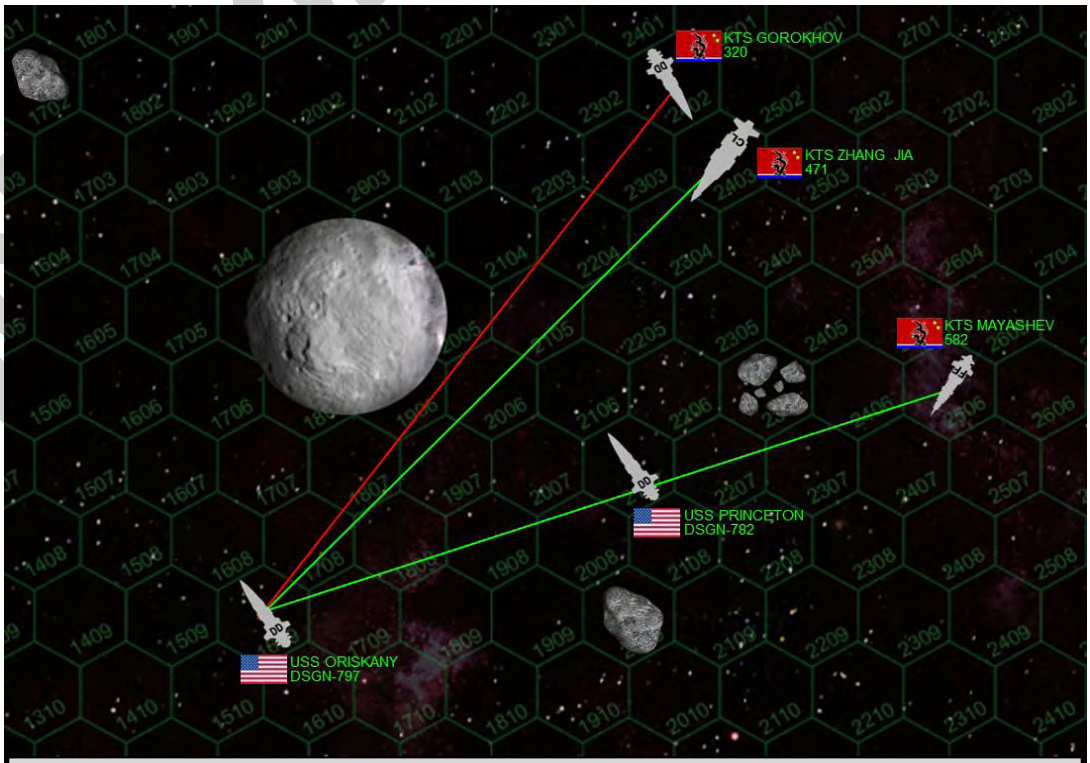
C. Ships never block movement, even if there are three ships and/or installations in the hex. If there are three warships in a hex, and a fourth ships wants to move *through* that hex, it is certainly allowed to do so at no penalty. The fourth ships just can't *end* its movement in that fully-stacked hex.

D. Astrophysical bodies *do* block line of sight, if that "center-to-center" line so much as nicks the corner of any hex which contains part of an astrophysical body's playing piece. This rule applies no matter how big or small the astrophysical body is.

5. Astrophysical Bodies: These are asteroids, moons, and planets, which behave differently than warships.

A. Not all *Darkstar* games have astrophysical bodies. If a given scenario has them, they will be listed in the scenario, along with any properties of movement or gravity, if appropriate.

B. Alternatively, players can simply agree to have them.



Examples of line-of-sight. Note LOS is traced from the center of the two hexes in question, no matter where in the hex a ship happens to be. USS *Princeton* does not block LOS, which is never blocked by any warship or installation. However, if LOS so much as nicks *any* part of a hex that contains an astrophysical body (like that seven-hex moon between USS *Oriskany* and KTS *Gorokhov*), LOS is blocked. Also note that although USS *Oriskany* and KTS *Mayashev* can see each other, USS *Princeton* cannot see KTS *Mayashev* - since an LOS line drawn between their hexes would nick asteroid hex 2306.

Make sure both sides agree to each astrophysical body, whether it / they are moving, and whether they exert any gravitational effects. If there are more than one, it's usually a good idea to let the players *alternate* placing them on the map.

C. Types: Astrophysical bodies are categorized as asteroids, moons, terrestrial planets, and gas giants.

i. Asteroids: These are one hex, and represent either a very large asteroid or a cluster of many smaller ones. Many times they are moving, usually at 1-3 hexes per turn. If they are moving, they are all moving in the same direction (part of a belt). They exert no gravity in game terms.

ii. Moons: These are circular counters, and can measure anywhere from 3 to 30 hexes across. Earth's Moon, at just under 3500 km across, would be 19 hexes across. Very large moons can exert some gravity effects on warship movement, depending on the scenario or player agreement.

iii. Terrestrial Planets: Terrestrial planets are small, rocky planets ranging size roughly from Mercury to Earth (roughly 30-70 hexes across, respectively). Of course, such pieces are larger than most *Darkstar* maps, so a "slice" of the planet is usually portrayed taking up one side or corner of the table. Terrestrial planets almost always exert at least moderate gravity (depending on scenario) and sometimes have rules for atmosphere, extending 1-2 hexes from their surface.

iv. Gas Giants: These are gigantic planets, ranging in size from Neptune to perhaps three times the mass of Jupiter (800+ hexes across). They are handled only in advanced games, covered in future references. They always exert very strong gravity that can easily destroy warships, they have extremely powerful magnetic fields that can disrupt sensors and electronics (thus affecting to-hit rolls and shield ratings), have atmospheres thousands of kilometers keep (often the whole game map is *in* the upper atmosphere of the gas giant), incredibly strong winds, and massive lightning. Captains beware.

D. Line of Sight / Movement: Unlike warships, *any* astrophysical body on the map automatically blocks *all* movement and line of sight through though the *entire* hex. The only exception to this is a planet's atmosphere.

E. Collisions: *Any* warship, aerospace unit, or torpedo spread that enters *any* hex that contains even *part* of an astrophysical body is considered instantly exploded (**Rule Section 4.9.2**), with no chance of salvage or recovery.

i. The only exception to this would be assault boats aerospace craft conducting a planetary assault.

ii. Needless to say, this makes *moving* astrophysical bodies like asteroids and comets very dangerous.

6. Gravity: Larger astrophysical bodies like planets or very large moons exert enough gravity to actually effect the way warships move on the game board.

A. Any rules for gravity will be included in the scenario are agreed to by the players beforehand.

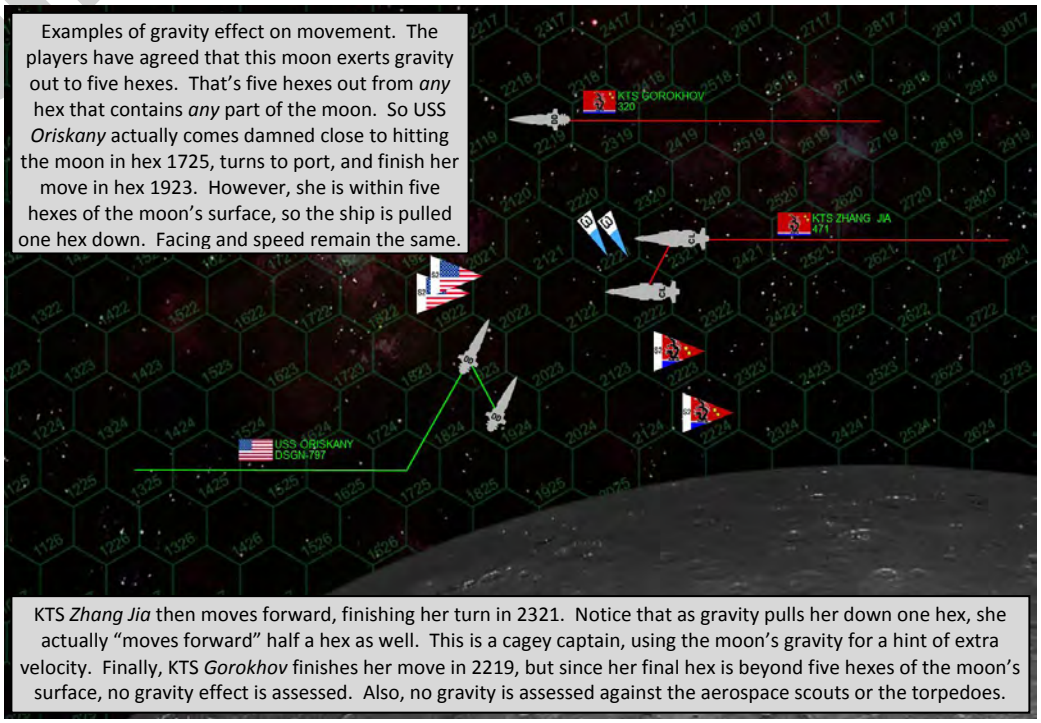
B. Gravity effects are applied simply by moving a ship one hex closer to the astrophysical body exerting the gravity (or center of its playing piece, if it is on the table).

C. Velocity and facing of the ship is not effected. Only it's final position / hex.

D. Gravity effects are assessed on any ships within the specified range of the gravity effect, *at the end of that ship's movement*.

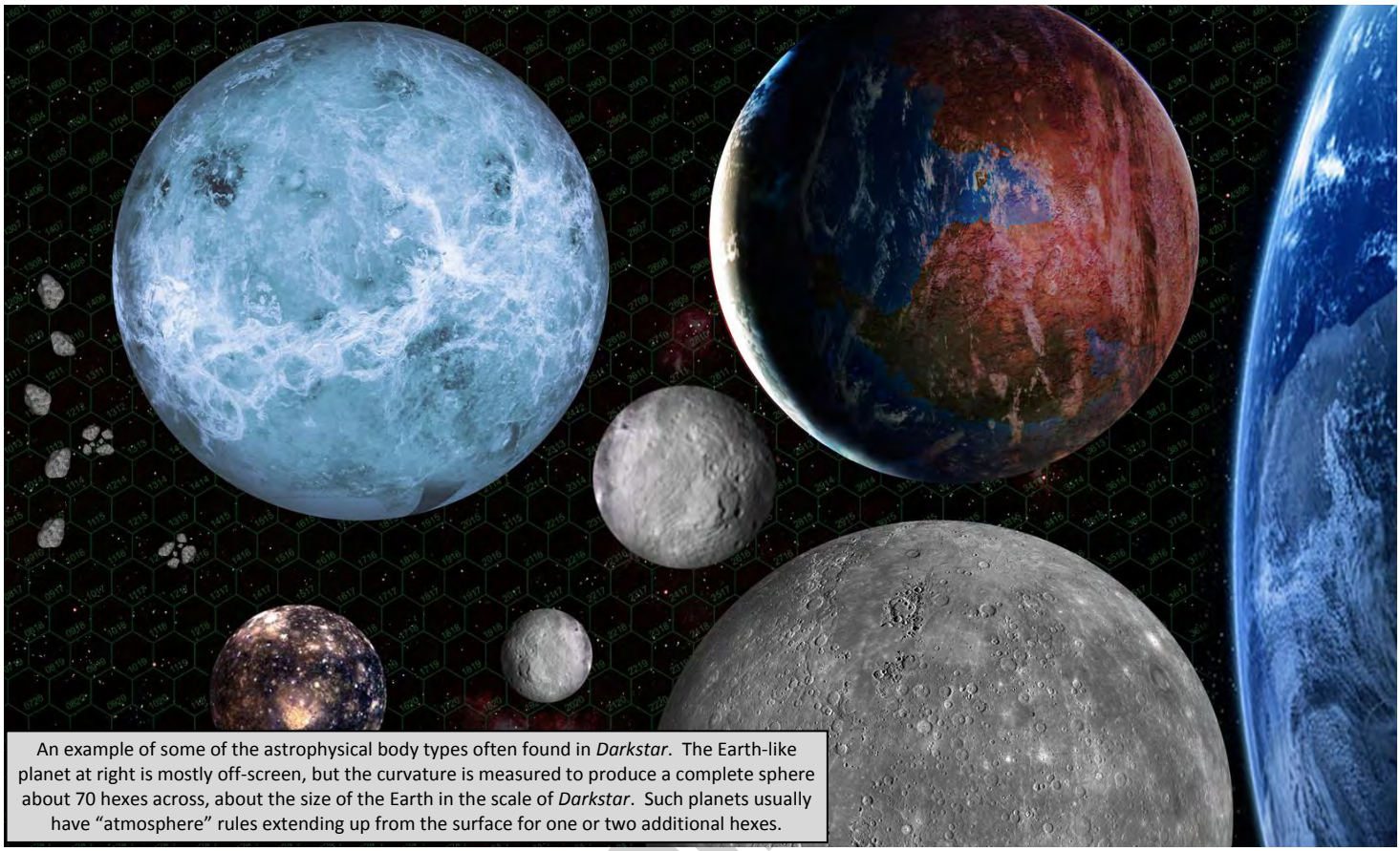
E. If gravity causes a ship to come into a hex containing any part of an astrophysical body, the ship is automatically and instantly destroyed.

F. Gravity for terrestrial planets / very large moons always pulls ships only one hex. Stronger gravity fields for larger terrestrial planets simply exert this affect over a longer distance.



Examples of gravity effect on movement. The players have agreed that this moon exerts gravity out to five hexes. That's five hexes out from *any* hex that contains *any* part of the moon. So USS *Oriskany* actually comes damned close to hitting the moon in hex 1725, turns to port, and finish her move in hex 1923. However, she is within five hexes of the moon's surface, so the ship is pulled one hex down. Facing and speed remain the same.

KTS *Zhang Jia* then moves forward, finishing her turn in 2321. Notice that as gravity pulls her down one hex, she actually "moves forward" half a hex as well. This is a cagey captain, using the moon's gravity for a hint of extra velocity. Finally, KTS *Gorokhov* finishes her move in 2219, but since her final hex is beyond five hexes of the moon's surface, no gravity effect is assessed. Also, no gravity is assessed against the aerospace scouts or the torpedoes.



An example of some of the astrophysical body types often found in *Darkstar*. The Earth-like planet at right is mostly off-screen, but the curvature is measured to produce a complete sphere about 70 hexes across, about the size of the Earth in the scale of *Darkstar*. Such planets usually have "atmosphere" rules extending up from the surface for one or two additional hexes.

G. Typically, gravity effects for terrestrial planets or moons are set at anywhere from 5-20 hexes. How far is up to the scenario / player agreement before the game.

H. When setting up a scenario in which there is more than one astrophysical body, always make sure that no astrophysical body is within the specified gravitational effect of another. Otherwise, how have these bodies not collided or merged millions of years ago?

I. Aerospace units and installations are *always immune* from gravitational effects. Aerospace units are assumed to simply maneuver within the hex to compensate for gravity, and orbital installations have station-keeping systems that keep them in stable orbits.

J. Gas Giants: Gravity for gas giants is on an order of magnitude stronger and effects warships across the whole table. Gravity for these behemoths can actually change a ship's velocity and even direction of movement (especially for crippled ships), and can easily destroy a ship by pulling it down into the merciless crush and blistering heat of its lower atmosphere. Ships must also limit their speed or they'll burn off layers of their armor through atmospheric friction. Devastating lightning and freakish winds pose further hazards.

Battles in gas giant atmospheres and gravity wells will be handled in a later reference of more advanced battle and scenario types.

3.4 WARSHIP RECORD SHEETS

As much as *Darkstar* is won or lost on the game board, just as crucial is the information and decisions made of the **Warship Record Sheets**.

These are the sheets that track the status of the warships and installations in play, including weapons, torpedo loads, aerospace launch status, velocity, damage, systems status, shields, targeting electronics, crew bonuses, FTL characteristics, and a host of other data points for the game.

Each warship or installation gets a warship record sheet. Aerospace craft do not get warship record sheets.

There is a lot of information laid out on these warship record sheets, and for players not accustomed to this kind of wargame, it can seem a little overwhelming. Please don't be alarmed. All this information is presented on the sheet so players don't have to carry it their head, or flip through rule books, stat lines, counters, note sheets, or cards. With only the information on these sheets, plus the **Turn Sequence Sheet** and the **Quick Reference Sheet** (**QRS**), players with even a passing familiarity with the *Darkstar* system can play a whole game without opening a book once.

Here is a list of the basic sections of a **Warship Record Sheet** (**WRS**).

1. Ship Name: The name of the ship, sometimes with her registry number (example: USS *Princeton* DSGN-782).

DARKSTAR STARSHIP CIC / TACTICAL OPS CONTROL SHEET

Ship Name:		Ship Class:	*Falklands / Commonwealth* Class	Status:		Thrust:	6
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	+1

Mass:	39,994 tons	Cargo:	200 tons	Crew / Passengers:	248 officers and men, 12 passengers

Darkstar Wave: 10th

Range Table								
	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5
	Template	OK	OK	-1	-2	-3	-4	-5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	8 MgKv Laser (Beam 2,2,2,2,1,1,1)	Bow
2 (+1)	8 MgKv Laser (Beam 2,2,2,2,1,1,1)	Stern
1 (+1)	60 eHz Syglex (Sheet 5,5,4,3,2,1,0)	Bow
1 (+1)	60 eHz Syglex (Sheet 5,5,4,3,2,1,0)	Stern
2 (+1)	Class IV Torp (Torp 4)	P Bow
2 (+1)	Class IV Torp (Torp 4)	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	35mm Mass Driver Array	Bow
3	35mm Mass Driver Array	P Bow
3	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Quarter
4	35mm Mass Driver Array	S Quarter
4	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
15	Marines	Port
15	Marines	Starboard
1	Cutter	Aft

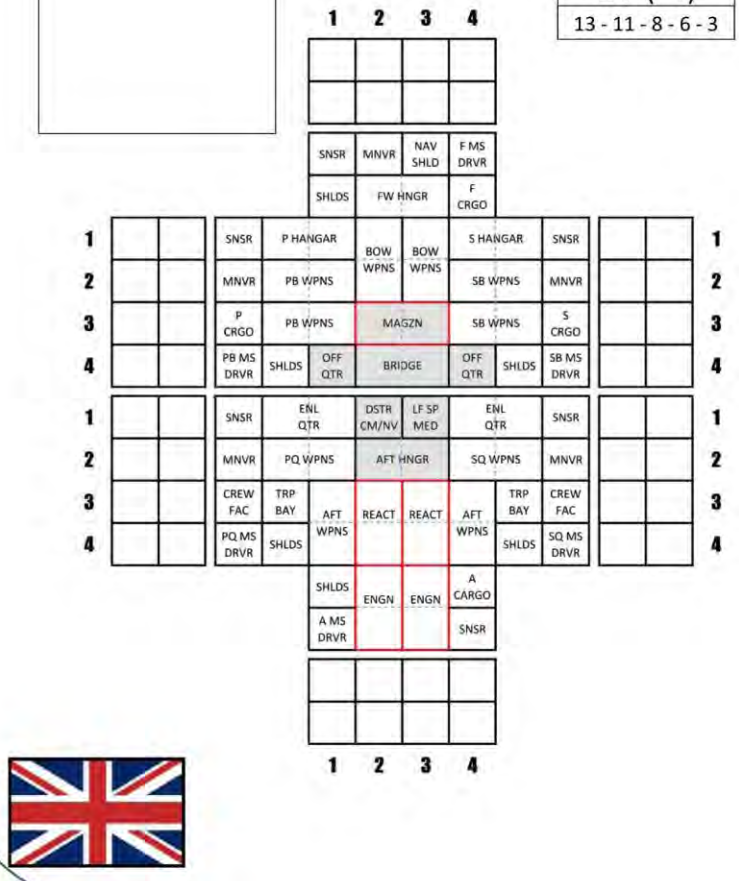
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	%
Initiative Modifiers	
Thrust Reduction:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
16 (+1)
13 - 11 - 8 - 6 - 3



ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Advanced
Base Scenario Cost	48
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	50

PQ SHD	AFT SHD	SQ SHD
4	4	4

2. Captain: Name of the ship's commander. There a campaign play options for tracking and advancing the career of a commander and his/her crew (**Rules 5.5**, **5.6**, **5.7**).

3. Ship Class: The class of the ship (e.g., *Valcour* Class).

4. Ship Type: The type of the ship (e.g., Destroyer).

5. Status and Points: These areas are used for tracking how many "campaign points" the ship has accrued through surviving and winning battles.

6. Thrust: This field records the ship's available thrust. Thrust points are applied to accelerate or decelerate the ship's velocity, as well as make turns or other maneuvers. It is part of the class' design, but can be upgraded through campaign points or reduced by engine and reactor damage during play.

7. CIC (+/-): CIC stands for Combat Information Center, the "tactical nerve center" of the ship. The +/- number recorded here (if any) indicates whether the ship gets a bonus (or penalty) for using its weapons in game play.

8. Mass, Cargo, Crew / Passengers: These record how much the ships "weighs" in space, how much cargo it can carry, and how many crew it takes to operate the ship. None of these have effect in game play, but aren't exactly "fluff" either. These figures are the product of equations in the class' design, and have contributed to the ship's available thrust (in the form of a mass / surplus power ratio) and scenario point cost.

9. Darkstar Wave: A measure of how fast the ship can travel in FTL. All combat and tactical tabletop play takes place at sublight speeds, so this has no immediate effect on the actual game table. However, it has a big effect on campaign play, and again has effected the ship's available power, thrust, and scenario points value.

10. Range Table: This is a reference field for general game play, and not part of the ship's design. This exact table appears on *all* Warship Design Sheets. It shows the **base to-hit** numbers (you must roll this number or *less*) on a d10 to hit at the corresponding range brackets, counted in hexes.

11. Cost To Turn: This is a reference field for general game play, and not part of the ship's design. This exact table appears on *all* Warship Design Sheets. It shows how many thrust points it cost to make one hex-side turn in a ship's facing at these corresponding velocities. As this chart shows, actual velocity is more or less unlimited (these ships operate in open space remember), but the faster they're moving, the more energy it takes to effect a change in the ship's course.

12. Main Armament: These fields list the weapons carried by the warship.

A. First is the number of individual weapons in a given mount, along with any to-hit bonuses inherent in the ship's design (CIC bonuses).

B. Next is the name of the weapon, and in parentheses, a series of **Damage Numbers**. These are a measure of how hard the weapon hits at different ranges. Each sequential **Damage Number** corresponds to a range bracket on the **Range Table**, and show how much damage the weapon does to a target in that range bracket.

C. Finally, each weapons mount has a location, that designates its firing arc.

D. Example: USS *Princeton* carries three double turrets of 5-gigawatt rail guns. Three lines indicate three turrets, each with a "2" for two guns per turret. The guns have a +1 bonus to hit thanks to the *Valcour* class' advanced targeting electronics in its CIC. They do 2 points of damage in the 0-1 hex range bracket, 2 points of damage in the 2-3 hex range bracket, 1 point of damage at 4-6 hexes, 1 point at 7-10 hexes, and zero damage at any range past that. Two of these double turrets fire forward (bow) and one fires aft (stern). Note that the *Princeton's* two 6-megakelvin laser arrays do different damage in different shapes, and rates of fall-off over range.

MAIN ARMAMENT		
NO.	TYPE	MOUNT
2 (+1)	5 GW Rail Guns (Block 2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (Block 2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (Block 2,2,1,1,0,0,0)	Stern
1 (+1)	6 MgKv Laser (Beam 2,2,2,1,1,1,0)	Bow
1 (+1)	6 MgKv Laser (Beam 2,2,2,1,1,1,0)	Stern
3 (+1)	Class IV Torp (Torp 4)	P Bw
3 (+1)	Class IV Torp (Torp 4)	S Bw

E. For torpedo bays, the data line also contains four boxes, which are marked off each time a torpedo spread is fired. These weapons have a limited ammo load. All ships carry the same four general "shots."

13. Secondary Armament: This field might contain any additional weapons that couldn't fit in the main armament field. Most often it contains **mass drivers** which are used to shoot down enemy torpedoes or aerospace craft. They have no effect on enemy warships.

14. Small Craft / Marines: This field records any aerospace fighters, bombers, scouts, or assault boats the ship might carry, as well as cutters, launches, yachts, or marines.

15. Status (Dmg'd Systems): These fields track all the systems that can take incremental damage during game play (**Rules Section 4.9.3**). If certain boxes in a ship's internal structure are hit, these can result in penalties to aspects of the ship's performance. **Core Boxes Hit** also tracks the likelihood that the ship will be forced to break off from the action (**Rules Section 4.9.4**), while **Critical Boxes Hit** tracks how close the ship might be to losing power (crippled) or even exploding (**Rules Section 4.9.1-2**).

16. Engineering: In these fields, players record the ship's current initiative and velocity.

A. For each turn, initiative is a d6 roll + Ship's Thrust + certain modifiers (**Rules Section 4.1**). The resulting number is written here for each turn, and determines the order in which that ship must make its movement during that particular turn.

B. For each turn, players also record their ship's velocity. This is space, there is no "maximum speed." The ship's thrust merely indicates how much energy the ship has available to speed up, slow down, or make turns in a given movement phase. Whatever speed the ship winds up at for a given turn, must be recorded here because it determines the ships' *beginning* speed for the *next* turn.

17. Shield Boxes: These are six boxes, one for each facing of the ship (bow, stern, port bow, starboard bow, port quarter, starboard quarter). The number in this box indicates the strength of the ship's gravitic shielding and ECM suite in that facing. In game terms, this is the number the enemy must *subtract* from his base to hit number for whatever range he is shooting from to get an adjusted target number to hit.

A. Shields can be knocked out, at which time this number is scratched off. For the rest of the game, the ship's ECM/Shield rating on that facing is zero.

18. Mass Drivers: This box displays a number that indicates the strength of the ship's point-defense system. In summary, this number shows which row on the Mass Driver Chart the ships gets to roll on when defending against enemy small craft or torpedoes, plus any bonuses the ship might get for CIC systems or enhanced electronic warfare bonuses (**Rules Section 4.4.1**).

A. Note the five incrementally smaller numbers beneath the large number. Each time a mass driver section is lost to enemy fire (there are almost always six, one for each facing of the ship), the current mass driver number is crossed off and the next smaller number is used instead.

19. Captain / Crew Bonuses: This box records any upgrades, enhancements, or promotions the ship, her captain, or her crew may have earned in campaign play (**Rules Section 5.7**).

20. Damage Chart: This is a diagram of the ship's general armor and internal systems, where impact and damage of enemy weapons fire is tracked.

A. Each **type** of ship (frigate, destroyer, light cruiser, etc.) has its own size of damage chart.

B. All ship **classes** of a given **type** use the same chart.

C. Each type also has a number of columns "available" to be hit on each of its six facings.

i. Gunboats 1

ii. Corvettes 2

iii. Frigates 3

iv. Destroyers 4

v. Light Cruisers 5

vi. Heavy Cruisers 6

vii. Battleships 10

21. Power Plant Type: This field indicates whether the ship has an standard, advanced, or dated power plant. No immediate effect on game play, but during design this value directly effected the ship's available power for weapons and thrust, as well as its scenario point cost.

22. Scenario Point Costs: The last fields on the sheet show the math that adds up to the ship's final scenario point cost.

A. This is spelled out on the record sheet because **Upgrades** purchased through campaign play can drive up the scenario point cost of the ship (**Rules Section 5.6.5.D**).

B. If players use campaign play and start to upgrade the abilities of their ship, these fields should be carefully maintained between games so the true capabilities of their more powerful ships are properly accounted for when balancing prospective scenarios.

3.5 SCENARIOS

Scenario Design, Scoring, and Examples are handled in more detail in Sections **5.1**, **5.2**, and **5.3** of this reference. But to *begin* play, here are some general notes on the types of scenario. While general rules are always the same, special rules (such as the presence of astrophysical bodies, their movement, gravity, and atmospheres), may be different. Furthermore, victory conditions will be different, based on the three basic scenario types below:

1. Assaults: Assaults are "hit and stay" missions, where the battle is being fought over permanent control of a certain sector of space. These are often near larger planets or moons, sometimes with an installation present. In game terms, victory is determined by comparing the scenario values of all ships left *remaining* in the battle area at the end of the game (i.e., the side that has "survived with the most."

2. Raids: Raids are faster "hit and run" missions, often deeper in space around small moons, asteroids, or outposts. No one is trying to "take and hold" anything, just take a slice out of enemy strength while keeping their own strength intact. In game terms, victory is determined by comparing scenario values of all ships *lost* during the battle (i.e., which side managed to inflict more material damage on the other).

3. Missions: Missions are often the most complex scenarios and difficult to balance. Most of these options will be covered in future supplements, but can include capture of certain enemy ships, landing a ground invasion force on the surface of an enemy colony, interdiction of an enemy supply convoy, minefield clearance, etc.

3.6 TURN SEQUENCE

Darkstar can seem like a complex game. Probably the best way to manage that perceived complexity is strict adherence to the **Turn Sequence**, listed below. A print-friendly version of the Turn Sequence is also provided at the back of this reference, we recommend printing few hard copies of this for easy reference during tabletop play.

Note that not everything that takes place on this turn sequence is covered in this beginning rules set. Some rules (like ship docking, boarding actions, ground assaults) will be covered in later references. They are presented here in the interest of having one cohesive and universal turn sequence.

1. Initiative Phase

A. Roll d6 + Ship Thrust for reach ship, record scores for current round.

B. Remember to add modifiers for any upgraded thrust, upgraded tactics, or penalties for damaged bridge/CIC compartments.

C. In the event of a tie, move larger ship **type** first. In event of a tie between two ships of same **type**, move ship with lowest thrust rating first. If adjusted roll, ship type, and thrust are all the same, roll d10 tie breaker dice.

2. Movement Phase

A. Starting with lowest initiative score, move warships (after astrophysical bodies and disabled ships - they move at the last facing and speed they recorded when they were crippled).

i. Note warship's starting velocity.

ii. Apply thrust to change velocity (accelerate or decelerate).

iii. Move ship, paying thrust for facing changes as ship is moved. Players are not allowed to change velocity in the middle of movement, only at the beginning and end. **No ship-to-ship collisions are ever allowed.**

iv. At the end of movement, apply remaining thrust to affect next turn's velocity (accelerate or decelerate).

v. Make capital ship docking attempts (must have matched facing / velocity).

B. Aerospace Movement

i. Each side (not nation) rolls d10 for aerospace initiative.

ii. Aerospace craft launches (place in adjacent hex to appropriate hangar).

iii. Move warship torpedoes already launched (initiative loser first). Identify which torpedoes enter target hexes (will hit this turn), and which facing of the target ship they will hit.

iv. Move assault boats (initiative loser first).

v. Move bombers (initiative loser first).

vi. Move fighters (initiative loser first).

vii. Move scouts (initiative loser first).

3. Combat Phase

A. Aerospace Combat

i. Resolve anti-aerospace defensive fire (note that any mass drivers that shoot at aerospace craft will be unable to shoot at torpedoes later in the turn).

ii. Resolve aerospace attacks (all simultaneous).

a. Dogfights against other aerospace craft.

b. Missile / Torpedo launches (launch and move to full range, impact same round).

c. Gunnery / strafing attacks against capital ships.

iii. Resolving docking / landing attempts.

B. Torpedo and Missile Impacts

i. Identify torpedoes in target hex (including aerospace torpedoes and missiles)

ii. Resolve mass driver / aerospace defensive fire vs. missiles. Remove torpedoes that were shot down.

iii. Resolve remaining torpedo / missile hits vs. shields (i.e., see if these warheads actually hit the hull).

iv. Roll for hit location and apply damage.

C. Capital Ship Combat

i. Ascertain range, available arcs of fire for the firing ship, shield facing of the target ship. This gives you which weapons can shoot, the base to-hit number, and the modifier to this number that is applied by the target ship's shields. This modified d10 to-hit number is what must be rolled to score a hit.

ii. Determine gunnery hits (roll d10s).

iii. For each impact that hits, roll hit location and apply damage. Note that new damage inflicted in this phase does not take effect until the Resolution Phase.

iii. Opposing player also gets to roll hits and apply damage here.

D. Launch Warship Torpedoes (place in ship's hex).

i. Mark off torpedo salvo on WRS ammo record.

E. Resolve Boarding Actions / Shipboard Combat.

4. Resolution Phase

A. Check for Ships Disabled.

i. Check if **Bridge / CIC** compartments are *completely* filled in.

ii. Check **Critical Compartment** damage (Engines boxes, Reactors boxes, Magazine boxes), shown in red.

iii. If any *new* Critical Compartment boxes were

marked off this round, determine if d6+ roll is required to cripple the ship.

iv. Opposing players makes any applicable rolls to see if ships are crippled.

v. Check for ship explosions by comparing Critical Compartment damage to explosion chance, owning player makes the roll.

vi. If any explosions are triggered, resolve collateral damage against nearby ships, installations, and aerospace units.

C. Ships Breaking Off

i. Was at least one box marked off in core area *this* round (marked in gray on warship record sheet)?

ii. Count all boxes in the core area, multiply by ship class factor.

iii. Roll percentile dice to see if ship is forced to break off starting with upcoming movement phase.

D. Resolve / Record Effects of Damaged Components

i. For any ships not crippled or exploded, review new damage and assess any game effects on the modifier section of the warship record sheet. These effects all take effect at the beginning of next turn.

3.7 TIPS FOR STARTING A GAME

Before a game of *Darkstar* actually kicks off, here are a few helpful tips, last-minute checks, and some general helpful hints that might make the game more enjoyable for everyone.

1. Scenario Points: Double check the math on the scenario point value on all the warships involved. This final number is recorded at the lower right corner of each warship record sheet (WRS), but if these are veteran ships that have purchased a few upgrades, this math may well have changed and could kick the game into unfair imbalance.

A. Victory Point Modifiers (VPMs): If the game really is imbalanced, consider applying the percentage of difference as a victory point bonus to the disadvantaged player (**Rules Section 5.1.3**).

2. Warship Record Sheets (WRS): Ensure any markings, numbers, notes from previous games are removed from the warship record sheets.

3. Establish Approach Velocities: Ships are never sitting still waiting for combat. Usually the two sides (often called "battle groups" or "task forces") are approaching each other. Before the official opening of the first turn, agree if there are any minimums or maximums for approach speeds.

A. Usually an opening velocity in the range of 8 to 15 is a pretty good idea.

4. Astrophysical Bodies: Place any asteroids, moons, or planets on the map. If there are more than one, allow players to alternate placement. Ensure none are in gravitational influence of any other. Double check to ensure that if any are moving, everyone knows their direction and speed, and they will not collide with any other astrophysical body or installation.

5. Opening Turn: Usually, ships enter opposing sides of the table. This doesn't *have* to be the case, one side may have an installation on the table, and their warships may be set up around them. In any event, once initiatives are rolled and the first turn officially begins, ships usually enter the map or start moving on the map in the order of that initiative (losers always move first).

6. Helpful Hints: Here are a few pointers that might help games run a little more smoothly:

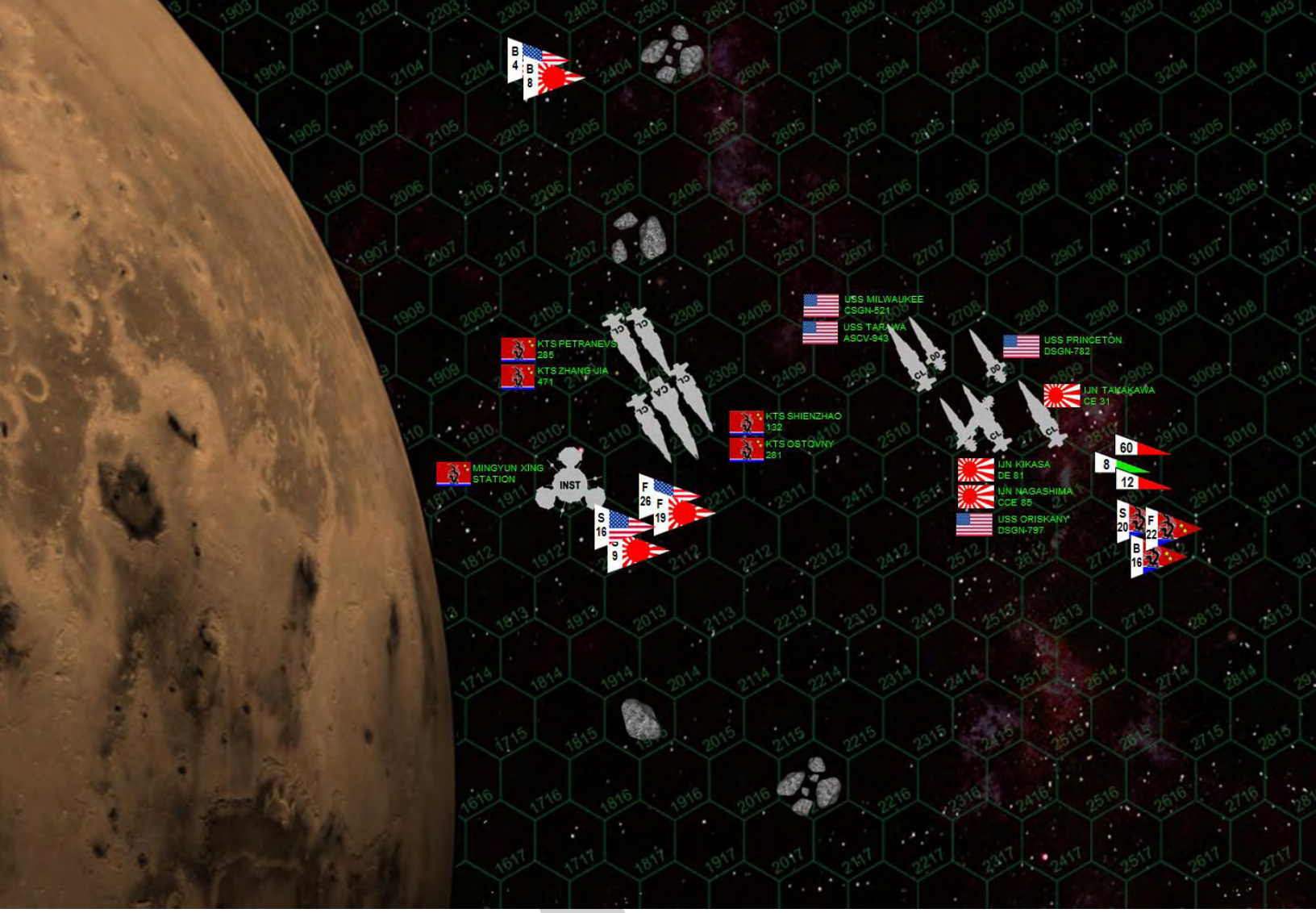
A. Don't go too fast: *Darkstar* is a game with no upper limit on speed. But the faster you're going, the more thrust it costs to turn and slow down. This is especially dangerous for larger ships with low thrust ratings (heavy cruisers and battleships.

B. Never end your turn facing toward a planet or asteroid. If you are crippled in such a state, your ship is doomed. Most crippled ships can come back if recovered (especially if you have the Commander's Luck campaign upgrade), but a ship that crashes into an astrophysical body is gone forever.

C. Marking damage on WRS: When marking damage on your Warship Record Sheet, consider using a dot or slash. Then, during the Resolution Phase, as you're assessing the effects of this damage, complete these slashes into "X"s. In this way you keep track of which damage took place *this turn* as opposed to previous turns. Remember, damage taken in a turn does not take effect until the Resolution Phase. This is because all gunfire is considered simultaneous, and guns you lose to enemy fire might be firing at the same time back at your opponents.

D. Keep your fleet together. Torpedoes and aerospace ordinance strikes are devastating weapons that can *easily* break warships in a single swing, but the danger is offset by your ability to shoot down incoming warheads with mass drivers before they hit your hull. This works best if your ships are relatively close together so they can "cover each other" by combining mass driver defensive fire.

E. Watch your "six." Note that almost all of the red "critical compartment" boxes on WRS damage charts are on the back of the ship in the form of reactors and engines. Taking too much fire directly astern is easily the fastest way to lose a ship. Don't let the enemy get too close behind you.



SECTION FOUR - THE DARKSTAR TURN

INTRODUCTION

Darkstar is played in turns, laid out in phases. Strict adherence to these phases, and not doing things out of sequence, is crucial to easy, fair, and fun play. The turn sequence has been carefully designed so that, by adhering to its steps, "unrealistic" things don't happen, most ambiguity in the rules will evaporate, and everyone can "trust" the results of the action since there are no unpleasant surprises regarding what happens in the rules or when.

In summary, the Darkstar turn goes generally like this:

Players **Roll Initiative**. Players roll one d6 dice for each ship in their fleet. The ship's thrust and other modifiers are added to this number for an adjusted initiative score. This is recorded, each turn, on the Warship Record Sheet (WRS)

Players then conduct **Movement**. Drifting objects move first (crippled ships and moving astrophysical bodies), then warships starting with the poorest rolls first. Once all warships have moved, torpedoes launched in previous turns move, possibly into contact with their intended targets. Then aerospace craft move, starting with the slowest types.

Players then begin **Combat**. This starts with any mass driver defensive fire against aerospace craft. Remaining aerospace craft then conduct their attacks, either on each other, strafing warships, or launching torpedoes and missiles. Once all any/all aerospace torpedoes and missiles have been launched, warships get a chance to shoot down any warheads they can. Finally, remaining warheads (both from warships and aerospace craft) get a chance to hit their targets, subject to shields.

Warships then conduct gunfire against each other, determining eligibility of what guns can hit, what the to-hit number is for the range, and modifying this number for target's shielding and ECM. Hits are rolled and damage is assessed. New torpedoes are launched for next round.

Finally, players conduct **Resolution**. Damage that was just taken is assessed, and determinations are made whether any ships must break off, are crippled, or are destroyed. Any surviving ships then assess new effects or penalty modifiers to systems based on damage just sustained.

Once all this is complete and double-checked, the round is over, and initiative is rolled for the next turn.

4.1 ROLLING INITIATIVE

The first phase of a turn in *Darkstar* is to determine **Initiative** for each warship. This indicates the order in which the ship will execute its movement. In general, it's always best to move as late as possible, so you can make the best decisions based on where everyone around you has already moved.

Of course in actual combat, all these ships are moving at the same time. Thus, **Initiative** is really an abstracted indicator of how agile, reflexive, and just plain lucky each ship is (and the skill / experience of her commander).

1. Each ship rolls a d6. Higher rolls are considered better.

2. Each ship adds its **Thrust** to the result of the d6 roll.

A. IMPORTANT: Players sometimes get "**Thrust**" confused with "Speed" or "Velocity." Speed or Velocity is simply a measure of how fast your ship happens to be moving at this moment. There *is no* maximum speed for any ship class or type. **Thrust** is a measure of your ship's available engine power compared to its mass, thus how quickly it can accelerate, decelerate, or make turns. **NEVER** add your Initiative d6 to your *speed*. This d6 is added to your **Thrust** (upper right hand corner of your WRS).

3. Modifiers: Note that Thrust can be reduced by battle damage. If your ship has lost Reactors or Engines in previous turns and is now operating with reduced Thrust, remember to add your *adjusted* thrust to your d6 roll (see **Rules Section 4.9.3.F** for details on Engine and Reactor damage).

A. Veteran ships may have added additional Thrust through certain **Upgrades**. As with battle damage, remember to add your *adjusted* Thrust to your d6 Initiative roll (**Rules Section 5.7.6**).

B. Veteran ships may have picked up certain **Upgrades** that give a straight +2 to their Initiative roll (Starship Tactics). Remember to add this to the initiative roll as well, if applicable (**Rules Section 5.7.9**).

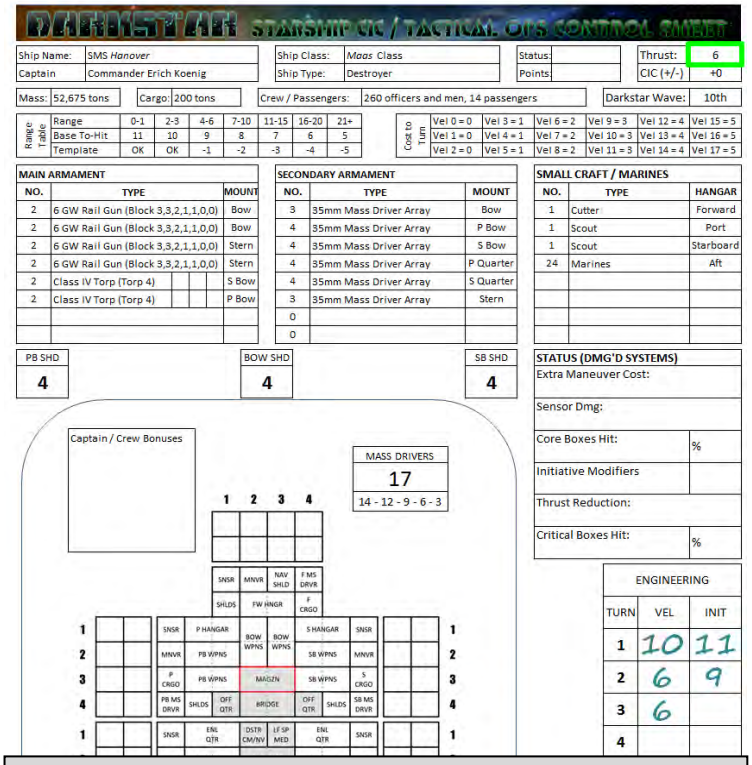
4. Record each ship's initiative number (d6 + Thrust +/- Modifiers) for the current turn on the warships record sheet.

5. Breaking ties: If any opposing warships wind up with the same final initiative, resolve in the following method:

A. Ships with the "heaviest type" always lose against ships with "lighter" types. Battleships move before Heavy Cruisers, which move before Light Cruisers, which move before Destroyers, which move before Frigates, which move before Corvettes, which move before Gunboats.

B. If two ships have tied Initiative numbers and are in the same Type, the ship with the lower **Thrust** moves first.

C. If two ships have tied Initiative numbers, in the same Type, and have the same Thrust, roll another d6 to break the tie.



DARKSTAR STARSHIP CIC / TACTICAL OPS CONTROL SHEET

Ship Name:	SMS *Hanover*	Ship Class:	*Maas* Class	Status:		Thrust:	6
Captain	Commander Erich Koenig	Ship Type:	Destroyer	Points:		CIC (+/-)	+0

Mass: 52,675 tons | Cargo: 200 tons | Crew / Passengers: 260 officers and men, 14 passengers | Darkstar Wave: 10th

Range Table							
Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
Base To-Hit	11	10	9	8	7	6	5
Template	OK	OK	-1	-2	-3	-4	-5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5	
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5	
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5	

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Stern
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Stern
2	Class IV Torp (Torp 4)	S Bow
2	Class IV Torp (Torp 4)	P Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	35mm Mass Driver Array	Bow
4	35mm Mass Driver Array	P Bow
4	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Quarter
4	35mm Mass Driver Array	S Quarter
3	35mm Mass Driver Array	Stern
0		
0		

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scout	Port
1	Scout	Starboard
24	Marines	Aft

PB SHD 4 | BOW SHD 4 | SB SHD 4

STATUS (DMG'D SYSTEMS)
Extra Maneuver Cost:
Sensor Dmg:
Core Boxes Hit: %
Initiative Modifiers
Thrust Reduction:
Critical Boxes Hit: %

Captain / Crew Bonuses

MASS DRIVERS 17 (14 - 12 - 9 - 6 - 3)

ENGINEERING

TURN	VEL	INIT
1	10	11
2	6	9
3	6	
4		

An example of filling our a *Darkstar* Warship Record Sheet (WRS). This ship declared and recorded before the game actually started, an initial velocity of 10. Her captain wrote it in "Turn 1" row or "Vel" (Velocity). He then rolled a 5 for his Turn 1 initiative, adding it to his Thrust of 6 (green box at upper right - no modifiers for Upgrades or engine / reactor damage), giving him an initiative of 11. As part of his movement on Turn 1, he applied 4 of his 6 Thrust points to decelerate, giving him a final velocity of 6, which he records for reference when Turn 2 begins. At the beginning of Turn 2, he rolls another d6 for initiative. This time he gets a 3, adding to his Thirst of 6 for an Initiative number of 9. During Turn 2 movement, he spends one point to accelerate, then two points to make a turn, two points to make a second turn, and finally one more point to decelerate back to 6. With an ending velocity of 6, he records this for future reference in Turn 3.

6. Installations never roll initiative since they never move. Aerospace craft do not roll initiative at this time.

7. Gameplay Tip: usually the best way to do this is to have everyone record their initiative numbers on the sheets, then start calling out numbers starting with the lowest. "Does anyone have a 4, a 5, a 6? Okay, our lowest is a six. Move your ship. Who has a 7?" . . . and so on.

8. Example: Six warships (the British, three Russian) are engaged in a battle, and are starting a turn. They each roll a d6 and add it to their Thrust.

- The Russian heavy cruiser rolls a 4, adding this to her Thrust of 4. Her Initiative number is 8.
- The Russian light cruiser rolls a 3, adding this to her Thrust of 5. Her initiative number is also an 8.
- The Russian destroyer rolls a 1, adding this to her Thrust of 6. Her initiative number is a 7.
- The British heavy cruiser rolls a 3, adding to her Thrust of 4, for an initiative number of 7. However, she's taken enough damage to her port engines to reduce her Thrust

to 3. She actually only gets an initiative of 6.

- The British light cruiser rolls a 3, adding it her Thrust of 5, giving her an Initiative number of 8.
- The British destroyer rolls a 6, adding it to her Thrust of 6. However, she's been upgraded with the "Sublight Engineering" campaign advantage, giving her a Thrust of 7. Her final Initiative is thus a 13.

Okay, the Russian heavy cruiser and Russian light cruiser both wound up with an 8, bit they are on the same side so don't have to "roll off" against each other.

- The British heavy cruiser, with damaged engines, has the lowest adjusted initiative (a 6), and thus has to move first.
- The unlucky Russian destroyer is next with a 7.
- We then have three ships with an 8. The Russian heavy cruiser, being the largest type, automatically has to move next. Then the Russian light cruiser and British light cruiser both have an 8. They are of the same type, and both have a thrust of 5. Completely tied, they have to dice off.
- Finally, the swift British destroyer, with a great initiative of 13, gets to go last.

4.2 WARSHIP MOVEMENT

Warship movement is one of the hallmark features of *Darkstar*. It tries (in a very rudimentary way) to replicate the "Newtonian" physics by which starships would actually move in space. There is *no* "top speed." In fact, if you look at the WRS, you'll find no value for "Speed" of the ship at all. There is only **Thrust**, which describes to what degree a ships can accelerate, decelerate, and make turns.

Also, ships never slow down on their own. Voyager 2 spent its last "thrust point" in 1989 and will pass its first star 40,000 years from now, still moving at the same speed. Only when Thrust is spent to decelerate does velocity decrease.

Thus, players in *Darkstar* aren't "conducting movement" so much as "managing momentum."

Ships are moved in the order indicated in the Initiative Phase. Clearly, ships who "lost" initiative and have to move first are at a disadvantage, since ships who "won" initiative and get to move afterwards can make their move based on where less agile ships have already taken position for the upcoming turn.

Astrophysical bodies (if they are moving) always move first, as do any warships crippled in previous turns. Disabled warships and astrophysical bodies always "lose initiative." Astrophysical bodies move however many hexes indicated in the scenario, and disabled warships move as fast as they were moving on the turn in which they were disabled.

1. Note Beginning Velocity and facing. Take a look at the ship's starting velocity for the turn. This will be whatever her velocity was at the end of last turn, or initial approach velocity for the scenario. Also, note the ship's facing.

A. IMPORTANT: As we've said before, but we'll repeat it here ... at all times, a ship *must be clearly facing one side* of a hex (not the "point" of a hex).

B. Also, ensure your ship has taken no engine, reactor, or maneuvering thruster damage. If she has, just remember to apply the appropriate modifiers to your available Thrust and costs to turn (**Rules Section 4.9.3**).

2. Apply Thrust to Change Velocity. At this time, before you actually start moving, you can spend thrust points to either speed up or slow down.

A. IMPORTANT: You cannot change velocity in the *middle* of movement. If you want to speed up or slow down, you have to do it now at the *beginning* of your movement or at the *end* of your movement. You cannot do it partway.

3. Move hexes. Start moving hexes, according to your adjusted velocity (starting velocity for the turn, plus or minus hexes if you sped up or slowed down).

A. IMPORTANT: You cannot elect to move *less* hexes than indicated by your velocity. You can slow down at the beginning of the movement phase by spending thrust points (as stated above). But once you start moving your ship, your *have* to move that number of hexes. So yes, it is very possible to "overshoot" a target.

Cost to Turn						
	Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
	Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
	Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

B. IMPORTANT: Ships can only move in the direction they are facing. They cannot move sideways or backwards (exception - Gravity Movement, see below).

4. Make Turns. Ships can naturally make turns at any time during their movement. However, each hex side facing costs a certain number of Thrust points.

A. The cost for a one hex-side facing change is related to the current velocity of the ship.

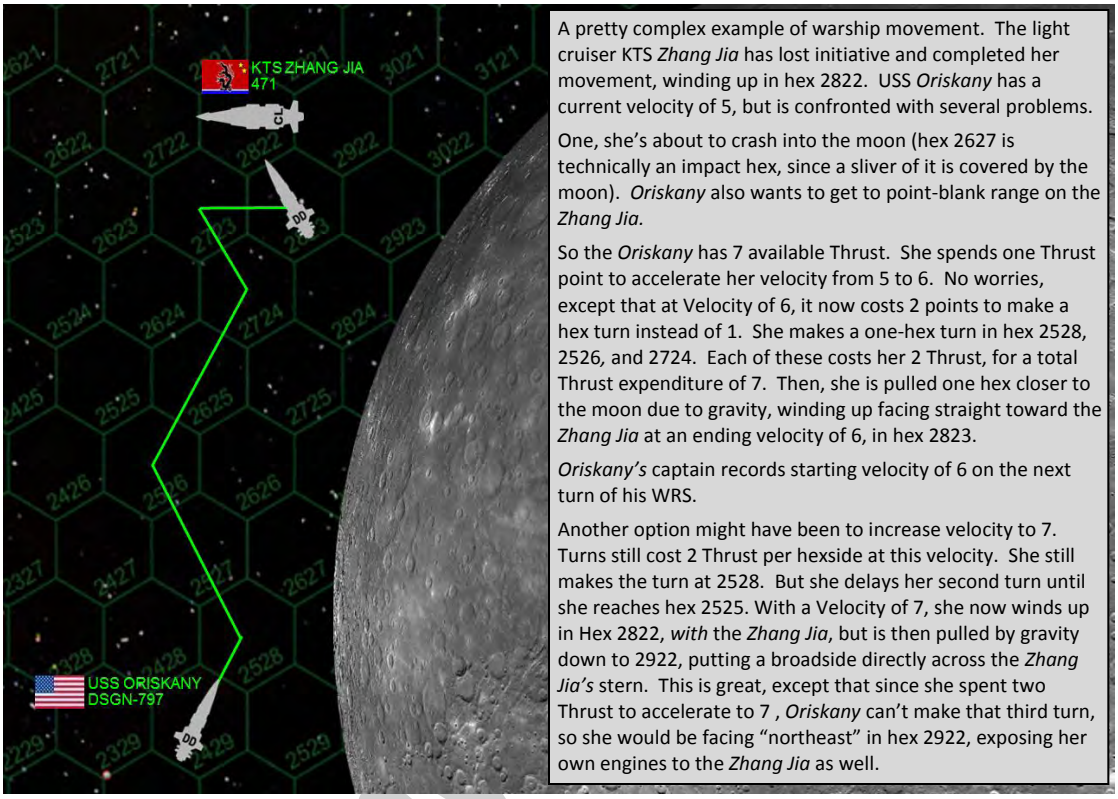
B. The Thrust cost for a hex side change is clearly listed on the **Quick Reference Sheet**, and also on every copy of every **Warship Reference Sheet**, as shown below.

C. Ships can make as many facing changes in one hex as they want, so long as they have the Thrust points available to make the turns at the speeds at which they are travelling.

D. Clearly, it is far easier to turn at lower speeds than higher speeds. Ships at high speeds are moving very fast, but are not very maneuverable. For this reason it is advisable for heavy ships to keep their speed relatively low.

E. The Thrust cost to turn is always the same for even the largest warship. The difference is that larger warships have less Thrust points to spend, and so are less maneuverable by the parameters of this table.

F. Note ships can suffer damage to their **Maneuver Thrusters**, which increases the cost for every single turn they make on this chart, making it much more expensive for a hex-side turn.



A pretty complex example of warship movement. The light cruiser KTS *Zhang Jia* has lost initiative and completed her movement, winding up in hex 2822. USS *Oriskany* has a current velocity of 5, but is confronted with several problems.

One, she's about to crash into the moon (hex 2627 is technically an impact hex, since a sliver of it is covered by the moon). *Oriskany* also wants to get to point-blank range on the *Zhang Jia.*

So the *Oriskany* has 7 available Thrust. She spends one Thrust point to accelerate her velocity from 5 to 6. No worries, except that at Velocity of 6, it now costs 2 points to make a hex turn instead of 1. She makes a one-hex turn in hex 2528, 2526, and 2724. Each of these costs her 2 Thrust, for a total Thrust expenditure of 7. Then, she is pulled one hex closer to the moon due to gravity, winding up facing straight toward the *Zhang Jia* at an ending velocity of 6, in hex 2823.

Oriskany's captain records starting velocity of 6 on the next turn of his WRS.

Another option might have been to increase velocity to 7. Turns still cost 2 Thrust per hexside at this velocity. She still makes the turn at 2528. But she delays her second turn until she reaches hex 2525. With a Velocity of 7, she now winds up in Hex 2822, *with* the *Zhang Jia*, but is then pulled by gravity down to 2922, putting a broadside directly across the *Zhang Jia's* stern. This is great, except that since she spent two Thrust to accelerate to 7 , *Oriskany* can't make that third turn, so she would be facing "northeast" in hex 2922, exposing her own engines to the *Zhang Jia* as well.

5. Rolling. Regardless of speed, ships can spend one Thrust point to "roll" their ship over in space, thus inverting themselves relative to other ships and the local battle space. This can be extremely useful when one side of your ship is heavily damaged, you've lost weapons on a certain side of your ship, or the torpedo tubes on one side of your ship are exhausted.

A. To indicate an inverted ship, simply place any convenient marker or token by the ship to clearly indicate to all players that the ship is inverted.

B. Speed and facing remain unchanged. Only the orientation of port and starboard sides are reversed.

C. Of course, ships can only invert along their forward-aft axis (thus reversing their port and starboard sides). They cannot "tumble" and reverse their bow and stern orientation, at least not without spending the Thrust cost for three hex-side facing changes.

6. Apply Gravity Movement. If you have *ended* movement within gravitational range of an astrophysical body, you must now move your ship accordingly. This is almost always one hex toward the astrophysical body. Velocity and facing unchanged (**Rules Section 3.3.6**).

7. Apply Ending Velocity Changes. If you have any Thrust points left over, you can either not spend them, apply them to speed up your beginning velocity next turn, or apply them to slow down your beginning velocity for next turn.

8. Note Starting Velocity for Next Turn. Wherever your velocity ended up, after all acceleration or deceleration at the beginning of the movement phase, and all acceleration or deceleration at the end of the movement phase, record this in the "Turn Velocity" field of the *next* turn on your WRS. This way you don't have to remember how fast this ship was moving at the beginning of next turn.

9. Warship Docking Attempts: Future supplements will include additional rules for warships attempting to dock with each other. This is the phase of the turn sequence where such actions will be taken.

A. Ships must be heading in the same direction and at the same velocity at the end of both of their movement phases in order to dock.

B. Friendly ships that meet the above conditions can always dock without a roll. Rules for how warships *start* their movement phase already docked together will be covered in future supplements.

C. "Contested" dockings with enemy ships must be rolled, assuming both ships don't welcome the rendezvous. Rules for such actions will be covered in future supplements.

10. Stacking: Remember that only **three ships** can ever complete their movement in the *same hex*. However, ships can freely move "through" each other. These hexes are 180 kilometers across, and technically speaking are three-dimensional as well. **Collisions are never allowed**. There are no rules for them. They don't happen in *Darkstar*.

4.3 AEROSPACE MOVEMENT

Fortunately, Aerospace Movement is far simpler. Each counter on the map represents one or more aerospace craft, grouped together into aerospace units.

1. Basics:

A. An aerospace unit (playing piece) contains aerospace craft of a given **type** (fighters, bombers, scouts, etc.).

B. Different **types** cannot be mixed into a single aerospace unit.

C. Aerospace units of different **types** can be stacked together into the same hex, but each unit moves in its own phase as determined by **type**.

D. Aerospace units do not track thrust, velocity, etc. They also have **no "facing."** They simply have a movement rate, and when the phase for their **type** comes up, they are allowed to move that number of hexes in any direction they choose.

E. Aerospace units do not have to move their full movement allowance. They can make as many turns as they like, so long as the number of hexes through which they move does not exceed their movement rating.

F. Aerospace units can split or combine with other units of the **same type**, at any time in their movement phase, assuming they're in the same hex when they do so.

G. At the end of their movement, aerospace units are allowed to use whatever attacks for which their weapons and current position qualify them. This takes place in the Aerospace Combat Phase (**Rules Section 4.4**).

2. Aerospace Initiative:

A. Both *sides* of a battle (not individual aerospace groups or even nations in team play) roll d10 for initiative.

B. Each side adds +1 to its roll for every *warship* or *installation* that is launching **elite** or **double elite** aerospace groups (see **Rules Section 5.7.8**).

C. The side that winds up with the higher number is considered the initiative winner.

3. Aerospace Movement: Aerospace units are moved in order according to **type** and **initiative**, as described below.

4. Aerospace Launches: Any warship or installation launching new aerospace units (regardless of type) does so now.

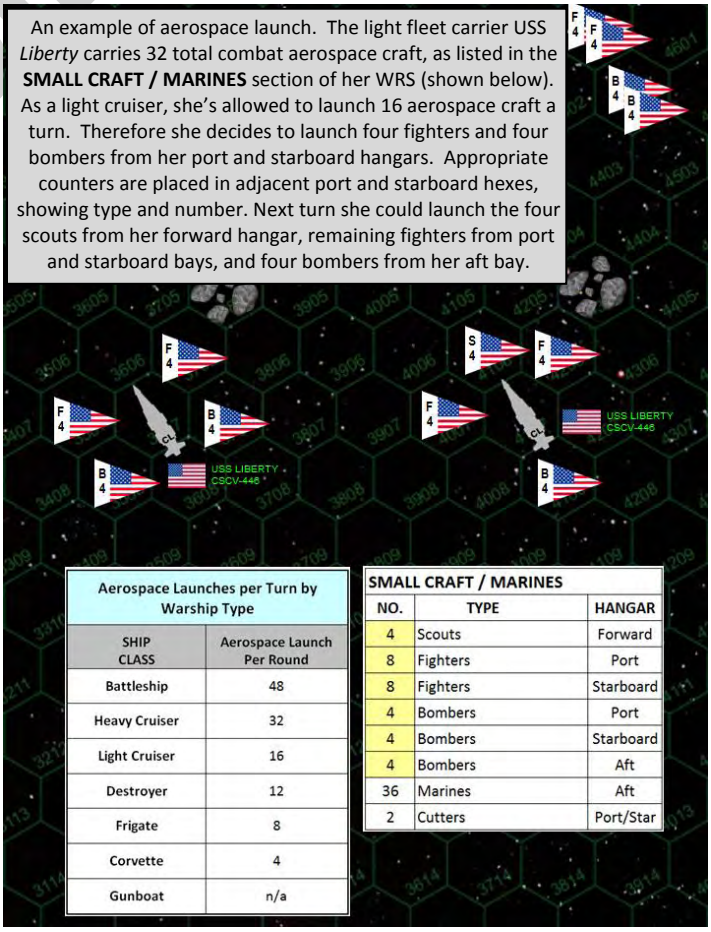
A. Please consult the below chart for the total number of aerospace craft a ship is allowed to launch in a given turn (this is always based on **warship type**). For dedicated aerospace carriers, this number should also be listed on the warship record sheet. If such a number does not appear on the WRS, assume the ship can launch all aerospace craft at once (usually 2-4 scouts for non-carrier warships).

B. To launch aerospace units, simply place the counter, token, or playing piece (that clearly indicates the aerospace type and the number of craft, see **Components, 3.1.3**) in a hex adjacent to the warship that launched the craft.

C. Aerospace craft launched from forward hangars should be placed on the adjacent hex in front of the mother warship. Aerospace craft from aft hangars should be placed on the adjacent hex behind the mother warship. Aerospace craft from either port or starboard hangars should be placed on either of the two hexes on the left or right of the mother warship.

Aerospace Launches per Turn by Warship Type	
SHIP CLASS	**Aerospace Launch Per Round**
Battleship	48
Heavy Cruiser	32
Light Cruiser	16
Destroyer	12
Frigate	8
Corvette	4
Gunboat	n/a

An example of aerospace launch. The light fleet carrier USS *Liberty* carries 32 total combat aerospace craft, as listed in the **SMALL CRAFT / MARINES** section of her WRS (shown below). As a light cruiser, she's allowed to launch 16 aerospace craft a turn. Therefore she decides to launch four fighters and four bombers from her port and starboard hangars. Appropriate counters are placed in adjacent port and starboard hexes, showing type and number. Next turn she could launch the four scouts from her forward hangar, remaining fighters from port and starboard bays, and four bombers from her aft bay.



Aerospace Launches per Turn by Warship Type	
SHIP CLASS	Aerospace Launch Per Round
Battleship	48
Heavy Cruiser	32
Light Cruiser	16
Destroyer	12
Frigate	8
Corvette	4
Gunboat	n/a

SMALL CRAFT / MARINES		
NO.	TYPE	HANGAR
4	Scouts	Forward
8	Fighters	Port
8	Fighters	Starboard
4	Bombers	Port
4	Bombers	Starboard
4	Bombers	Aft
36	Marines	Aft
2	Cutters	Port/Star

5. Move Warship Torpedoes: Any torpedoes launched from warships in the previous turn's combat phase should now be moved. The side that lost initiative moves all launched torpedo spreads first, then the side that won initiative moves all their torpedo spreads.

A. As with aerospace craft, torpedoes simply have a movement number that indicates how many hexes they can travel (determined by the 1-5 "class" of the torpedo, listed on **QRS**). This path of hexes is counted in any way the player decides, as long as it doesn't it an astrophysical body. There is no minimum required movement or limit on turns, so long as the total number of hexes through which the torpedoes passed does not exceed the movement rating.

B. If a torpedo spread reaches the hex of an enemy target, it strikes in the upcoming Combat Phase.

C. Be sure to indicate by the placement of the impacting torpedo spread counter **which facing** of the enemy warship or installation the spread intends to strike.

D. In order to strike a given facing of an enemy target, the torpedo spread must trace a movement line of hexes that takes it into the enemy hex **through the hex side corresponding** to the hex side to be struck. Put another way, your torpedoes have to enter ***from*** the hex adjacent to the target facing you want to hit.

6. Move Assault Boats: The side that lost initiative moves all Assault Boats. The side that won initiative then loves all their assault boats.

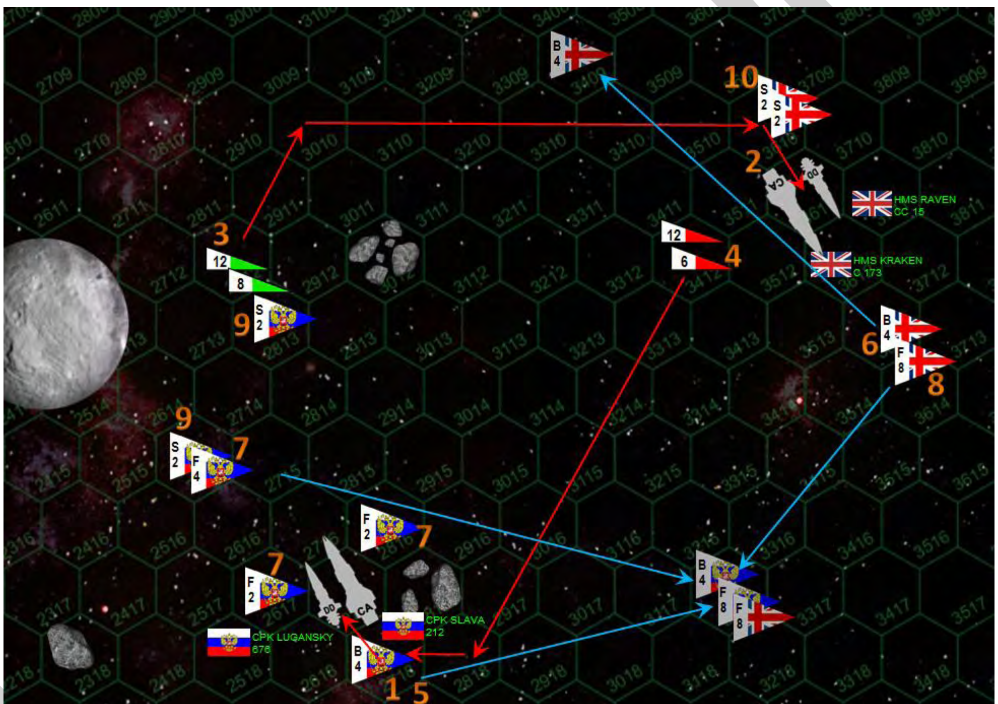
7. Move Bombers: The side that lost initiative moves all bombers, then the winner.

8. Move Fighters: The side that lost initiative moves all fighters, then the winner.

9. Move Scouts: The side that lost initiative moves all scouts. The side that won initiative then loves all their scouts.

A. Note that aerospace docking attempts (covered in future supplements), to include **aerospace recovery** on friendly carrier-class warships (covered in this reference), does not take place yet Docking / Landing is considered that aerospace unit's "attack" and therefore is handled in the Combat Phase. For now, if an aerospace unit wants to dock with or assault an enemy vessel, or land aboard a friendly carrier vessel, simply move the aerospace unit into the target hex and declare its intention.

B. Note that aerospace movement takes place in general sequence of heaviest, slowest types ships to the lightest, fastest ships. This is by design and should not be altered. It allows lighter, faster craft to "see" where the larger, heavier craft are going and what they are doing, and take action accordingly during their own movement phase.



An example of aerospace movement. We see a Russian heavy cruiser and a destroyer-type carrier up against a British heavy cruiser and destroyer-hulled carrier. In previous turns, both sides launched torpedoes and some of their aerospace groups. In this turn, asteroids and warships have all moved. Aerospace movement begins with initiative. The British carrier HMS *Raven* carries elite aerospace, so they get a +1 on their d10 initiative roll. The Russians roll a 4 and the British roll a 6+1=7. So the Russians start with (1) launching the last of their bombers from the aft bay of the *Lugansky*. (2) The British launch the last of their scouts. (3) Russians move their torpedoes, entering the aft side of HMS *Kraken's* hex. (4) British move their torpedoes, entering the rear hex of CPK *Slava*. (5) The Russians move their bombers. (6) The British movie their bombers. (7) The Russians move their fighters, combining three units into one, and moving to protect their bombers in the same hex. (8) The British move their fighters into the same hex to attack the Russian fighters and bombers. (9) The Russians move their scouts, (10) the British move their scouts to complete the aerospace movement phase.

Aerospace / Torpedo Movement	
Aerospace Unit	**Move**
Scout	15
Fighter	12
Bomber	10
Assault Boat	10
Class I Torpedo	12
Class II Torpedo	15
Class III Torpedo	17
Class IV Torpedo	18
Class V Torpedo	20

4.4 AEROSPACE COMBAT

Combat in *Darkstar* now takes place, where ships finally start shooting at each other and damage is assessed.

- Combat only takes place **after all movement is completed.**
- With one exception, all combat is **considered simultaneous**, with the effects of the turn's battle damage not being assessed and applied until the Resolution Phase (see below).
- Combat is handled in two essential phases**: Aerospace Combat** and **Warship Combat**. Aerospace Combat is resolved first.

1. Resolve Anti-Aerospace Defensive Fire. Both sides declare and resolve whether any of their warships will use any of their **mass driver** class weapons to engage and destroy enemy aerospace craft.

A. Mass driver class weapons are the only weapons on a warship allowed to engage aerospace craft.

B. Any mass driver weapons that fire at aerospace craft will not be able to shoot at torpedoes later in the turn.

C. A ship fires its mass driver weapons simply by referring to the **Mass Driver** box on its **WRS**. This box contains a number, and possibly a (+) modifier in parentheses. This number indicates the general strength of the warship's mass driver battery, and any bonuses it might get due to enhanced Bridge / CICs, Electronic Warfare Bonuses, etc.

MASS DRIVERS
28 (+1)
24 - 19 - 15 - 10 - 6

D. Find the row on the Mass Driver Table of the **Quick Reference Sheet** that corresponds to the warship's mass driver battery number.

E. Roll a d6 against that row, applying any modifiers that apply (details below). The resulting number is the number of aerospace craft shot down and ***immediately*** removed from play.

F. Note that this is the one exception to the general rule that all fire in a combat phase is simultaneous. Aerospace craft that are shot down here ***do not*** get to fire their weapons one last time, or launch missiles or torpedoes, or anything.

G. Partial Mass Driver Fire: Note that a warship does not have to fire its entire mass driver battery at a single target. If a ship has a Mass Driver value of 15, she can fire 5 at a group of fighters, 5 at another group of fighters (or bombers, or anything in range), and 5 against incoming torpedoes. **Any mass driver bonuses only apply *once.***

i. The limit on this division is **three** targets. Also, a **single aerospace unit can only be attacked by a single warship once**, do not divide a single attack into two smaller attacks and roll twice.

MASS DRIVER TABLE

MDF	-2	-1	0	1	2	3	4	5	6	7	8	9
1-3	0	0	0	0	0	0	1	1	2	3	4	5
4-6	0	0	0	0	0	1	1	2	3	4	5	6
7-9	0	0	0	0	1	1	2	3	4	5	6	7
10-12	0	0	0	1	1	2	3	4	5	6	7	8
13-15	0	0	1	1	2	3	4	5	6	7	8	9
16-18	0	1	1	2	3	4	5	6	7	8	9	10
19-21	1	1	2	3	4	5	6	7	8	9	10	11
22-24	1	2	3	4	5	6	7	8	9	10	11	12
25-27	2	3	4	5	6	7	8	9	10	11	12	13
28-30	3	4	5	6	7	8	9	10	11	12	13	14
31-33	4	5	6	7	8	9	10	11	12	13	14	15
34-36	5	6	7	8	9	10	11	12	13	14	15	16
37-39	6	7	8	9	10	11	12	13	14	15	16	17
40-42	7	8	9	10	11	12	13	14	15	16	17	18
43-45	8	9	10	11	12	13	14	15	16	17	18	19
46-48	9	10	11	12	13	14	15	16	17	18	19	20

H. Mass Driver Modifiers. Before rolling mass driver attacks against aerospace craft, ***make sure*** to check the **Mass Driver Modifier Table**, included on the **QRS** and also below. Apply any modifiers (they are cumulative) to the mass driver d6 roll and will obviously effect the result.

Mass Driver To-Hit Mods	
Impact Hex 0-1 hexes away	+0
Impact Hex 2-3 hexes away	-1
Impact Hex 4-6 hexes away	-2
CIC Bonuses, EW Bonuses	+1,2
Enemy EW Bonuses	-1,-2
Enemy Fighters and Scouts	-1

Note that no mass driver fire modifiers are listed beyond 6 hexes. This is because 6 hexes is the extreme range of any mass driver attack. At ranges of 7+ hexes from the firing warship, no mass driver attacks are ever allowed.

i. CIC / EW Bonuses: Warships may get a +1 or more to their roll for advanced / enhanced CIC or electronic warfare suites installed on them (**Rules Section 5.7.5**).

ii. **Enemy EW Penalty**: Enemy electronic warfare (specifically on the parent warship of the aerospace craft) may hamper a warship's ability to shoot down aerospace craft (**Rules Section 5.7.5**).

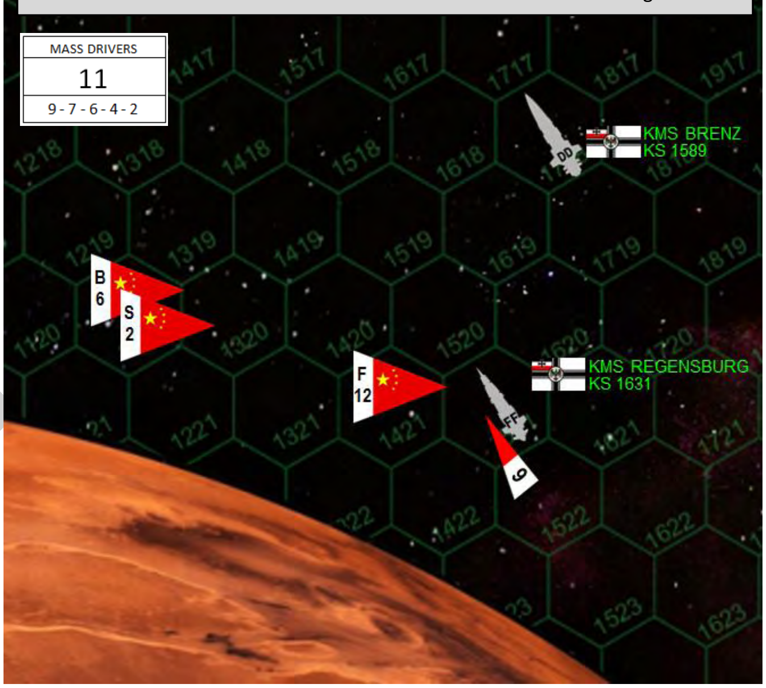
iii. Fighters and Scouts: Fighters and Scouts are inherently more difficult to hit, so impose a -1 penalty for mass drivers (on chart). Bombers and assault boats are too ponderous for this advantage, and torpedoes (though fast and guided by sophisticated AI) are not flown by unpredictable human pilots.

Iv. Elite or **Double Elite** aerospace units impose a -1 or -2 penalty on mass drivers (**Rules Section 5.7.8**).

iv. Reduced Mass Driver Strength: If a warship has taken certain damage, her mass driver number may have been reduced (**Rules Section 4.9.3.B**). If this has happened, one or more of the mass driver number(s) will have been marked off her **WRS,** leaving the next smaller number available. If this is the case, use the smaller, current number.

v. Sensor Damage: Note that if a warships has taken certain damage to her sensor arrays (**Rules Section 4.9.3.D**), she might take -1 or more off her d6 mass driver rolls.

An example of anti-aerospace mass driver fire. The Prussian frigate *Regensburg* is under attack by Chinese torpedoes and fighter craft, with bombers and scouts hanging back at a range of 4 hexes. The *Regensburg* has a Mass Driver strength of 11, and has suffered no mass driver battery damage (number not reduced to a 9). She has no CIC bonus, but has taken one box of sensor damage, so is firing at a -1. She must also take -1 off for firing at fighters (**Mass Driver To Hit Modifiers**). She finds the 10-12 row on the **Mass Driver Table** and rolls a 5, reduced -1 for sensor damage and -1 for firing at fighters, for an adjusted 3. The table indicates she has shot down two Chinese fighters. She could also split her fire, perhaps firing 6 mass driver points at the fighters and five against those six torpedoes coming at her stern. Or she could shoot everything at the torpedoes (for example), and rely on the destroyer KMS *Brenz* to handle the fighters. The *Brenz* has a Mass Driver strength of 17, but must take -1 off for firing at 3 hexes away, plus -1 for shooting at fighters. She could also shoot at those bombers, (no -1 for shooting at fighters) but instead would have to take -2 off her roll for the 5-hex range.



2. Dogfights. Once Aerospace craft have endured any warship mass driver fire against them (and eliminated units are removed), they are free to start their attacks. The first of these are attacks against other aerospace craft.

A. Any aerospace craft may attack any other aerospace craft. That said, some types are *much* better at it than others (fighters are the best).

B. To attack each other, opposing aerospace craft must be in the *same* hex. Remember these hexes are 180 kilometers wide.

C. If an aerospace unit is attacked, they do *not* have to reciprocate. They can elect to attack other targets. The most common example of this would be bombers making a torpedo run, they do *not* have to turn and engage enemy fighters attacking them. They can continue on their bombing run, but of course will suffer the losses from the fighters.

D. To find the “attack roll” of a given aerospace unit against another, consult the **QRS.** Simply compare the attacking unit’s **Intercept** number against the target unit’s **Evade** number. The difference is the chance on a d10. Roll 1d10 per attacking craft. If the result is equal to or less than the **Intercept - Evade** numbers, the attack is a success and one target aerospace craft is shot down.

E. Unlike mass driver fire, dogfights “kills” are considered simultaneous with other aerospace attacks. Any bombers shot down still get to launch their ordinance (right before their pilots eject). Any fighter shot down still get to shoot back, etc.

F. If the Intercept number is **equal to or less** than the target’s Evade number, the required attack roll is naturally zero or less ... technically an impossible roll. In such a case, **a “1” is always considered a “hit.”**

Aerospace Dogfight Table		
Aerospace Class	**Intercept** vs. torp BTH	**Evade** Intcp - Evd = d10
Fighter	9	5
Bomber	4	3
Scout	6	10
Assault Boat	7	5

G. Aerospace craft can elect to shoot down enemy torpedoes in flight, before the torpedoes strike their carrier warships or other targets. Simply take the aerospace type’s Intercept number and **subtract the class of the torpedo** (Class I-V). This gives the d10 target. Roll 1d10 per aerospace craft making this anti-torpedo “dogfight” attack, any result that hits **this number or less** on the d10 is considered a success and the torpedo is removed from play **before** it hits the target.

i. Of course, any aerospace craft that makes this anti-torpedo attack cannot attack other targets this turn.

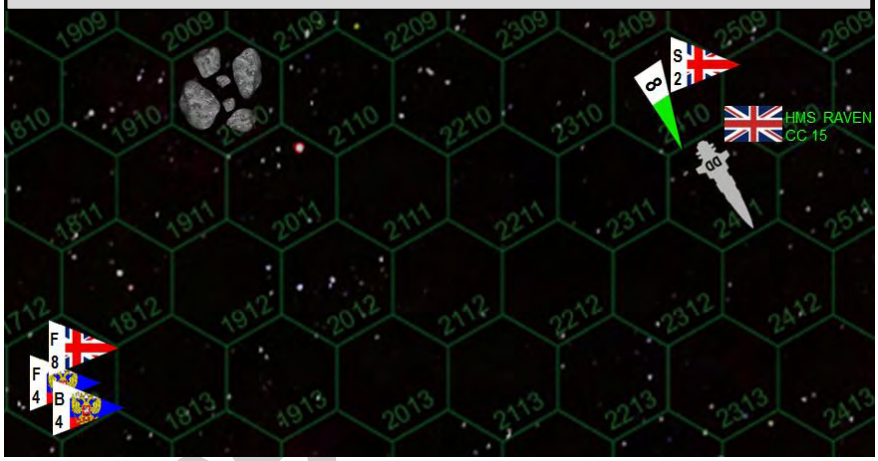
H. Aerospace units, through the purchase of **Upgrades**, can become either **Elite** or **Double Elite** (**Rule 5.7.8**).

i. Elite Aerospace units always get a +1 on **both** their Intercept and Evade numbers. This makes them not only more likely to hit enemy aerospace craft or torpedoes, but also less likely to be hit in turn.

ii. Double Elite Aerospace units always get a +2 on both their Intercept and Evade numbers.

iii. Note that these modifiers also apply against enemy mass driver fire, as noted in **Rule 4.4.1.H.iv**.

An example of Aerospace Dogfighting. The Russians are trying to set up a combined torpedo attack from their carrier (torpedoes marked by the green "8" counter) and more aerospace torpedoes launched from their bombers ("B4" counter). Such combined ordinance strikes are a common tactic. Note the bombers are launching from a standoff range of 7 hexes, just far enough away so their target, HMS *Raven*, can't shoot them down with mass drivers. But the Russians have lost aerospace initiative. They had to place their bombers first, then their fighters. Worried that the British might attack their bombers, they chose to put their fighters in the hex with their bombers. Sure enough, the British fighters also enter that same hex to attack the Russian bombers. The Russian bombers decide to continue their torpedo attack, so they cannot dogfight against the British fighters. The British fighters have an Intercept of 9, the bombers have an Evade of 3. This gives the British an attack value of 6 or less on a d10. They roll 8 dice (eight fighters in the group), and score 5 successes. All four Russian bombers are lost. But aerospace combat is simultaneous, so their torpedoes are still launched. The four Russian fighters now roll, they need a 4 (9 Intercept vs. 5 Evade). They only score 2 successes. Two British fighters are shot down. Meanwhile, HMS *Raven's* two scouts also try shooting down some of those torpedoes. They have an Intercept of 6, and these are Russian Class III torpedoes. So their chance is a 3 or less on a d10. They roll two dice (two scouts) and get 1 success. Seven torpedoes are now left.



i. Note that combat aerospace craft are worth victory points in most *Darkstar* games, and the cost of heavy losses can add up with terrifying speed. Many are the battles where one side's heavy warships seem to have lost, only to have actually won the battle by inflicting heavy damage on enemy aerospace groups (even if enemy carriers remain unscathed).

3. Aerospace Ordinance Attacks. Simultaneous with Dogfights, aerospace craft may elect to launch torpedoes or missiles against enemy warships or installations.

A. Aerospace fighters can always carry **one aerospace missile** strike.

B. Aerospace bombers can carry either **five aerospace missile** strikes or **two aerospace torpedo** strikes.

i. Bomber units actually have to declare their weapons load-out at the beginning of the scenario.

C. Ordinance strikes can only be launched against enemy warships or installations, not aerospace craft.

D. Ordinance strikes can only be launched once. After that, the aerospace units must land and re-arm if they want to try another strike (see **Aerospace Docking,** below).

E. Aerospace missiles or torpedoes do not fly around for multiple turns the way much larger warship torpedoes do. They have a set range, and when launched, either hit or miss their targets immediately following (**Rules Section 4.4.6**).

i. Aerospace missiles have a range of 7 hexes.

ii. Aerospace torpedoes have a range of 8 hexes.

F. Aerospace ordinance can be coordinated with warship torpedoes. They all hit in the same part of the combat phase (**Rules Section 4.4.6**), and enemy mass drivers can only fire once.

G. For now, simply declare which bombers and fighters are launching aerospace missiles or torpedoes, and which enemy targets they are attacking.

H. In order to launch an ordinance strike, aerospace units must have a valid line of sight with targets (**Rules Section 3.3.4**). Once launched, however, missiles and torpedoes don't have to travel in a straight line.

I. As with warship torpedoes, aerospace ordinance strikes should be designated to hit a specific *hex side* of the target warship or installation. They must have sufficient range (in hexes) to reach the adjacent entry hex corresponding to the desired facing of the target, and then of course the target hex itself.

J. Players should indicate in an agreed manner which aerospace units have fired their ordinance. This is actually less tedious than it sounds, as ordinance strikes are most effective when launched all at once (to overwhelm target shields and mass driver defenses).

4. Aerospace Gunnery vs. Warships. Aerospace units can also strafe enemy warships with their own onboard lasers, mass drivers, or other small-caliber weapons. This is very risky, as enemy mass driver defensive fire always takes effect *first* (**Rule 4.4.1.F**), but if you can swamp an enemy target with missiles, aerospace craft, and torpedoes (remember that warships can only use their mass drivers *once* a turn),

these small but deadly-accurate attacks can often spell doom to an enemy warship, especially if she is already heavily damaged.

A. Aerospace gunnery attacks can be made at up to 6 hexes, depending on the type of aerospace craft.

B. On the **Aerospace Gunnery Table** (also found on the **QRS**), find the row corresponding to the **type** of aerospace craft making the attack, and the column corresponding to the range.

C. The base d10 to-hit number is the first number listed. **Subtract the shields** rating for the target ship or installation (on the facing being attacked), to get an adjusted target number.

D. Roll one d10 for each aerospace craft making the attack. Any result that equal or less than the adjusted target is a hit. **A "1" is always a hit in strafing attacks.**

E. Aerospace gunnery attacks must now **roll for damage**. For each hit that was successful, foll a d6. The d6 target number (4+, 5+, or 6+) is indicated on the same **Aerospace Gunnery Table**, per aerospace craft type and range.

Aerospace Gunnery Table			
Aerospace Class	Gunnery (To Hit vs. d10 / Dmg vs. d6) at range		
	0-1 Hexes	2-3 Hexes	4-6 Hexes
Fighter	8 (-shld)/4+	7 (-shld)/5+	6 (-shld)/6+
Bomber	7 (-shld)/5+	6 (-shld)/6+	n/a
Scout	6 (-shld)/6+	n/a	n/a
Assault Boat	10 (-shld)/4+	9 (-shld)/5+	8 (-shld)/6+

F. Each attack that both **hits** and **scores damage** is going to fill in a damage box on the enemy ship. Take careful note of exactly how many **total** boxes of damage the complete aerospace strike has inflicted.

G. Applying Aerospace Gunnery Damage. Aerospace gunnery attacks are usually very light (basically machine guns firing against battleships), but they are also very precise.

i. On the appropriate **facing** of the ship being struck, roll the appropriate sized dice for hit location (d10 for battleship, d6 for heavy cruiser, d5 for light cruiser, d4 for destroyer, d3 for frigate, d2 for corvette, and gunboats have only one hit column per facing).

ii. The first box of aerospace gunnery damage has to be applied in the column indicated, on the outermost box of armor (or hull compartment, if all armor in that column has been eliminated).

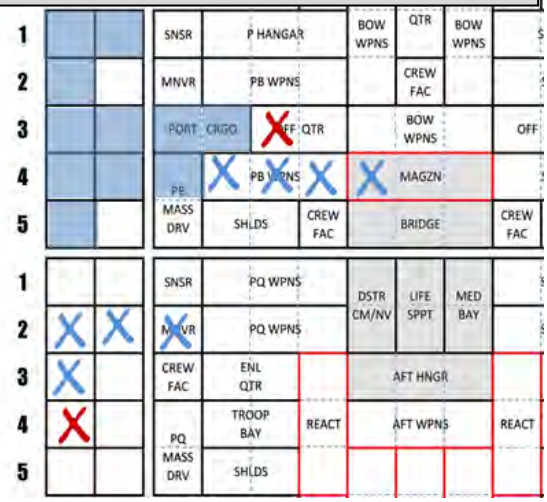
iii. Any further aerospace gunnery damage inflicted by this turn's attack can be extended into further boxes, "walking" or "strafing" through adjacent columns in any way the firing player wishes, with a few restrictions.

iv. Damage can never appear "in the middle" of an enemy ship, it always has to work its way in from the outermost layer of armor in that column.

vi. Successive damage boxes don't have to be adjacent to each other, they just have to appear in **adjacent columns**, starting with the column initially rolled for the first box of damage.

vii. Aerospace gunnery damage has to always be on the same facing. It cannot "turn corners" or drift from one facing section of the ship to another.

Two examples of aerospace gunnery attacks on a warship. Twenty fighters and ten bombers attack a light cruiser at a range of 3 hexes. At this range, fighters hit on a 7 or less, minus the cruiser's shields (in this case 4). Against an adjusted target of 3 on a d10, the fighters score 9 hits. They then roll 9d6 against a 5+, getting 4 successes. The ten bombers roll (much tougher) only hitting on an adjusted 2 or less on the d10, then needing a 6+ on d6 to score damage. In all, they get one damage success, giving this aerospace gunnery attack a total of five damage. In the first example (bottom, port quarter), the initial d5 roll for hit location is a 4. From there, the attacking player applies the other four boxes in any adjacent columns he chooses, first in Column 3, then "walking" his way to Column 2. The remaining damage is applied in Column 2, aiming for Maneuvering Thrusters, thus hampering the cruiser's ability to turn. In the second example (top, port bow), we see where some of the armor and hull compartment boxes were already removed from previous damage. The initial hit location was 3, and the attacking player opted to pile the rest in Column 4, aiming for a gunnery hit on the enemy cruiser's forward magazine. Boom.



5. Aerospace Docking Attempts. The final kind of "attack" an aerospace unit can attempt is a docking. These come in two basic types, opposed or unopposed.

A. Opposed Aerospace Docking attempts are mainly assault boats, trying to clamp onto enemy warships. They cut through the hull and disembark marines, which then attempt to take over the ship. They can also conduct ground invasions against surface targets, disembarking troops or even tanks to assault enemy installations or colonies. These are advanced actions, which will be covered in detail in a future supplement.

B. Unopposed Aerospace Docking is usually recovery of

friendly aerospace craft. This is mainly done by bombers who have released their ordinance, and may want to try to land on their carriers to re-arm, re-launch, and carry out a second strike.

i. Aerospace docking / recovery is that unit's "attack." It cannot dogfight, strafe enemy warships, or launch ordinance in the same turn it wants to land.

ii. Aerospace recovery requires three points of movement from the aerospace unit hoping to land. So long as a friendly aerospace unit reaches its carrier with three movement points to spare, it can land this turn. If not, it has to land next turn. Recovery has no effect on the warship's movement.

iii. Aerospace units don't have to land on the exact ship that launched them. However, the ship they hope to land on has to be equipped to accommodate the type of aerospace craft trying to land, and in sufficient numbers.

iv. Remember that warships are limited in how many aerospace craft they can launch and recover in a given turn (**Rule 4.3.4.A**).

v. In extremely large, complex, or desperate battles, it is conceivable that the same a carrier warship will be launching and recovering aerospace craft in the same turn. Remember the aerospace launch limit applies to both launches and recoveries. If a light cruiser-type carrier has a limit of 16, and has already launched 10 this turn, she can only recover 6 until next turn.

vii. Once landed, aerospace units must spend a complete movement phase (i.e., the next movement phase) re-arming. Only on "Turn 3" are they eligible to re-launch, completely re-armed. Bombers do *not* have to carry the same ordinance package they did the first time if they don't want to.

viii. Players may be tempted to simply consider an aerospace unit immediately "landed" if it reaches its carrier with three or more movement points at the end of its movement phase. Many times, this is fine. However, the docking phase is written in *this* step of the turn sequence so that all docking attempts (friendly and unfriendly) happen at once, and so **enemy mass drivers get a chance** to shoot down aerospace craft as they attempt to land (if they are in range). That said, in most cases friendly carriers aren't close enough to enemy warships for this to happen.

6. Torpedo and Missile Impacts. The last part of Aerospace Combat is to see whether any of the aerospace torpedoes, aerospace missiles, or warship torpedoes (launched in previous turns) may or may not have hit their targets.

A. Identify Torpedoes / Missiles in Target Hex. Make sure both players are clear on which torpedoes are in what hex, that all torpedoes expected to hit an enemy target are in fact in a hex with that target, and that the facing of the target intended to be struck is clearly indicated.

B. Resolve any Remaining Mass Driver Fire. Any mass driver fire that either side has not used should be used now, if any such fire is eligible.

i. Many times players reserve their warship mass driver fire until after the aerospace combat phase, to see how many enemy torpedoes or aerospace craft their own aerospace craft can destroy.

ii. They might also want to reserve mass driver fire for use against aerospace torpedoes or missiles launched by bombers or fighters in the **Aerospace Combat** phase.

iii. Conduct any **remaining** mass driver attacks at this time, especially against enemy torpedoes about to hit friendly ships, per the **Rules Section 4.4.1**.

iv. Ensure that no mass driver points are being "used twice."

v. Any warship torpedoes, aerospace torpedoes, or aerospace missiles hit by this mass driver fire are immediate removed from play. They do not get a chance to strike their targets.

C. Ordinance Hits Shields. Now that all mass driver and aerospace attack rolls have been made against incoming torpedoes and aerospace ordinance, each remaining warhead gets to roll against the shields of the target they are striking.

i. Each type of ordinance has a Target to Hit number, ranging from 5 to 9. These are listed on the **QRS**.

Torpedo / Missile Table		
Type	**BTH**	**Speed**
Class V	9	20
Class IV	8	18
Class III	7	17
Class II	6	15
Class I	5	12
Aero mssle	7	7 (range)
Aero torp	9	8 (range)

ii. Simply subtract the enemy target's shield value (using the shield rating on the correct facing) from this base target number to get an adjusted target number. This is the number that must be rolled on a d10.

iii. Each individual warhead gets a d10 roll. Any result that equals the adjusted target or less is a hit.

iv. Sometimes the adjusted target number is zero or

less. Since you can't roll a zero or less on a d10, any "1" result is considered a *possible* hit. Any such "1" results are then confirmed on d6, with a 5+ result considered a verified hit. In other words, there is never a truly automatic miss.

v. Sometimes the adjusted target number is a 10 or higher. Since you can't roll over a 10 on a d10, any result of a 10 is considered a *possible* miss and is then re-rolled on a d6. A result of 5+ is considered a verified miss, regardless of the actual adjusted target number. In other words, there is never a truly automatic hit.

D. Apply Damage. Any warship torpedo, aerospace torpedo, or aerospace missile that actually hit their warship or installation targets now do damage. On the appropriate **facing** of the ship being struck, roll the appropriate sized dice for hit location (d10 for battleship, d6 for heavy cruiser, d5 for light cruiser, d4 for destroyer, d3 for frigate, d2 for corvette, and gunboats have only one hit column per facing).

i. Class I Torpedoes do one box of damage.

ii. Class II Torpedoes and **Aerospace Missiles** do two blocks of damage, the box initially struck and a second box right behind it.

iii. Class III Torpedoes and **Aerospace Torpedoes** do three blocks of damage, the box initially struck and the two boxes right behind it.

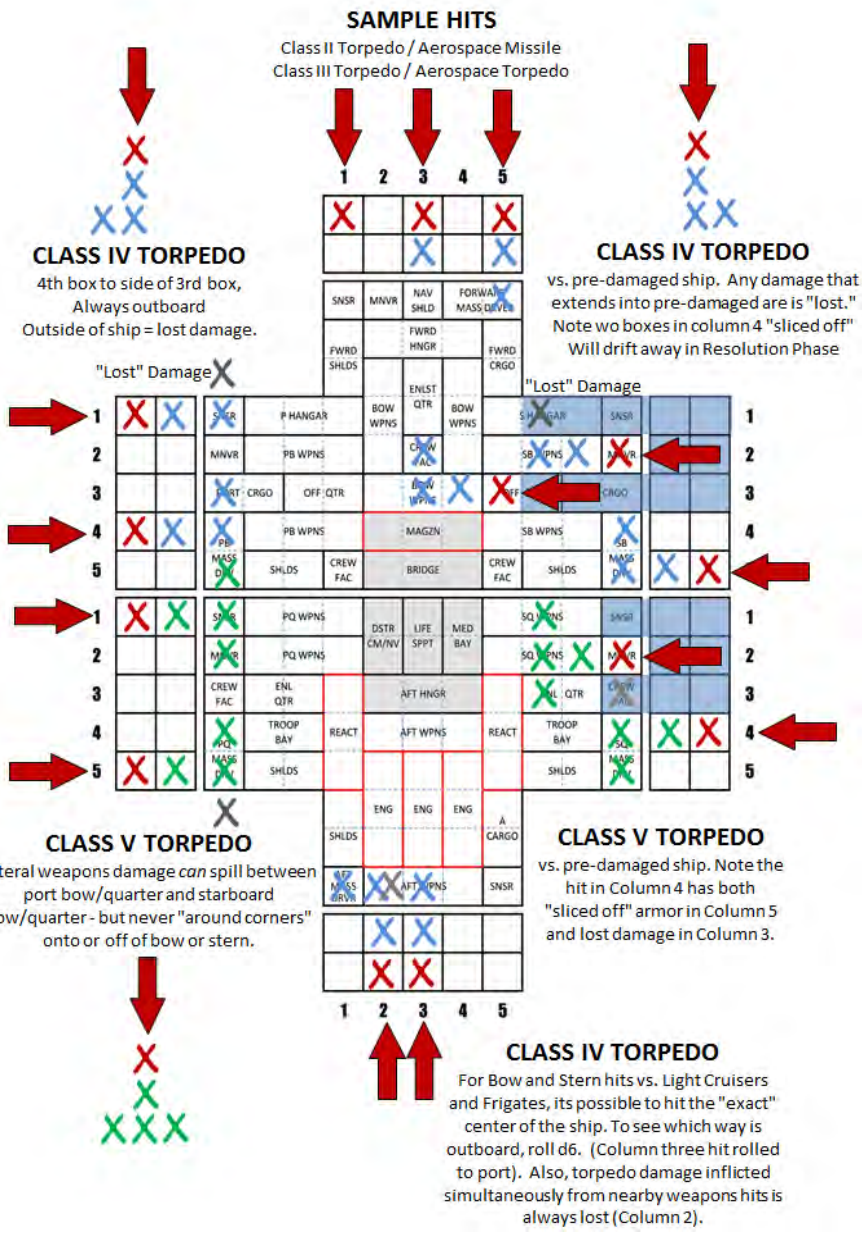
iv. Class IV Torpedoes do four boxes of damage, starting with three boxes straight down in the column indicated in the hit location roll. It then does one extra box of damage extending off the side of the deepest box already inflicted, always toward the **outboard** side of the ship.

v. Class V Torpedoes do five boxes of damage, starting with three boxes straight down in the column indicated in the hit location roll. It then does one extra box of damage extending off **both** sides of the deepest box already inflicted.

vi. Glancing Damage: Note that with Class IV and V torpedoes, damage can sometimes "spill off" the side of the ship, or explode into boxes that have already been marked off by previous or simultaneous weapons fire. Such damage is "lost." It doesn't "turn corners" or "spill" into deeper sections of the ship.

vii. Cavitation Damage: Note that with Class IV and V torpedoes, armor can be "sectioned off" by sideways blast damage behind it. This armor is sliced away, but drifts off only in the **Resolution Phase** (**Rule 4.9.3.A**).

viii. Remember that any damage against a warship or installation, no matter when it is scored or recorded, only actually takes effect in the **Resolution Phase**. Players are advised to use dots or slashes to mark damage being recorded this turn, and only completing the slashes into "X"s or filling in the whole box during the Resolution Phase, when all effects of this turn's damage are finally assessed.



4.5 WARSHIP COMBAT BASICS ESTABLISHING POSITION

With all aerospace craft, missiles, and torpedo operations out of the way, combat starships can finally do what they do best, turn gigantic sci-fi weapons on each other.

Before warship combat begins in earnest, a few fundamentals should be addressed. These are **Range**, **Weapons Arcs**, and **Target Facing**. In other words, how far is the enemy, which of your weapons can hit him, and what part of the enemy ship will be struck?

1. Range: This is probably the easiest. Range is simply the number of hexes counted from your ship (don't count the hex your own ship occupies) to the enemy ship (include the enemy's hex in your count).

A. Keep an eye out for any astrophysical bodies that might block LOS / LOF. Remember that LOS / LOF is measured from the **center** of your hex to the **center** of the enemy's hex, and if that line so much as nicks any corner of a hex occupied by part of an astrophysical body, LOS / LOF is considered blocked.

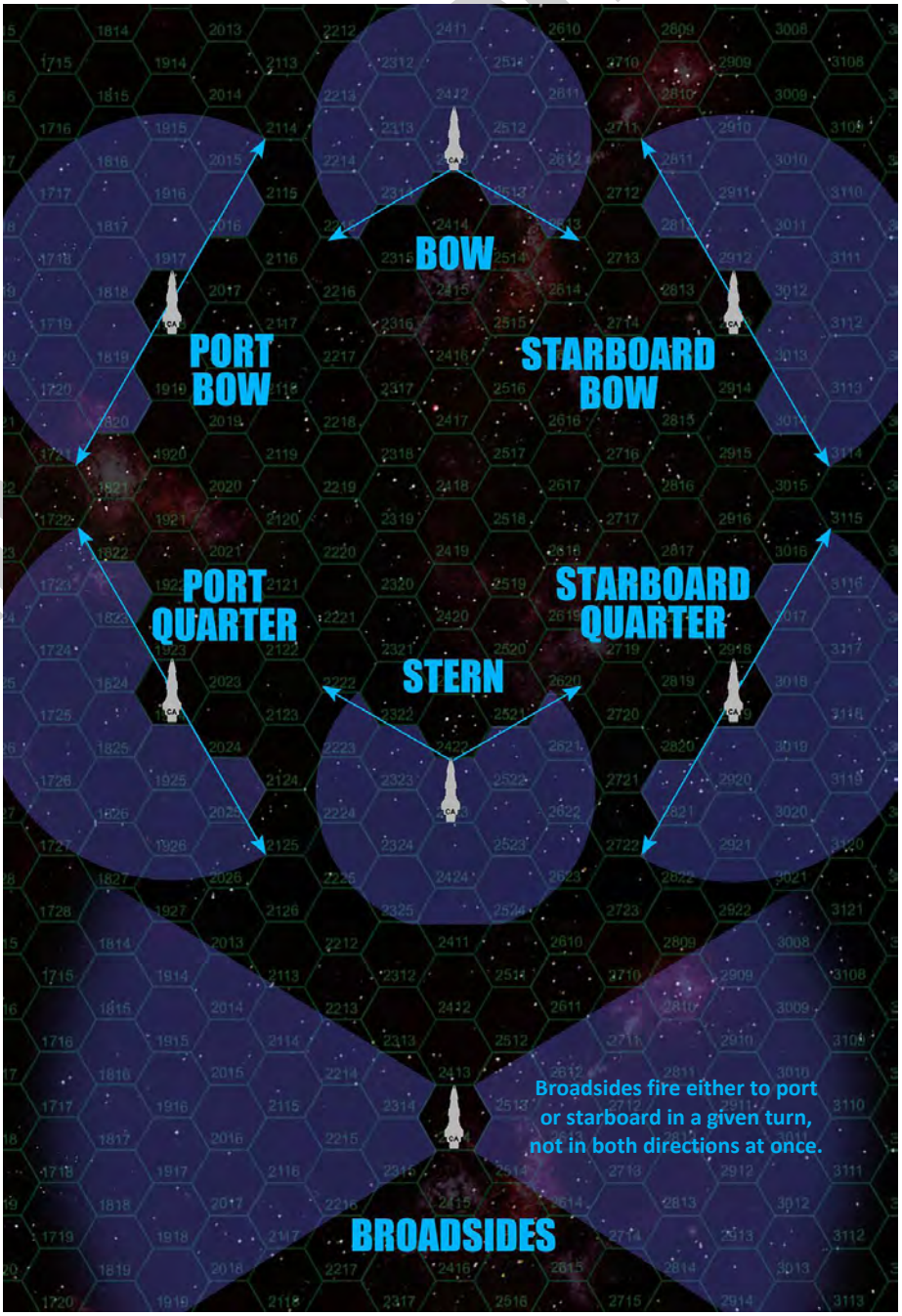
2. Weapons Arcs: All weapons on a ship have a weapons arc. A given weapon mount can only fire at a target if the LOS between the firing ship and the target ship lies within the designated arc of the weapon. The six arcs are as follows:

- Bow (Front)
- Starboard Bow (Front, Right)
- Port Bow (Front, Left)
- Starboard Quarter (Back, Right)
- Port Quarter (Back, Left)
- Stern (Back)

A. The arcs are shown in the chart to the right. As you can see, there is a lot of overlap between these arcs. As a general rule, in most cases a target falls in **three adjacent** weapons arcs of a firing ship (e.g., bow / port bow / starboard bow - or port quarter / port bow / stern, etc.).

B. Broadsides: One of the most vital fire arcs is directly to the side of a warship, where the **Bow** and **Stern** arcs overlap (note they are slightly expanded compared to the other four arcs). This overlap encompasses a ship's **broadside**, where **four** fire arcs overlap (**Bow**, **Stern**, **P/S Bow**, **P/S Quarter**) instead of three. This is the classic "battleship broadside" of naval tactics, where the maximum number of weapons can come to bear on a target.

C. Using the Hex Grid: When in doubt, use the hex grid of the firing ship's hex as a guide to determine what arcs can be brought to bear on the hex containing the target ship. Port Bow, Starboard Bow, Port Quarter, and Starboard Quarter weapons arcs more or less bisect the hex of the firing ship, as shown below. Bow and Stern arcs are more expansive, as shown in the diagram below. As you can see, weapons arcs are one reason it is so important to keep ships clearly pointing to a hex side.



3. Target Facing: In addition to the weapons arcs of the firing warship, exactly what **facing** (or side) of the target ship is about to be struck needs to be ascertained. This is especially important as it will show **which shield** will be absorbing or deflecting the incoming fire, and thus critical in determining the adjusted target number since many ships have different shield ratings on different facings.

A. Warships have six facings. These are the same as the six weapons arcs.

- Bow (Front)
- Starboard Bow (Front, Right)
- Port Bow (Front, Left)
- Starboard Quarter (Back, Right)
- Port Quarter (Back, Left)
- Stern (Back)

ii. To determine which facing (side) of the warship is about to be struck, draw a line from the **center** of the firing ship's hex to the **center** of the target ship's hex. **Whatever hex side of the target unit's hex this line crosses** determines which facing of the target ship is being struck.

iii. The only exception to this rule comes when the firing and target ships are positioned in such a way that the LOF passes into the target ship's hex **directly** along the seam between two neighboring hexes. Examples area shown in the accompanying diagram. In such a case, the firing ship is positioned "between facings" and thus gets to **choose** which of the two adjacent target facings she is shooting at.

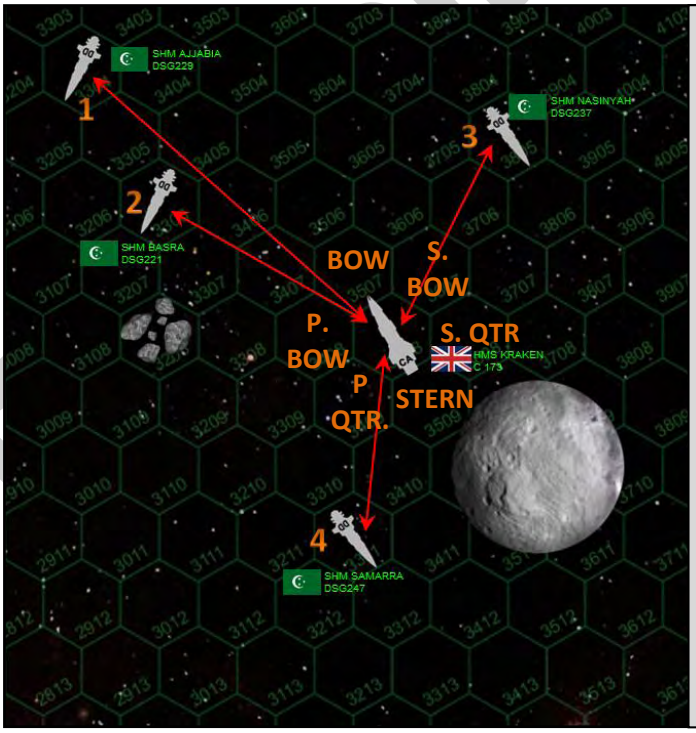
iv. Target facings are a vital part of the tactics involved in successful *Darkstar* play. Placing your ship's broadside against an opponent while avoiding his broadside in turn (usually by "crossing the T" of his bow or raking a broadside across his stern) tends to deliver solid results. There are also "sweet spots" in a target ship's port and starboard bows, which allow you to possibly hit the enemy's bridge or forward magazines, while avoiding a return fusillade from the enemy's broadside.

B. Facings for Ships in Same Hex: When ships wind up in the same hex, the interrelationship between two ships in the same hex (which weapons arcs can come to which target facings on a ship in the same hex) is up to the *second* ship to enter the hex (i.e., the ship that won initiative between the two).

i. This is subject, of course, to the facing of the two ships. The positioning of the second ship as relates to the first has to agree with their respective facings **as if they were in adjacent hexes.** A ship moving parallel into the same hex as an enemy ship may freely choose whether it is to the port or starboard side of the enemy ship, but cannot declare it is "crossing the T" or "raking the stern."

ii. This positioning within the hex must also be declared before the *next* ship's movement starts.

iii. Playing pieces should be placed (as best as is able) to show how the ships are positioned within the hex. They are still considered n the "center" of the hex for all LOS or ranging purposes.



Some examples of weapons arcs and target facings.

Case 1: Arab destroyer has the British cruiser broadsided (destroyer can fire bow, port bow, port quarter, and stern weapons). The fire passes through the cruiser's frontal (bow) hex side, so will hit the cruiser's bow shields and armor. Range 6.

Case 2: Arab destroyer also has the British cruiser broadsided and her fire will hit the cruiser *exactly* along the seam between hex 3408 and 3507. The Arab captain thus gets to choose whether he will hit the cruiser along the bow (front) or port bow (left front). Range 4.

Case 3, the Arab cruiser has the British destroyer broadsided (barely). The Arab destroyer's fire will hit the British cruiser on her starboard bow (right front). Range 3.

Case 4: the Arab destroyer is just a little too far forward to broadside the British cruiser. She can only hit the cruiser with her port bow (barely), port quarter, and stern weapons. The destroyer is also a not quite forward enough to hit the cruiser on her stern (usually the best target), and her fire will hit the cruiser's port quarter (left rear). Range 3.

The British cruiser, meanwhile, is hitting Destroyer 1 on the port bow (B, PB, SB weapons), Destroyer 2 on either the port bow or port quarter (her fire is hitting Destroyer 2 directly along a hex seam with B, PB, PQ, and even SB weapons weapons), Destroyer 3 on the Starboard Bow (broadside, B, Stern, SB, SQ weapons), and Destroyer 4 on the port quarter (with PQ, PB, Stern weapons).

4.6 WARSHIP COMBAT

ROLLING TO HIT

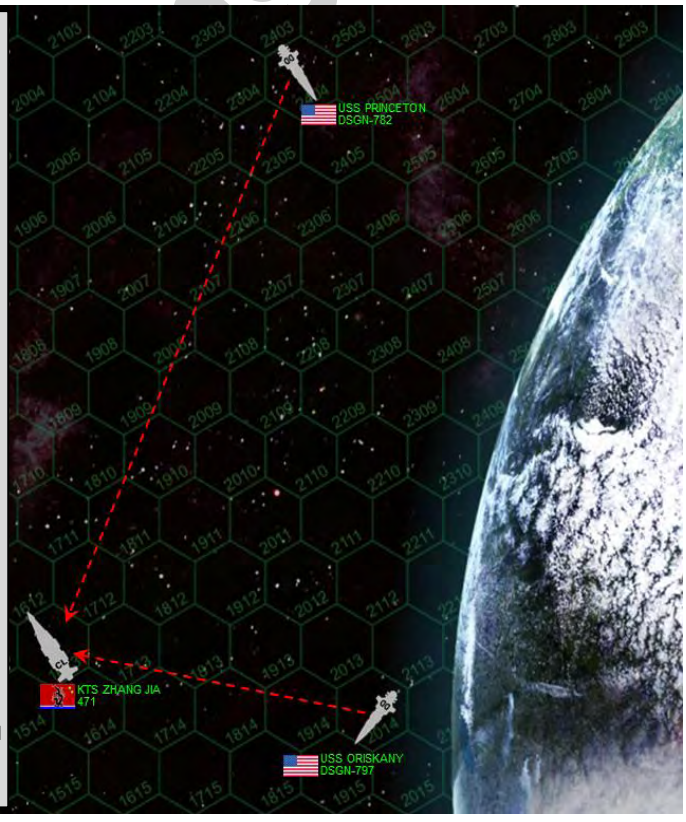
The next step in the firing sequence is to determine what number you need to roll to hit the enemy ship, then roll a d10 against that number to see if your weapon hits the intended target.

1. Dice: All to-hit rolls in warships gunnery are made on a d10. Low rolls are better. You have to roll on or under the **Adjusted Target Number** to score a hit.

2. Base To-Hit Number: First, find the **Base to-Hit** number. This is found simply by looking at the **Range Table**, either on your Warship Record Sheet (**WRS**) or on the Quick Reference Sheet (**QRS**). You'll find that the range between your ship and your target falls into a bracket, which corresponds to a Base to Hit number between 11 (0-1 hexes) and 5 (21+ hexes).

RANGE TABLE							
Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
Base To-Hit	11	10	9	8	7	6	5

3. Adjusted To-Hit Number: Subtract the target's **ECM/Shields Rating** for the facing being struck from the Base To-Hit number. Be sure to use the correct shield rating for the correct facing, as many warships have different strength shields protecting different areas of the ship.



An example of Base To-Hit number and Adjusted To-Hit number. The destroyer USS *Oriskany* is 5 hexes from her hated rival, the Black Dragon light cruiser *Zhang Jia*. This gives a **Base To-Hit** of 9. The *Oriskany* has a +1 bonus for her CiC, and also +2 for her "Gunnery Accuracy" Battle Upgrade. However, The *Zhang Jia* has a powerful ECM/Shielding on her starboard quarter of 5. Thus, the **Adjusted To-Hit** number works out as 9 + (1+2) - (5) = 7 to hit. USS *Princeton* is further away, 9 hexes. This gives a Base To-Hit of 8. USS *Princeton* was built with the same +1 CiC but doesn't have the same +2 "Gunnery Accuracy" Battle Upgrade. However, the *Zhang Jia's* starboard bow shields are only a 4, so the *Princeton's* shot works out as 8 + (1) - (4) = 5. Note that the *Oriskany* has the *Zhang Jia* broadsided, and so can fire with bow and stern weapons, while the *Princeton* is just too far back to bring her aft weapons to bear, and so can fire bow weapons only (these ships carry no heavy guns on their Port/Starboard Bow or Port/Starboard Quarter arcs). *Zhang Jia*'s aft guns will hit *Oriskany's* starboard bow, while her forward guns will return fire on the *Princeton's* starboard bow.

A. Note that shields in *Darkstar* only effect the to-hit number. They are not "invisible armor" that absorb damage like we see in many sci-fi franchises. They represent gravitic curvature and electronic interference that cause enemy weapons to miss, refract, or detonate prematurely. In game terms, they effect a weapon's change to hit, but if the weapon hits anyway, all damage is applied directly against armor.

B. Also, if a ship has no shields on the facing being struck, usually because of battle damage, but sometimes civilian ships are on the board as objectives, then the base to hit number is unaffected.

C. Other Modifiers: Other modifiers can effect a target roll to hit.

i. Sensor Damage can apply -1 or more to your chance to hit (**Rules Section 4.9.3.D**).

ii. Bridge / CIC ratings can apply +1, +2, or in extreme cases, +3 to a ship's to-hit roll. These represent advanced sensors and command systems in the ship, and are noted on the WRS.

iii. Upgrades: Gunnery Accuracy is a **Battle Upgrade** that veteran ships can purchase with campaign points (**Rule 5.7.3**). If a ship has purchased this upgrade, it gets a +2 or +4 bonus to all gunnery to hit rolls (does not apply to torpedoes or mass drivers)

4. Roll to Hit: Once a finalized **Adjusted Target Number** has been established and agreed upon by the opposing player, one d10 is rolled for each weapon that was able to fire, based on weapons arc.

A. Always declare which weapon you're firing before rolling.

B. A "hit" is indicated by a result that is on the Adjusted To Hit number or less. So the higher the Adjusted To Hit number, the easier the shot. If the Adjusted To Hit number is a 5, than a result of 1, 2, 3, 4, or 5 is registered as a hit. A 6, 7, 8, 9, or 0 counts as a miss.

C. If rolling for more than one weapon, keep very careful track of which dice are for which weapons. Which dice are for which weapons should really be declared before dice are rolled, it's considered unfair to roll fistful of dice and then declare that all your hits were scored by your heaviest weapons.

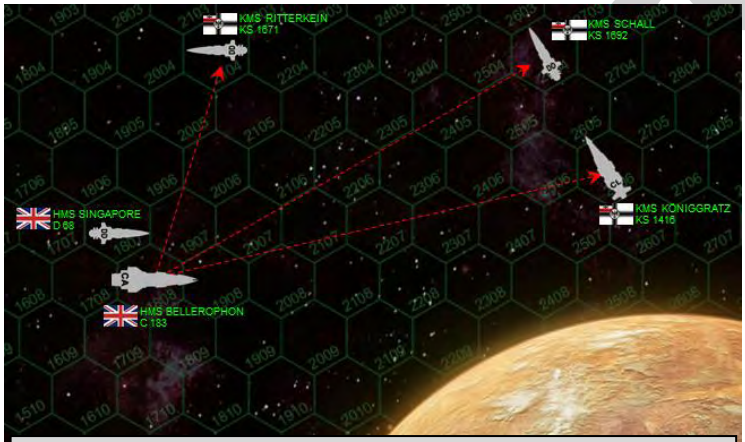
D. "Automatic" Hits: There is no such thing as an automatic hit in warship gunnery. If an adjusted target is 10 or above, still roll the d10 to hit. On a result of 10, roll a d6. On a result of 5+, the shot is considered a miss no matter what the Adjusted To-Hit number was. In other language, you always have a 1/30 chance of missing.

E. "Automatic" Misses: There is no such thing as an automatic miss in warship gunnery. If an adjusted target is 0 or below, still roll the d10 to hit. On a result of 10, roll a d6. On a result of 5+, the shot is considered a miss no matter what the Adjusted To-Hit number was. In other language, you always have a 1/30 chance of hitting.

F. Declaring Targets: Ships should declare which targets they are firing their weapons at, then resolve which weapons hit, before moving on to the next ship.

i. Ships do not have to fire all their weapons at the same ship. In fact, most of the time they won't be able to.

ii. Players can, at their option, declare targets for one of their ships, then roll to hit, then resolve damage for those particular hits (see **Rules Section 4.7**, below), before declaring which targets their *next* ship will fire at. In this manner, they can optimize the efficiency of their fire to an extent, making the most of their guns without "splashing" too much overkill on one target.



An example of Target Selection and making to To-Hit rolls. HMS *Bellerophon*, one of the new Royal Navy *Trafalgar* class heavy cruisers, finds herself beset by a "*Kruezergeschwader*" (cruiser squadron) of Imperial Prussia. She can fire only frontal arc weapons at the KMS *Königgratz* and *Schall*, while her aft weapons can come to bear against KMS *Ritterkein*. *Bellerophon* selects her aft EPC and 6-MgKv laser batteries to fire a port broadside volley on the *Ritterkein*, her forward EPCs at the *Königgratz*, and her forward lasers at the *Schall.* Each weapon rolls its own d10 to-hit. The players can resolve damage now as they go or all at once at the end, assuming they keep careful track of which weapons hit which ship, so long as the *Bellerophon* declares where all her weapons are shooting, then starts rolling. HMS *Singapore* can now make her own decisions on which targets to engage, either after the *Bellerophon* resolves her hits or even after she resolves damage. This way, *Singapore* doesn't waste guns on ships that are already crippled, driven off, or exploded ... or can help against a target that the *Bellerophon* badly missed. The takeaway is that you can divide a ship's fire in as many directions as your fire arcs allow, and declare your targets and make your to-hit rolls **each ship in turn.**

4.7 WARSHIP COMBAT APPLYING DAMAGE

Once warship weapons have hit their targets, damage is applied according to this summarized procedure: **Hit Locations** are rolled for each individual weapon that scored a hit, **Damage Numbers** and **Damage Profiles** are determined for each individual weapons hit, and **Armor / Compartment** boxes are marked off the Warships Record Sheets (WRS).

1. Roll Hit Locations: Each weapon that just hit the target rolls a dice to see exactly *where* the weapon hit.

A. Start by looking at the WRS of the target ship, specifically the **Target Facing** that was targeted during **Rules Section 4.5.3.A.ii**. You'll find a number of **columns** that are available to be hit. The number of **columns** depends on the **type** of the warship.

- Battleship: 10 columns
- Heavy Cruiser: 6 columns
- Light Cruiser: 5 columns
- Destroyer: 4 columns
- Frigate: 3 columns
- Corvette: 2 columns
- Gunboat: 1 column

B. Each weapon rolls a dice that will produce a random number corresponding to the available columns to be struck.

i. On a battleship you would roll a d10, on a heavy cruiser you would roll a d6, on a light cruiser you would roll a d5 (d10 / 2), on a destroyer you would roll a d4, on a frigate you would roll a d3 (d6 / 2), on a corvette you would roll a d2 (odds / evens on any convenient die), and for gunboats no roll is necessary because only one column is available to be hit per target facing and so all weapons fire automatically hits that column.

C. In the column indicated by the hit location die roll, find the outermost box of either armor or internal structure. This box is the designated **Impact Point** of that weapon.

D. Each individual weapons hit rolls its own dice for hit location. So if you hit with three rail guns, even if all three rail guns are in the same turret, each shot makes its own hit location roll and its damage is assessed as a separate impact.

2. Damage Number: In general, weapons hit harder when strike at close range. Also, big weapons hit harder than smaller weapons. How hard a given weapon has hit a target is quantified by its "damage number."

A. To find the correct damage number, simply refer to the Main Weapons section of the firing ship's WRS.

B. Beside each weapon, you will find a series of seven numbers in parentheses. These are the **Damage Numbers** of that weapon, corresponding to the seven range brackets in *Darkstar*.

C. So when a given weapon hits, count through the these damage numbers until you get the one corresponding to the range bracket at which this hit was delivered. That is the **Damage Number** for this particular hit.

Ship Name:	HMS *Kraken* (C173)
Captain	Commodore Rhea Aubrey

Mass:	157,703 tons		Cargo:	600 tons				

Range Table								
	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5
	Template	OK	OK	-1	-2	-3	-4	-5

MAIN ARMAMENT		
NO.	**TYPE**	**MOUNT**
2 (+1)	10 GW Rail Gun (Block 5,5,5,4,3,2,1)	Bow
2 (+1)	10 GW Rail Gun (Block 5,5,5,4,3,2,1)	Bow
2 (+1)	10 GW Rail Gun (Block 5,5,5,4,3,2,1)	Stern
2 (+1)	10 GW Rail Gun (Block 5,5,5,4,3,2,1)	Stern
2 (+1)	8 MgKv Laser (Beam 2,2,2,2,1,1,1)	Bow
2 (+1)	8 MgKv Laser (Beam 2,2,2,2,1,1,1)	Bow
6 (+1)	Class IV Torp (Torp 4)	Bow
6 (+1)	Class IV Torp (Torp 4)	Stern

The Main Weapons area of the WRS for the heavy cruiser HMS *Kraken*. Consider a 10GW rail gun hit delivered at a range of 9 hexes. Such a hit would be registered in the 7-10 range bracket (fourth bracket), so you just count four damage numbers over in the parentheses and find a "4." This weapon has a **Damage Number** of 4 at this range. At a range of 3 hexes it would deliver 5 damage boxes. At 19 hexes it would deliver 2 boxes. The lasers at 15 hexes would hit with 1 box of damage (Range 15 is in the fifth bracket, fifth number beside 8MgKv Laser reads a "1").

3. The **Damage Profile** of the weapon that scored the hit is then applied, starting from the **Impact Point** determined above.

A. The Damage Profile is nothing more than a pattern of boxes that describes both the extent and the shape of the damaged area. Some weapons burn, some weapons explode, some weapons cut. Every hit in *Darkstar* is going to have a **Damage Profile** based on its weapons class and **Damage Number** (determined above).

B. Different classes of weapons can be classified into two general categories, important for understanding the correct way in which damage profiles are applied. These are **Blast Weapons** and **Beam Weapons**.

C. Blast Weapons explode on impact. Once an impact point is determined by rolling a hit location dice and referring to the appropriate column on the WRS, the weapon "explodes" its damage profile from that point, no matter what.

i. Any damage boxes that wind up "outside" the ship are lost.

ii. Any damage that explodes into armor or structure boxes already hit are redundant and also considered "lost."

iii. However, these weapons can also "cavitate" into the enemy target, depending on their damage profile, especially if hitting areas of the ship already damaged.

iv. Blast Weapons include Rail Guns and Torpedoes.

D. Beam Weapons do not explode, they cut or burn. Once an impact point is determined by rolling a hit location dice and referring to the appropriate column on the WRS, the weapon "burns" its damage profile from that point.

i. Any damage boxes that wind up "outside" the ship are lost.

ii. Any damage that explodes into armor or structure boxes that are already hit *passes through* these gaps and to hit the next available armor or structure box in that column. It can help to think of this damage as "liquid", pouring down into the ship, an especially useful analogy when applying beam weapons damage against previously damaged areas of a ship (i.e., against "uneven" armor or structure boxes).

iii. Therefore, these weapons never "cavitate" into the enemy target. They can only apply damage straight down whatever column their damage profiles indicate.

iv. Beam weapons include lasers, plasma projectors, electron particle cannon (EPCs), and syglex emitters / grasers.

4. Weapons Classes: The best way to learn the many different damage profiles (at many different ranges) is to review the charts and illustrations included over the next few pages. However, the general characteristics of the weapons classes and their damage profiles are explained here in summary. By learning these overall concepts, many questions about how damage boxes are actually applied against targets will essentially answer themselves.

A. Lasers: These are probably the simplest of all weapons profiles. They do a certain amount of boxes of damage, depending on their caliber and range of the hit. Whatever their **Damage Number** for their caliber and range, they simply burn that number of boxes straight down, starting from the Impact Point. They "skip" any previously damaged boxes and continue burning into the next available armor or structure box on the target's WRS.

B. Torpedoes: These are blast weapons, whose damage profiles have already been covered in **Rules Section 4.4.6.E.i-vii.** Note that torpedoes never have to worry about determining a "Damage Number." They are self-propelled projectiles that deliver damage through explosive warheads, and so always inflict the same amount of damage regardless of the range of the hit.

C. Rail Guns: Rail guns are raw kinetic energy weapons, bolts of metal hurled into targets at mind-bending speeds. As such, they inflict blast damage, cavitating into a target from their point of impact.

i. They inflict damage up to three boxes deep, then expand the *base* of their damage profile with additional boxes in the columns on either side.

ii. These extra boxes of "flanking" blast damage should be kept as symmetrical as possible.

iii. When they can't be symmetrical, always put the excess damage on the *outboard* side of the ship.

iv. Examples of all rail gun damage profiles, per all damage numbers, is illustrated in the accompanying charts.

v. Remember that rail guns are **blast** weapons, and so depending on where they can hit, *can* cause cavitation and "sideways" splash damage. However, any boxes of damage that would be allocated into areas outside the ship or into boxes already hit by other weapons fire is considered lost.

D. Plasma Projectors: Plasma projectors are in many ways the opposite of rail guns.

i. Instead of blasting through three boxes deep and then starting to splash with additional boxes to the side, they start by burning evenly across three boxes (impact point as rolled, then one more box on either side). Only when all three of these have been filled does a fourth box hit in the next row (same initial hit location column) and the process repeats.

ii. These extra boxes of "flanking" blast damage should be kept as symmetrical as possible. Any extra put on the outboard side of the ship.

iv. Examples of all plasma projector damage profiles, per all available **Damage Numbers**, is illustrated in the accompanying charts.

v. Plasma projectors are **beam** weapons, and so never cavitate. In whatever column the next assigned damage box is to be inflicted, the damage "pours" like liquid and hits the next available box. Accordingly, boxes already hit by other weapons fire do *not* "waste" damage, such boxes are "skipped" and the damage is applied to the next available box.

E. Electron Particle Cannons (EPCs): Electron Particle Cannons (EPCs) are focused streams of highly-charged subatomic particles, a "lightning gun" that hurls a bolt of electromagnetic radiation against a target.

i. EPCs inflict damage much like rail guns. They go up to three boxes deep in the column indicated by the hit location roll. Then they do a box in the flanking column (outboard side), then a flanking box on the inboard side, and alternating until the whole 3x3 block of boxes is filled. Then the tenth point of damage fills in an fourth box in the original hit location, starting the process over.

ii. These extra boxes of "flanking" blast damage should be kept as symmetrical as possible. Any extra "uneven" boxes are applied on the outboard side.

iv. Examples of all EPC damage profiles, per all available **Damage Numbers**, is illustrated in the accompanying charts.

v. Remember that EPCs are **beam** weapons, and so never cavitate. In whatever column the next assigned damage box is to be inflicted, the damage "pours" like liquid and hits the next available box. Accordingly, boxes already hit by other weapons fire do *not* "waste" damage, such boxes are "skipped" and the damage is applied to the next available box.

F. Syglex Emitters / Grasers: These can almost be thought of as "sideways" lasers. They never inflict damage deeper than two boxes. Any further damage is applied in successive columns, always toward the *aft* (not necessarily *outboard*) end of the target ship. Basically, the beam is punching into the enemy hull and then the enemy ship's movement is causing the beam to tear through the hull like a zipper.

i. Syglex / Graser emitters inflict up to two points of damage in the column indicated by the hit location rolled.

ii. The third and fourth box (if any) is applied in the next column aft.

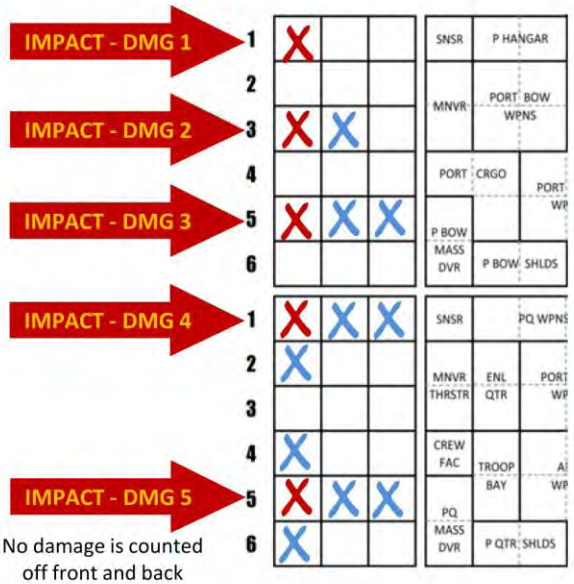
iii. This continues until you run out of damage, or run out of ship (you run off one of the corners).

iv. These weapons *never* do more than 2 boxes deep. More powerful hits simply inflict a longer streak.

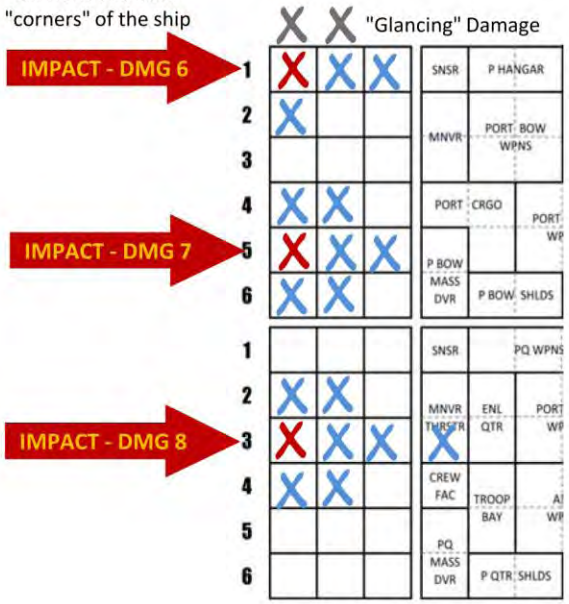
v. Syglex / Grasers are **beam** weapons, and so never cavitate. In whatever column the next assigned damage box is to be inflicted, the damage "pours" like liquid and hits the next available box. Accordingly, boxes already hit by other weapons fire do *not* "waste" damage, such boxes are "skipped" and the damage is applied to the next available box.

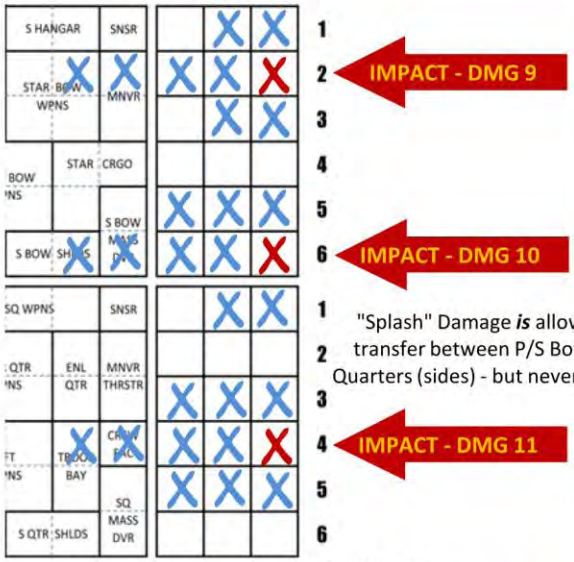
RAIL GUNS
DAMAGE PROFILE EXAMPLES

95% of all actual *Darkstar* rail gun hits are in these DMG 1, 2, 3, 4, and 5 ratings.

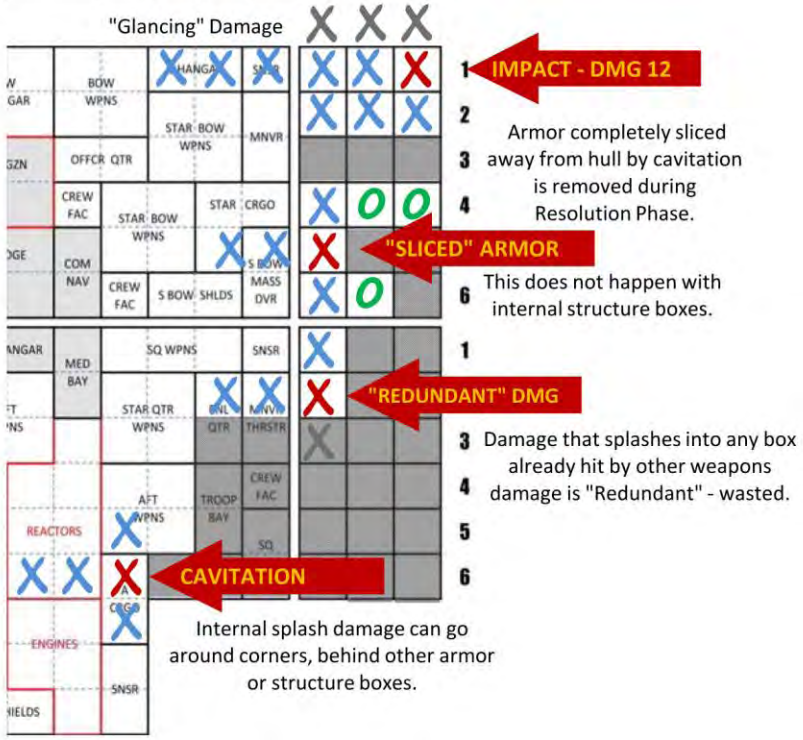


No damage is counted off front and back "corners" of the ship





"Splash" Damage ***is*** allowed to transfer between P/S Bow and Quarters (sides) - but never around



Armor completely sliced away from hull by cavitation is removed during Resolution Phase.

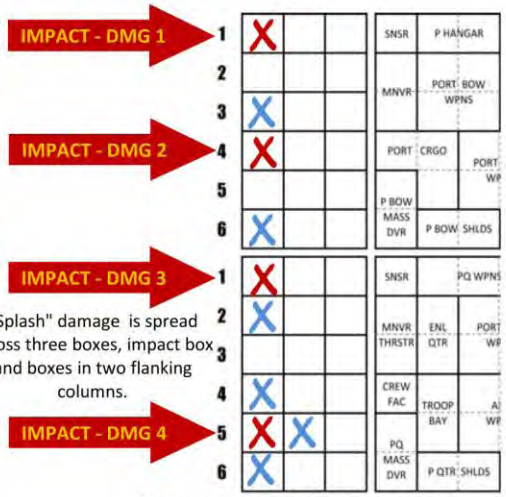
This does not happen with internal structure boxes.

Damage that splashes into any box already hit by other weapons damage is "Redundant" - wasted.

Internal splash damage can go around corners, behind other armor or structure boxes.

PLASMA PROJECTOR
DAMAGE PROFILE EXAMPLES

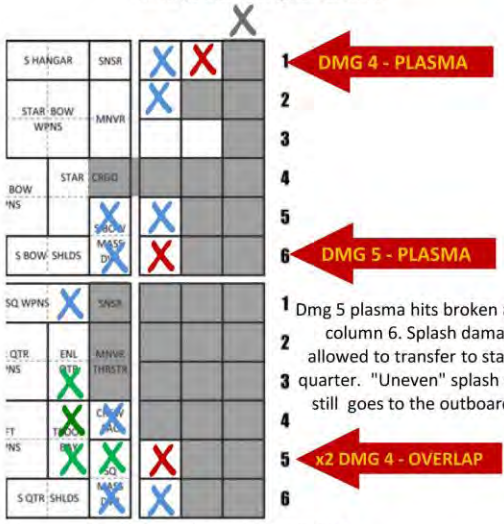
"Splash" Damage ***is*** allowed to transfer between P/S Bow and Quarters (sides) - but never around front and back "corners."



"Splash" damage is spread across three boxes, impact box and boxes in two flanking columns.

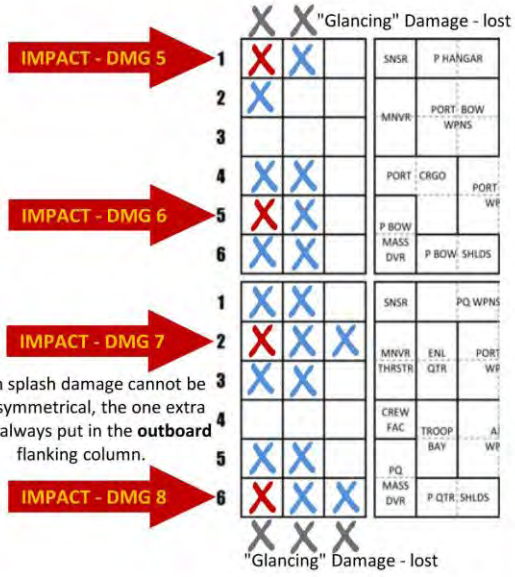
"Splash" damage is kept as symmetrical as possible between two flanking columns from impact box.

Dmg 4 plasma hits broken armor in Column 1. First splash goes outboard, misses ship. Second splash "flows" down. Last point of damage hits in original column.

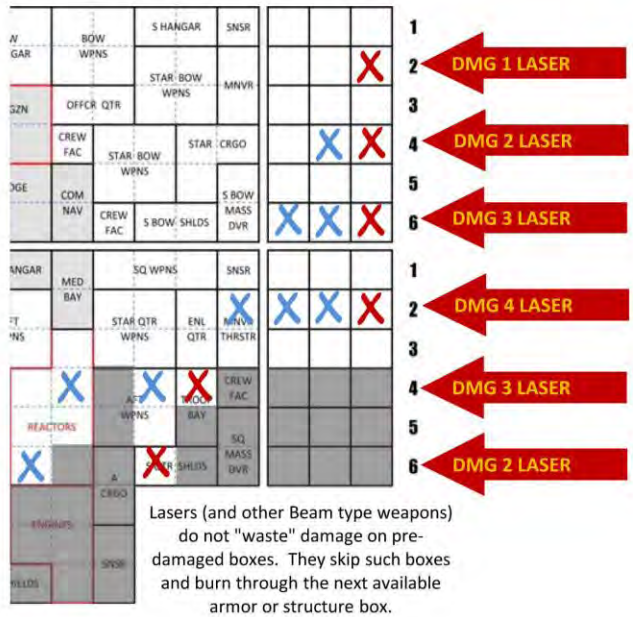


Dmg 5 plasma hits broken armor in column 6. Splash damage is allowed to transfer to starboard quarter. "Uneven" splash damage still goes to the outboard side.

First Dmg 4 plasma hits column 5. Damage is "liquid", excess splashes outboard. Second Dng 5 hits same round in Column 4 (green).



When splash damage cannot be kept symmetrical, the one extra box is always put in the **outboard** flanking column.



Lasers (and other Beam type weapons) do not "waste" damage on pre-damaged boxes. They skip such boxes and burn through the next available armor or structure box.

LASER
DAMAGE PROFILE EXAMPLES

EPC

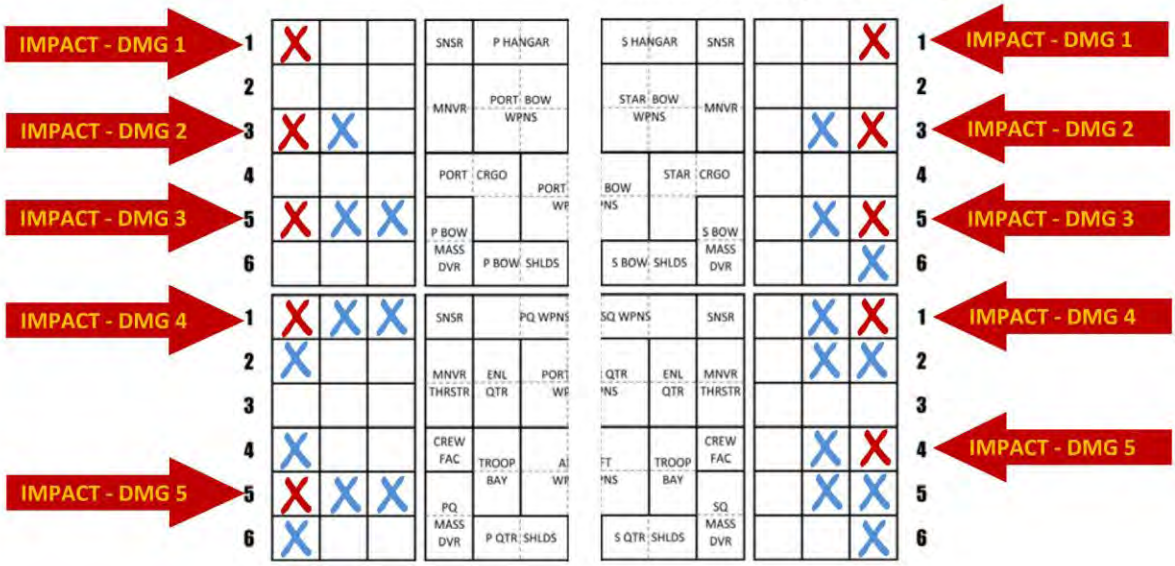
DAMAGE PROFILE EXAMPLES

EPCs do damage in linear columns extending to 3 boxes, then start doing "splash" damage in alternating, symmetrical flanking columns, always flanking to the outboard side first.

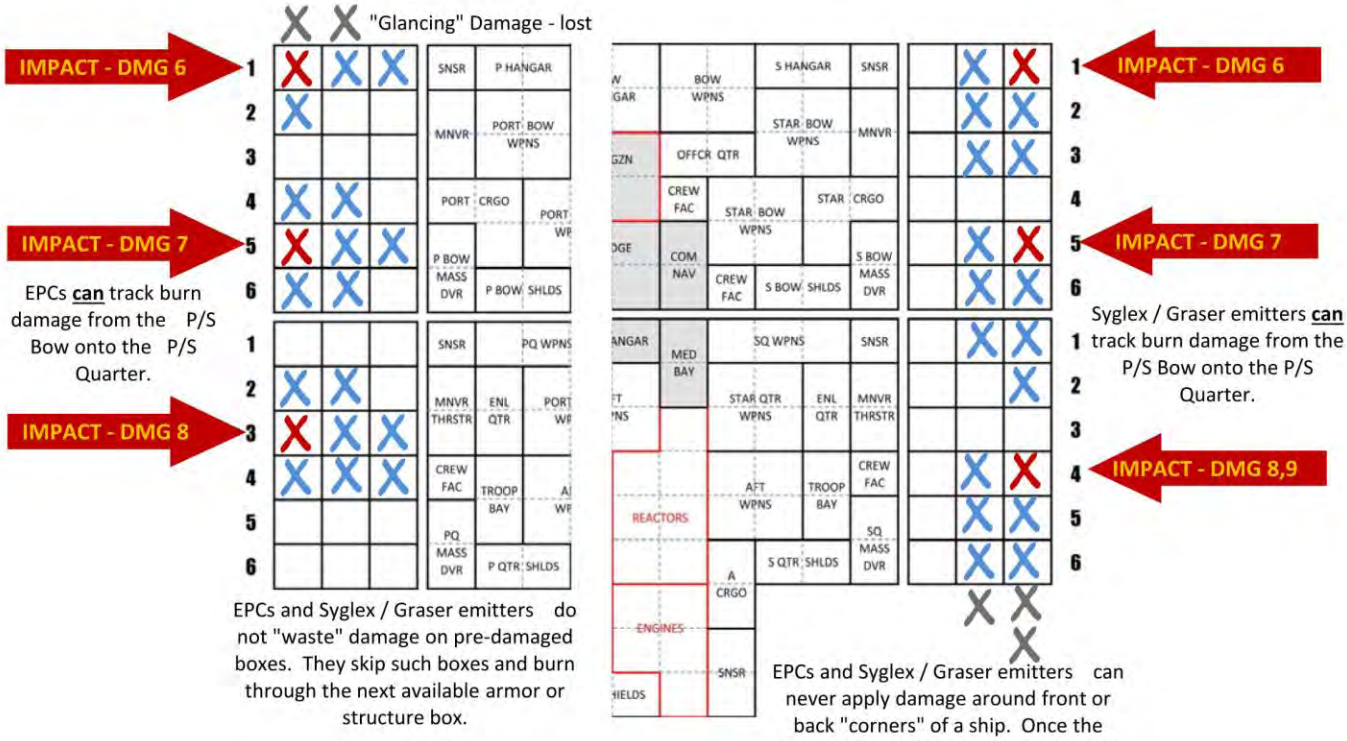
SYGLEX

DAMAGE PROFILE EXAMPLES

Syglex / Graser emitters burn two boxes deep, never more. Any further damage is applied in successive columns, always toward the *aft* (not necessarily *outboard*) end of the target ship.



EPCs and Syglex / Graser emitters are beam weapons, and so inflict new damage on broken , pre-damaged armored and structure boxes in a "liquid" fashion just like plasma projectors. (see previous page).



EPCs **can** track burn damage from the P/S Bow onto the P/S Quarter.

Syglex / Graser emitters **can** track burn damage from the P/S Bow onto the P/S Quarter.

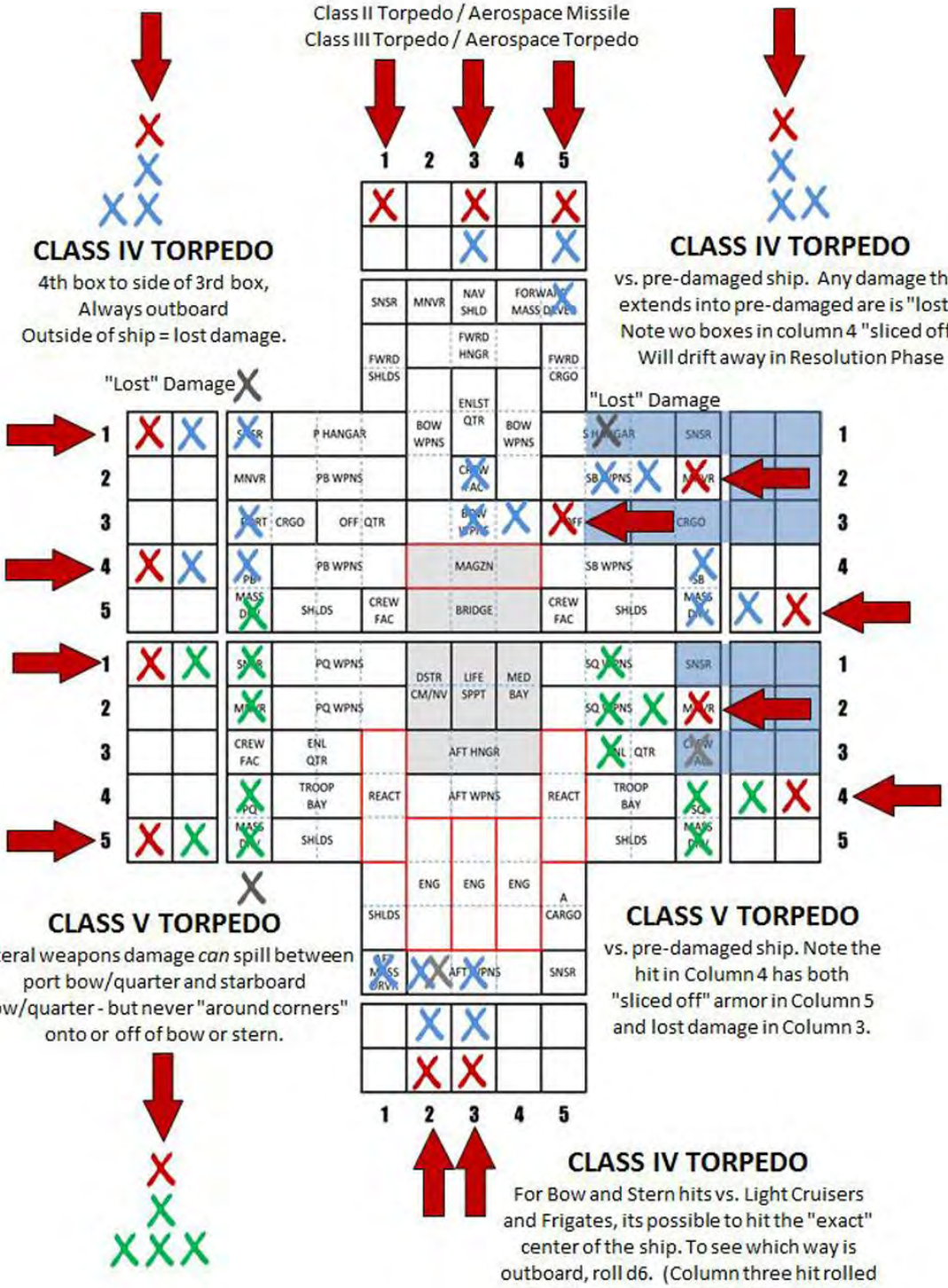
EPCs and Syglex / Graser emitters do not "waste" damage on pre-damaged boxes. They skip such boxes and burn through the next available armor or structure box.

EPCs and Syglex / Graser emitters can never apply damage around front or back "corners" of a ship. Once the damage flies off the back of a ship, it's lost.

TORPEDO
DAMAGE PROFILE EXAMPLES

SAMPLE HITS

Class II Torpedo / Aerospace Missile
Class III Torpedo / Aerospace Torpedo



CLASS IV TORPEDO

4th box to side of 3rd box,
Always outboard
Outside of ship = lost damage.

CLASS IV TORPEDO

vs. pre-damaged ship. Any damage that extends into pre-damaged are is "lost."
Note wo boxes in column 4 "sliced off"
Will drift away in Resolution Phase

CLASS V TORPEDO

Lateral weapons damage *can* spill between port bow/quarter and starboard bow/quarter - but never "around corners" onto or off of bow or stern.

CLASS V TORPEDO

vs. pre-damaged ship. Note the hit in Column 4 has both "sliced off" armor in Column 5 and lost damage in Column 3.

CLASS IV TORPEDO

For Bow and Stern hits vs. Light Cruisers and Frigates, its possible to hit the "exact" center of the ship. To see which way is outboard, roll d6. (Column three hit rolled to port). Also, torpedo damage inflicted simultaneously from nearby weapons hits is always lost (Column 2).

5. Hit Sequence: Players are allowed to resolve all their hits in a given turn in any way they choose. In fact, players will quickly learn that there are some hidden tactics (or at least personal preferences) in the exact order in which hits on a target are applied within a fire phase.

A. Players can apply hits from different weapons types in whatever order they like. Some like to hit with their "broad" weapons first, especially plasma projectors and syglex emitters, "shaving" down enemy armor before punching into the hull with lasers, rails guns, and EPCs.

B. Players can apply hits that have struck in different columns in any order they like. This doesn't matter much with beam weapons which damage in a "liquid" fashion anyway. But with rail guns that cavitate, some players like to apply his in "poor" columns first – sometimes the "splash" damage is just enough to allow hits in neighboring columns to dig much deeper into an enemy's hull and knock out critical systems.

C. Whatever arrangement the players agree on is fine. Just so long as no one is holding up the game. A good rule of thumb is that once a weapon's damage is written on a sheet, it's on there, players shouldn't change their mind and resolve another weapon's damage first.

D. Changes to damage recorded on a WRS should be done only if a clear game mechanics error was made and the players agree to backtrack and fix the mistake.

6. Lost Damage: As seen on the previous damage profile example sheets, it is very easy to "lose" weapons damage. The three most common ways are described below

A. Glancing Hits: As seen on the previous damage profile example sheets, "splash" damage points scored in columns that flank the impact location column can easily "spill" off the side of the ship. Any such points are lost. This was a "glancing hit" that clipped the corner of the ship's hull, with some of the collateral blast damage flaming off harmlessly off into space.

i. Note that "splash" damage **is** allowed to transfer between the **side** facings of a ship (port / starboard bow and stern).

ii. Splash damage is never allowed to "turn a corner" around the front or back of a ship, i.e., transfer onto or off of the bow or stern facings.

iii. Note the "corners" on a WRS where the bow and stern facings join the rest of the ship. Weapons damage is never allowed to transfer "across" this empty corner. If a light cruiser is hit on the stern in Column 5 (extreme starboard side), any splash damage that would be recorded in column 6 (no such column on a light cruiser) is lost, it does not "transfer" into the side of the target ship's starboard quarter.

iv. The one exception to the above rule is **internal cavitation damage** inflicted by certain rail gun or torpedo hits that strike through damaged armor and explode **inside** the ship. Such cases are shown on the damage profile example diagrams on previous pages.

B. Redundant Damage: Blast weapons like torpedoes and rail guns can also lose damage when their damage carries into boxes that are already hit by simultaneous weapons fire or armor or structure boxes that were hit in previous turns. Such cases are shown on are shown on the damage profile example diagrams on previous pages.

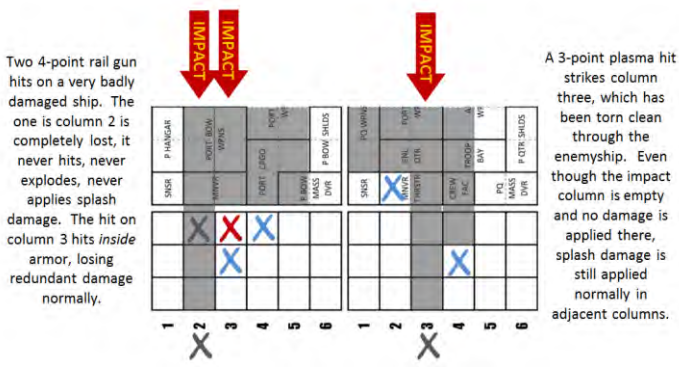
i. Beam weapons do damage in a "liquid" fashion, "pouring" down into any column in which they are designated to do damage. They never suffer redundant damage, if a box or armor or structure was previously hit, that point of damage simply continues to the next available box in that column and applies damage there.

C. Pass-Through Damage: In extreme cases, a ship may be so heavily damaged that a column of destroyed armor and structure boxes has been dug completely through the hull and out the other side of the ship.

i. Any subsequent damage that falls into such a column is lost, it simply sprays through the gutted enemy ship and keeps going into space.

ii. Blast weapons like rail guns, warship torpedoes, aerospace torpedoes, and aerospace missiles, that roll such a column on their hit location, are completely lost. The projectile sailed clean through the gutted enemy ship, it never detonated, and inflicted no damage (no flanking or splash damage, either).

iii. Beam weapons that roll such a hit location may still do damage. The damage that would have been inflicted in the impact location is gone, but any flanking damage or splash damage can still be inflicted in adjacent columns as normal, as the beam rakes the hull along the side of the gaping hole.



4.8 CONCLUDE WARSHIP COMBAT

After all warship firing has been completed, and all damage resolved, there are just a few more steps to go through to wrap up the combat phase.

1. Launch Torpedoes: To complete their weapons fire, warships now launch torpedoes that will begin moving in the aerospace movement phase of the next turn.

A. To "launch" torpedoes, simply put a counter on the map that corresponds to the number of torpedoes in the spread. As discussed in **Rules Section 3.1.4,** torpedo counters should also indicate what class of torpedo they are (color usually works, so a "red five" might mean five Class III torpedoes, but a "blue five" might mean five Class IV torpedoes, etc.).

B. Torpedoes being launched are simply placed in the hex of the *firing* warship. They will begin actual movement during **Rules Section 4.3.5** of the following turn.

C. Before launching torpedoes, make sure that the torpedo bay that is launching them has an **arc of fire** on an enemy **warship**. A given torpedo bay **cannot** fire if it cannot "see" at least one enemy **warship** or **installation**. Enemy aerospace craft do not count for this purpose.

i. Please note that players are in no way obligated to declare which ship their torpedoes are targeting. Right now they're just launching.

ii. Derelict or crippled ships can be used as targets for torpedo launches – so long as they are *enemy* ships. No friendly ship can be used as torpedo "launch bait."

iii. Once launched, when the game gets to next turn's aerospace movement phase, players are free to move torpedoes where they wish within constraints of movement factors and astrophysical bodies. They do not have to remain fixed on the targets that were originally designated as "launch bait."

D. Note that torpedo bays have a limited amount of torpedoes. In *Darkstar*, every torpedo bay is designated as having four "shots." These are recorded as the four boxes right next to torpedo weapon description in the Main Armament area of the **WRS.** When a torpedo bay launches a salvo of warheads, mark off the next "ammo" box in the corresponding torpedo bay.

i. Note that in many cases, a ship will be unable to fire all its torpedoes in the same turn. This results on different ammunition loads in different torpedo bays. This is why ammo is tracked *per bay*. It also means that later in the game, certain torpedoes bays may be empty while other still have warheads loaded, one more factor the captain has to keep an eye on when plotting movement.

E. IMPORTANT: Any given torpedo bay can only have one torpedo spread "in the air" at any given time. A torpedo bay cannot fire a torpedo spread if a previously-fired thread is still in operation (has not hit its target or been shot down).

ii. This is to prevent "cheesy" tactics like massing all four of their torpedo loads in space at once and then bum-rushing enemy mass driver defenses in a single unstoppable salvo.

iii. A useful method to keep track of which torpedoes are "launched" and "active" for purposes of ammunition and eligibility to fire new spreads is this: When a torpedo spread is *fired*, put a **slash** in the ammo track for the appropriate torpedo bay. As long as there is a **slash** in the torpedo bay, new torpedoes cannot be launched from this bay. When a torpedo spread hits its target or is shot down (or otherwise accounted for), the slash is "completed" into an "**X**" to show that the torpedo spread has been fired and has, for better or worse, completed its mission. The shipboard guidance system that direct that torpedo spread to its target is now free to launch and direct a new spread of torpedoes.

MAIN ARMAMENT		
NO.	**TYPE**	**MOUNT**
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Stern
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Stern
2	6 GW Rail Gun (Block 3,3,2,1,1,0,0)	Stern
4	Class IV Torp (Torp 4) X /	P Bow
4	Class IV Torp (Torp 4) X X /	S Bow

2. Resolve Boarding Actions / Shipboard Combat: These take place very rarely in advanced *Darkstar* games. They will be handled in more detail in future supplements, but are mentioned here to indicate when in the **Turn Sequence** such actions take place.

i. Assault boats can dock with enemy warships (**Rules Section 4.4.5.A**) or warships can actually dock with each other (**Rules Section 4.2.9**). Most often this is with crippled enemy ships, but exceptions do happen.

ii. Opposing ships that are linked in this way are actually engaged in shipboard combat, with marines and crew of both ships engaged in a firefight through the passageways and compartments of the warship under attack. Details on these actions will be covered in a later supplement.

4.9 RESOLUTION PHASE

With all combat complete, it's time to assess the damage that's been inflicted on all warships this turn, determine the effects of this damage, and apply those effects to the **Warship Record Sheets** and the game board.

As stated previously, all combat in *Darkstar* (with the exception of mass driver fire against aerospace craft and torpedoes) is simultaneous. Accordingly, **no damage inflicted upon warships or installations *this* turn has yet taken effect.** Here is where his damage is actually applied.

The below steps can actually be taken in any order, since this in mainly a "book keeping" phase of the game where players take stock and assess consequences of what's happened in the preceding **Combat Phase**. However, the sequence outlined below is designed to make this administrative part of the game run as smoothly as possible, eliminating many "double steps" and speeding progress to the opening of the next turn.

1. Check for Ships Disabled: The first and fastest check to make is whether a ship that took new damage this round is now **disabled.** Once a ship is determined to be disabled, very few of the below steps are necessary. "Weeding out" the ships that are disabled is a good way to shorten the Resolution Phase.

A. Bridge Destroyed: If ***all*** the bridge boxes have been marked off the **WRS** (most ships have more than one bridge box), the bridge is considered destroyed and the ship is automatically disabled.

i: No other resolution is required unless the ship is also in danger of exploding (see **Rule 4.9.2**, below).

ii. Note that the ship is not crippled until ***all*** bridge boxes are eliminated. Bridges that are partially destroyed (have at least one box left) suffer an initiative penalty (see **Rule 4.9.3.E**, below)

B. Critical Boxes: The other way ships can be disabled is by suffering hits in **Critical Boxes**. Depending on how many of these boxes have been hit and the **warship's type**, the opposing player may make a **Disable Roll** at this time. If successful, the warship is considered disabled.

i. A **critical box** is any box that appears in an area outlined in **red** on the **WRS.** These include any box of **Engine**, **Reactors**, or **Magazine**.

C. Target to Disable: Each **type** of warship (battleship, heavy cruiser, light cruiser, etc) has a **Target to Disable** value. These can be found in the **Starship Elimination Table** box on the **WRS.**

i. The **"Targ to Disable"** is the number that the *opposing* player must meet or exceed on a d6 dice to disable the ship.

D. Roll to Disable? If the warship has suffered at least one box of critical (**red**) damage **this** round, subtract the **total** number of critical boxes hit from the **Targ to Disable** for the warship's type. If this adjusted number is 6+ or less, the opposing player might disable the ship at this time.

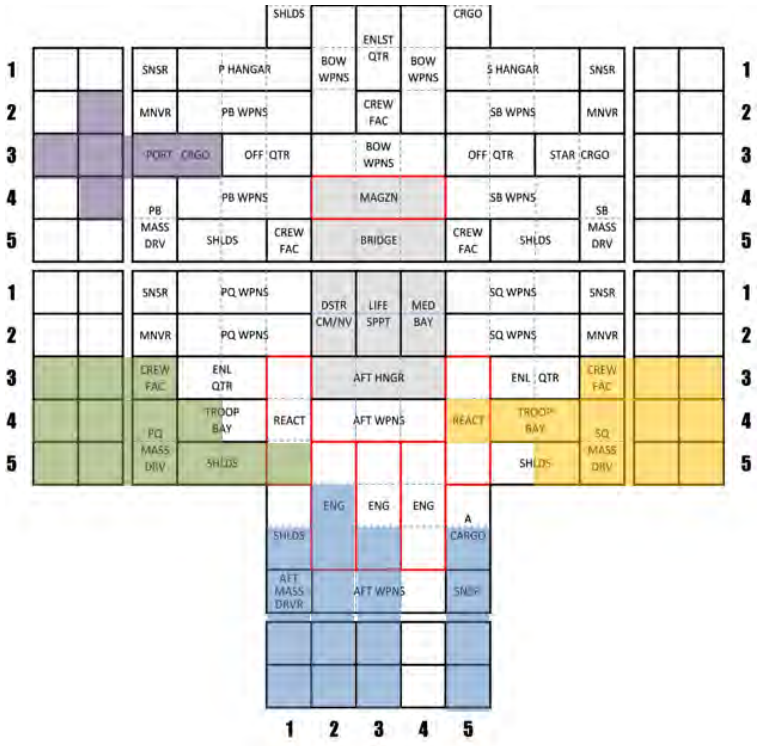
i. The opposing player rolls a d6, and tries to match or exceed the **adjusted** target to disable. If this roll succeeds, the ship is disabled. Once the number becomes 1+, the ship is automatically disabled. If it's *less than zero*, she could explode.

Starship Elimination Table

Class	Targ to Disable (# - crit bx hit) enemy meets this roll on d6 to disable ship	Explosion % per crit box < 0 disable	Core Damage Factor (% per box)	Ship Explosion Damage (two adj facings, rows or boxes) 0	1	2	3	4	Ship Recovery Table (disabled after battle)** Win-Draw	Lose
Battleship	19+	10%	5%	2r	2r	1r,3b	1r	3b	9	8
Heavy Cruiser	14+	20%	10%	2r	1r,3b	1r	3b	1b	8	7
Light Cruiser	10+	25%	15%	1r,3b	1r	3b	1b	--	7	6
Destroyer	7+	30%	20%	1r	3b	1b	--	--	6	5
Frigate	6+	35%	30%	3b	1b	for box damage, roll for where it starts, apply aft or outboard. Any "extra" spills off, does not stack.			5	4
Corvette	5+	50%	45%	1b	--				4	3
Gunboat	4+	N/A	60%	--	--				3	2

** Ships that fail this roll are lost. Roll 1d10 to see how. 1-4 = scuttled. 5-7 = destroyed by enemy. 8-9 = captured. 10 = vanished into space, never seen again (crew may have escaped beforehand).

Aerospace losses from explosions: each "r"= 50% loss, each "b" = 10% loss.



An example of a warship being disabled by critical box hits. In Turn 2, this light cruiser was heavily battered astern (blue). Note three boxes hit in areas outlined in red (engines). A light cruiser has a Target to Disable of 10+, which becomes a 7+ when three are subtracted for those engine hits. But the opposing player can't roll a 7+ on a d6, so this cruiser is okay … for now. On Turn 3, She is hit hard in the port quarter (green). Note one more red box is now hit (reactor). The target to disable is now 10 - 4 = 6+, so during the Resolution Phase, the opposing player gets a chance for a Disable Roll. He rolls a 4, which is not 6+, so the cruiser *still* remains active. On Turn 4, the cruiser is hit in the port bow (purple). The target to disable is still a 6+, but the opposing player does *not* get another Disable Roll here because no new critical (red) boxes were hit this turn. Finally, on Turn 5, the cruiser is hammered on her starboard quarter (yellow). One more reactor box is hit, so the opposing player gets another chance at a disable roll. The adjusted number is now 10 - 5 = 5+. The opposing player rolls a 5, and the cruiser is now **disabled**.

E. Disabled Warships: Warships that are disabled are considered "lost" for scenario / victory point purposes, and they can take no further action for the rest of the game. However, they remain tactically significant and are not completely removed from play.

i. Disabled warships remain in their hex. At the beginning of every movement phase for the rest of the game, they continue to move at the same velocity and facing they were travelling in the turn they were disabled. They have **no** operable weapons or shields.

ii. Disabled warships always move first (they "lose initiative" automatically). They cannot turn or change velocity, except through normal gravity rules.

iii. This movement continues until the ship leaves the table or strikes an astrophysical object (**Rules Section 3.3.5.E**).

iv. Disabled warships count as a warship in the hex for stacking purposes (**Rules Section 3.3.3**). They can also be used for a torpedo lock for the launch of future enemy torpedo spreads (**Rule 4.8.1.C.ii**).

v. In advanced games, disabled warships are also subject to docking by enemy warships or assault boats, boarding, and capture.

vi. Note that for campaign / commander development purposes, most disabled warships will actually be recovered and eventually put back in service (**Rules Section 5.4.2 and 5.4.3**).

vii. Disabled warships can still be fired at. Their shields are all **automatically zero**. Enemy players may want to increase repair times in a campaign game, or may just want to explode the ship. While this kind of play is hardly encouraged, it is technically legal.

2. Check for Ships Exploded: Not all ships that are disabled are so lucky. If a ship has taken *too much* damage in critical boxes, she might also explode.

A. "Negative" Target To Disable: A disabled warship becomes eligible to explode if the Adjusted Target to Disable (above) becomes a negative number.

i. Obviously, in any such case the warship in question is already automatically disabled (you can't roll less than a -1 on a d6).

ii. In the aforementioned example of the light cruiser being crippled, if she takes 11 critical hit boxes, and her Adjusted Target to Cripple becomes a -1, she is now not automatically crippled, but she might also explode.

B. Roll for Explosion: The roll for an explosion is a percentile roll (either roll a d100 or two d10s, one for a 10s value and one for 1s value).

i. The target for an Explosion Roll is equal to the % value listed for the warship type on the Starship Elimination Table, **times** the amount by which a Ship Disable number is a negative value (< 0).

ii. That sounds complex. It really isn't. Here's an example. Assume the light cruiser we've been talking about has taken *yet more* critical damage. She's now been hit in 13 critical boxes. A light cruiser's target to disable is 10, so her Target to Disable would technically be a -3. Looking at the Explosion Column of the **Starship Elimination Table**, we see that a light cruiser has a 25% chance to explode **times** the amount that the Disable Roll <0. Since she is at -3 Target to Disable, the light cruiser is obviously automatically disabled and is now 75% likely to explode (3 x 25%).

iii. Warship explosion rolls are always made by the **owning** player, not the opposing player.

iv. If a warship explodes, it does so immediately, right

here in the Resolution Phase. Note that this explosion might cause additional damage to nearby warships and aerospace craft (see below).

v. If a warship does not explode, it is automatically disabled and continues to move at the beginning of each movement phase per **Rules Section 4.9.1.E.** It does *not* have to make new explosion checks unless someone hits it again in a future turn and it suffers at least one more critical box hit.

vi. It should be noted that explosions in *Darkstar* are actually quite rare. The game is about crippling enemy warships or driving them off. The officers and men of these warships are all "part astronaut" - and rarely do they actively strive to inflict on even their most bitter of enemies a hideous death in the vacuum of space. Still, "accidents" happen.

C. Effect of Explosion on Warships: Warships in *Darkstar* are powered by massive fusion reactors, and when they explode, they do so with incredible violence.

i. If a warship explodes, immediate check the **Ship Explosion Damage** columns on the **Starship Elimination Table.** Each type of warship (except gunboat) has a series of values that show how much blast damage they inflict on any ship or installation within 0, 1, 2, 3, or 4 hexes. Shields offer no protection.

Class	Ship Explosion Damage (two adj facings, rows or boxes)				
	0	1	2	3	4
Battleship	2r	2r	1r,3b	1r	3b
Heavy Cruiser	2r	1r,3b	1r	3b	1b
Light Cruiser	1r,3b	1r	3b	1b	--
Destroyer	1r	3b	1b	--	--
Frigate	3b	1b	for box damage, roll for where it starts, apply aft or outboard. Any "extra" spills off, does not stack.		
Corvette	1b	--			
Gunboat	--	--			

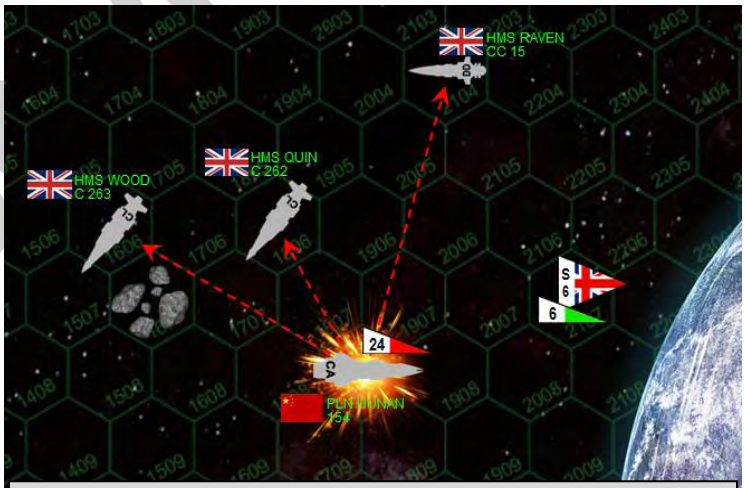
ii. This blast damage is inflicted *immediately* upon any and all warships or installations (enemy or friendly) within the prescribed 0-4 range in hexes.

iii. Two adjacent facings of any warship are always effected by blast damage. In most cases, these will be obvious (the two hex sides of the subjected ship pointing most clearly towards the exploding ship).

iv. If two facings are not obvious (the ships were aligned in the same hex row, and so one hex side is a "perfect" match), damage is taken on that "obvious" hex row and whichever adjacent facing the owning player decides. In this case, sensors detected the buildup of the explosion and the ship was able to execute a last-second partial evasive action.

ii. A value of "2r" means two complete rows of armor or structure boxes are removed from the two adjacent facings of the ship suffering blast damage. A "1r, 3b" means strip away one complete row from both subjected facings, plus three consecutive boxes off the next facing (for frigates and smaller, this will constitute another whole row). A value of "1r" means one full row removed from both affected facings. "3b" means three adjacent boxes off the two affected facings. "1b" is a single box.

iii. For "partial rows" (i.e., the "3b" results), roll on appropriate sized hit location dice for type of ship being affected by blast damage (d10 for a battleship, d6 for a heavy cruiser, etc.). This is where that three boxes of blast damage starts, and extends outboard from there. Any "extra" spills off the ship, it does not stack or loop back around to the next row.



An example of explosion damage. A Panasian Union heavy cruiser has just exploded. HMS *Raven* is four hexes away, so must take a single box of damage on her port bow and port quarter facings (the two obvious facings toward the blast). As a destroyer, she rolls a d4 for each of the hit location columns for these two bits of damage. HMS *Quin* is closer, two hexes, so must lose an entire row of damage boxes Her port bow is *directly* facing the blast, so that facing is definitely taking the blast, but her captain can choose to take the second required facing of damage on either the bow or the port quarter. HMS *Wood* is actually screened by astrophysical body (per normal LOS rules), so takes no damage. The Panasian cruiser had just launched torpedoes, but all 24 of these are lost (2r = 100%). Three hexes away, the British player must lose 30% (3b blast damage) of his torpedoes and scouts. But since 30% of 6 is technically 1.8 and you *always* round down here, he only loses one scout and one torpedo.

iv. NOTE: Blast damage is considered "liquid" damage if it's hitting ship facings with pre-damaged armor or structure boxes. So if a ship is required to suffer one row of blast damage, a better way to think of it might be: "remove one box from every column in that facing." Basically, all the damage that ship already has in that facing now gets one row deeper.

v. Although it's very rare, a warship explosion can actually disable nearby ships, or (in very extremely rare cases) actually set off *another* explosion.

D. Effect of Explosion on Aerospace: Aerospace craft and torpedoes can also be effected by the massive shockwave kicked off by these cataclysmic ship explosions.

i. Consider any torpedo spread or aerospace groups within an effected hex (0 - 4 range from the blast, depending on the size of the ship exploding).

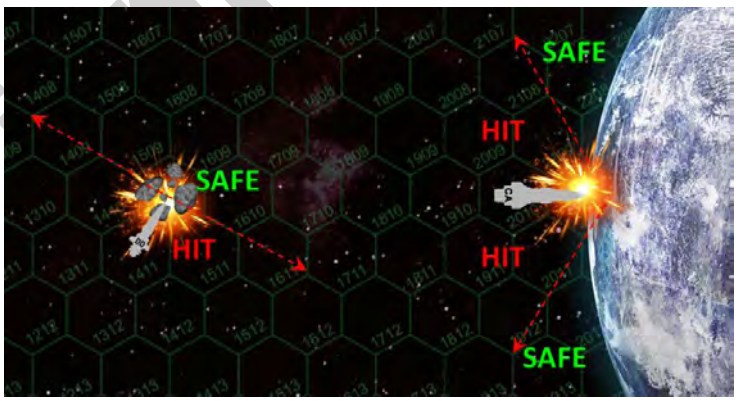
ii. For each "r", immediately remove 50% of the **total** aerospace craft in each effected hex, do the same with torpedoes. For every "b", remove 10%. Calculate this for the **total aerospace** craft and the **total** torpedoes for each hex that falls within the radius of the blast. Round **down** to the nearest whole aerospace craft / torpedo. If the hex contains mixed types, the owning player can remove whichever types he wishes, so long as the correct number are removed from play.

iii. These aerospace craft and torpedoes are immediately destroyed by the blast wave.

- **2r = 100% aerospace / torpedo loss**
- **1r, 3b = 80% loss**
- **1r = 50% loss**
- **3b = 30% loss**
- **1b = 10% loss**

iv. Example: A battleship explodes. Two hexes away, there is a stack of eight fighters and four bombers. At two hexes, a battleship explosions inflicts a damage code of 1r, 3b (80%) aerospace loss. Since 80% of 12 (total aerospace craft in the hex) = 9.6, nine total aerospace craft are considered destroyed. The owning player chooses (for example) to remove all eight of his fighters and one bomber, trying to keep as many of his bombers active as possible.

D. Explosions and Astrophysical Bodies: Explosions are also triggered when ships collide with planets, moons, or asteroids. Blast damage is assessed as normal, with the consideration that if the astrophysical body would block LOS between the blast and another ship or aerospace group, it blocks the blast as well and no blast damage is assessed (absorbed by the astrophysical body).



3. Apply Damage Effects: For any ship that is disabled or exploded, this step is not necessary. Exploded ships are obviously gone, and disabled ships have **no** operable systems (including any weapons and shields). However, ships that are still in the game may have taken damage to key systems that will adversely effect their performance in various areas.

In general, a "component" is considered destroyed (for game effect) if the *entire* component is filled in. Especially in larger ship types, almost all components consist of more than one structure box. Unless otherwise noted, all structure boxes in a given component must be filled in for the results described below to take effect.

A. Removed Sliced Armor: Any armor boxes completely severed from the hull of the ship are now removed. This can happen through "cavitation," the result of certain torpedo or rail gun hits. In order to be considered "still attached," a box of armor must be able to connect back to the internal structure boxes of the ship by any **non-diagonal** connections (sideways connections are allowed). Connections are not allowed between different facings of the ship.

B. Mass Drivers Destroyed: When a complete Mass Driver component location is hit, the mass drivers for that facing are considered knocked out (e.g., bow, port quarter etc.). On the Mass Driver box on the WRS, mark off the highest remaining Mass Driver number. The new smaller number is now used for the rest of the game. If more mass driver locations are knocked out on other facings, further Mass Driver numbers are marked off.

C. Other Weapons Destroyed: When a complete weapons location (e.g., Starboard Bow Weapons) is marked off, the owning player must choose one of his **Main Weapons turrets** or **torpedo bays** in that location and scratch it off his WRS. That whole turret or torpedo bay is gone.

i. If a second weapons component is completely marked off (larger ships, destroyers and above), or if there is only one weapons component in that facing (smaller ships, frigates and below), then **all** Main Weapons in that facing are marked off.

ii. Mass Drivers are not effected by this roll unless there are no "Main Weapons" in that facing (typically true for P/S Bow, and especially P/S Quarter). In such cases, mark off a Mass Driver number as described in **Rules Section 4.9.3.B** *unless* that facing's mass driver component has already been accounted for. Basically, you can't knock out the same mass drivers twice.

Hit Location Damage Effects			
Engines	Each COMPLETE engine lost, -1 Thrust. Counts as CRITICAL HIT	**Bridge/CIC**	1st hit, -1 to init. All boxes hit, ship disabled.
Reactors	Each COMPLETE reactor lost, -1 Thrust. Counts as CRITICAL HIT	**Maneuver**	Each full component hit = +1 thrust cost / turn.
Magazine	Do NOT fill in all boxes. Counts as CRITICAL HIT.	**Sensors**	Each full component hit = -1 all base to hits.
Weapons	Each COMPLETE weapon area filled in = wpns mount elim in that mount location (target ship's choice). If no wpns there, no effect. If ALL wpns hit in mount location, ALL wpns in that mount location lost.	**Mass Drver**	Each full Mass Driver hit = one MD value scratched out.
		Hngr/Crgo	If all filled in, lose all cargo / craft in location.
Criticals	During Resolution Phase, subtract crit boxes hit from **Target to Disable**, roll on or above this on d6 knock out the ship. If the adj number is ≤ zero (roll impossible), the ship is auto disabled, and roll Explosion Chance % Dice.	**Miscell.**	Enlisted, Officer & Flag Qtrs, Flag Bridge, Darkstar Drive, Medical, Com/Nav, Nav Shield, Crew Facilities. No Effect in game play. Troop Bay = Marines (board / landings)

D. Sensors Station Destroyed: When a complete sensors component is marked off, assess a -1 penalty to all to-hit rolls for the rest of the game. Record the penalty in the **Status (Dmg'd Systems)** section of the WRS. This -1 penalty applies to all gunnery, torpedo, and mass driver rolls for the rest of the game. Facing does not matter. Successive hits and sensor suite losses are cumulative.

E. Maneuvering Thruster Destroyed: When a complete Maneuvering Thruster component is marked off, add a +1 cost (thrust) to all turns the ship makes for the rest of the game. This includes **Roll to Invert,** which now costs 2 thrust instead of 1. Note some smaller ships (corvettes and below) have a -2 penalty. Record the penalty in the **Status (Dmg'd Systems)** section of the WRS. Additional Maneuver Thrusters lost add **additional** penalties.

F. Engines / Reactors Destroyed: When a complete Engine or Reactor location is marked off, reduce the ship's available thrust by 1. Record the penalty in the **Status (Dmg'd Systems)** section of the WRS.

i. Remember that reduced thrust also affects initiative scores for the rest of the game, as initiative is resolved as d6 + ship's thrust (**Rules Section 4.1.3**).

ii. Of course, these are considered **critical boxes** and may also lead to ships being disabled or exploding.

G. Bridge Hit: If at least one box of a bridge is hit but the whole bridge is not destroyed, the ship suffers a -1 to all initiative rolls for the rest of the game. Be sure to record the penalty in the **Status (Dmg'd Systems)** section of the WRS.

H. Hangars Destroyed: When a complete Hangar location is marked off, any aerospace craft in that hangar are lost.

i. Often, aerospace craft in that hangar are already launched. The aerospace craft are naturally unaffected, but they cannot land in that hangar for purposes of rearming (this really only happens in battles involving larger carriers).

I. Troop Bays Destroyed: When the troop bay locations are destroyed, mark off a corresponding fraction of the ship's marines or ground assault troops.

i. Gunboats and **Corvettes** have no troops bays. Eliminate all marines when **Aft Hangar** is destroyed.

ii. Frigates: Eliminate all marines when the only **troop bay** box is hit.

iii. Destroyers, Cruisers: Eliminate half of the marines when the first **troop bay** is completely destroyed. Eliminate the rest when the second bay is destroyed.

iv. Battleships: Eliminate 25% of marines for each troop bay completely destroyed.

J. "No Effect" Compartments: The rest of the compartments (crew facilities, med bay, cargo, etc.) have no effect on game play, other than possibly as critical boxes (e.g., **Magazine**), or as **Core Boxes**, see below.

4. Check for Ship Breaking Off: Even if a ship is not crippled or exploded, it may have taken enough damage and (more importantly) crew casualties that the commander of that ship is compelled to break off. Whether the captain makes that call regardless of what his commander (the player) wants, or is compelled by the crew or first officer, or even the ship's AI, the ship basically "fails a morale check" and makes best speed for the nearest corner of the map sheet.

A. Core Boxes: How likely a ship is to breaking off is determined by looking at how many **core** boxes have been marked off. These are the boxes in the center of the WRS damage chart, that are colored in gray. These represent areas of the ship where most of the crew complement are actually located when the ship is at general quarters. In other words, marked off core boxes represents significant crew casualties.

B. Roll for Break-Off: Each core box hit adds a certain percentage to the chance the ship will break off the action now in the Resolution Phase. How much of a percentage is determined by ship type. These percentages are found on the **Starship Elimination Chart** on the **QRS.**

i. At this step of the Resolution Phase, check to see if the ship took any **additional** core box damage **this turn.** If she did, she will have to make a percentile dice roll. The owning player makes this roll.

ii. Any result that matches or is below this target indicates that the ship must "break off" the action.

iii. Example: On Turn 3, a destroyer has suffered one box of core damage. Looking at the **Core Damage** section of the **Starship Elimination Chart**, we see she has a 20% chance of being forced to break off. Her captain rolls a 43, indicating that she does *not* have to break off. On Turn 4, she takes additional damage, but none of it is in the core. She still has core damage, but no *new* core damage, so during the Resolution Phase of Turn 4, she does *not* have to make another roll. On Turn 5, she takes two more boxes of core damage. She how has three total core damage, bringing her chance to 60%. Her captain rolls a 38, indicating that beginning on Turn 6, the destroyer must flee the battle area.

C. Effects of Breaking Off: When a ship fails a break off roll, take note with your opponent which corner of the map sheet is closest to the ship in question. That is the corner from which she must escape.

i. On the ship's next movement phase, she is compelled to turn as best she can (given all other damage and penalties, of which there are by now probably several) toward that corner.

ii. IMPORTANT: A ship that has "broken off" **is not allowed to decelerate.**

iii. A ship that has broken off is still allowed to use all weapons she has left, launch torpedoes and aerospace craft, lend mass driver support to other ships, etc. She's just compelled to get off the table.

iv. A ship that has broken off is allowed to otherwise maneuver and turn however she wants, so long as she maintains an "honest course" toward her designated escape corner and does not decelerate.

iv. The rules about escape corners and "prohibiting deceleration" are just to keep cynical players from "cheesing" the system and dragging their feet in getting "fleeing" ships off the table.

D. Additional Notes: Note that any time a player *wants* to get a ship off the table, he can "break off" voluntarily.

i. The ship simply has to accelerate off the table during her movement phase. A player never has to "wait" to fail a break off roll if he wants a ship to run.

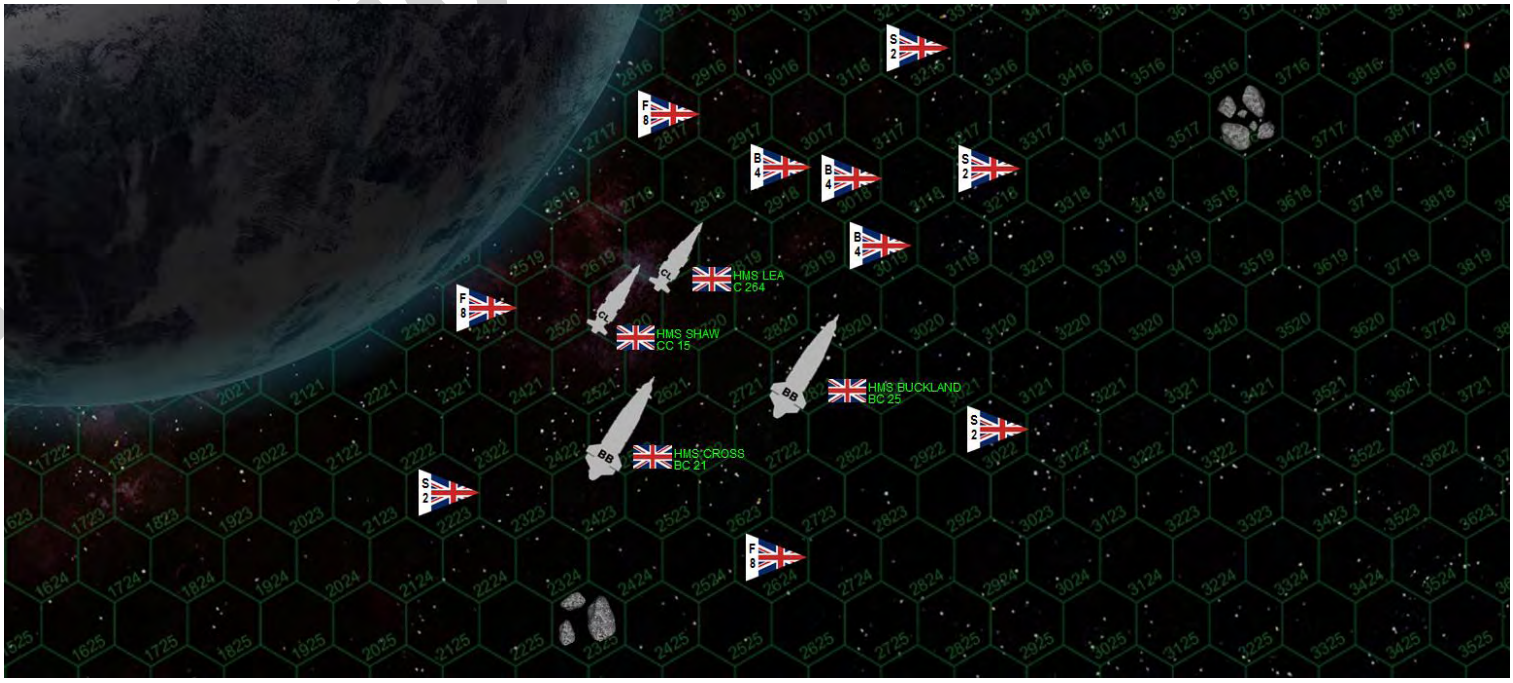
ii. This is especially true in campaign games, where ships that have accrued campaign points and advantages are prized assets. When they take too much damage, players may very often choose to lose a battle rather than lose their best ships ... *and* the battle.

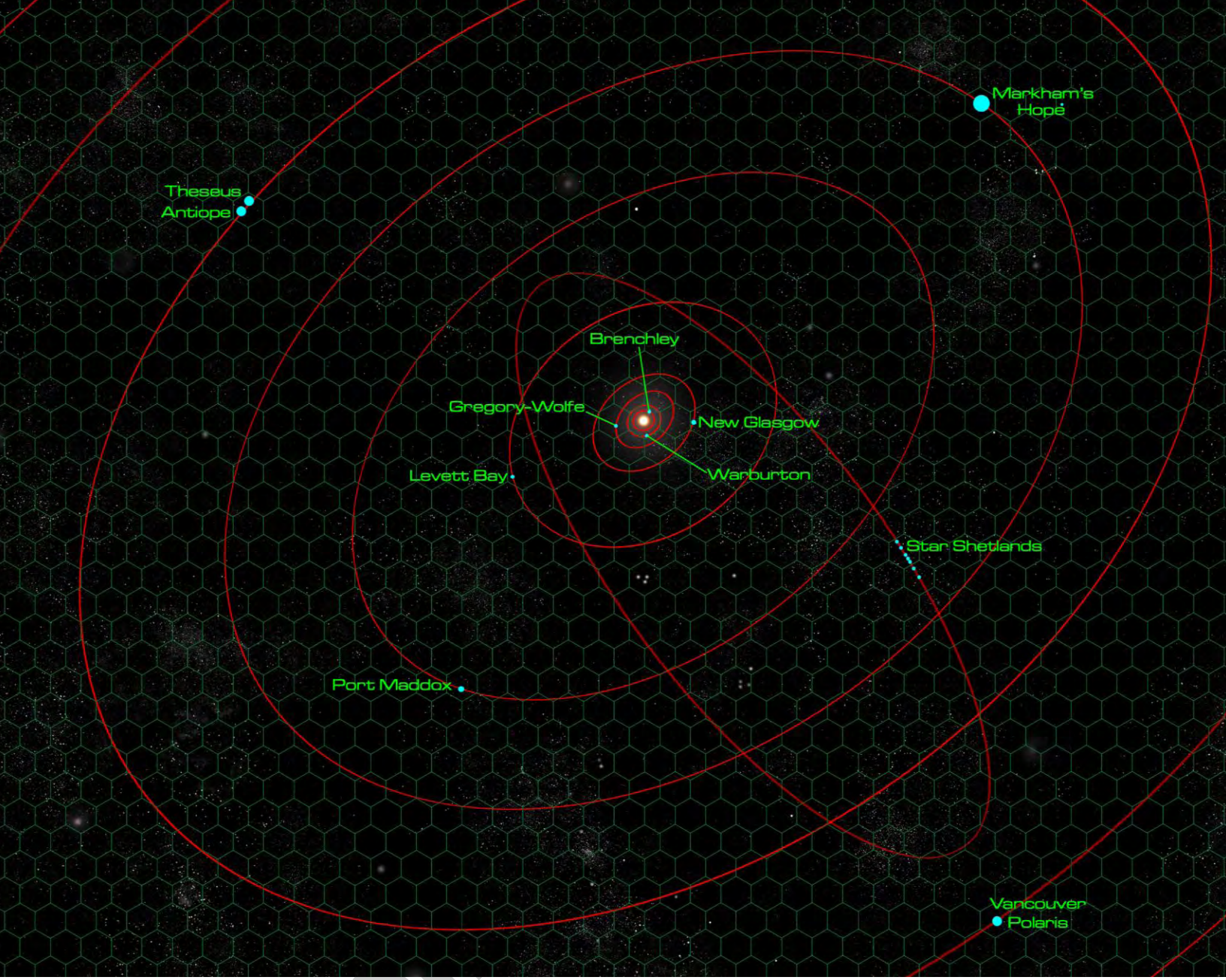
5. "Lock In" Damage For This Round: The last part of the **Resolution Phase** is to finalize all damage sustained by warships this round.

A. Carefully review all WRS one last time, especially those for ships that have not been disabled or exploded, and ensure that all system penalties have been assessed and recorded.

B. Depending on how you're recording damage, "finalize" all damage sustained this round, so it will be easily distinguished from new damage sustained next round.

i. As stated in **Rules Section 3.7.6.C**., when marking damage on your Warship Record Sheet, consider using a dot or slash. Then, during the Resolution Phase, as you're assessing the effects of this damage, complete these slashes into "X"s.





SECTION FIVE - SCENARIOS AND COMMANDERS

INTRODUCTION

Thus far, the rules presented have covered only the "bare bones" mechanics required to make a *Darkstar* game actually work - how to move the ships, how they fire at each other, how to apply damage, etc. This section will deal will now expand into the more contextual concepts of the *Darkstar* system, taking a broader look into how these rules start to build into the larger environment of the *Darkstar* universe and the navies that operate here.

First, we'll look at **Scenario Design**, where guidelines are established for how to set up the balance of warships, aerospace craft, and other forces in a given *Darkstar* game. Not all games are strictly "equal," and we discuss how such "asymmetrical" games can also be successfully run.

Next we tackle **Scenario Scoring**. In many *Darkstar* games, who actually won the game isn't immediately clear. One side may have lost less ships, but suffered damage to many more or lost a critical objective.

Post Battle Resolution covers what happens to warships after the battle is over. The vast majority of ships "knocked out" of a *Darkstar* game will be disabled, not destroyed outright. Are these ships saved, scuttled, or even captured?

Next we look at **Upgrades**, where players can establish a cadre of favorite ships and commanders, advancing them from battle to battle, building them up in rank, skill, fame, and capabilities. Will your commander make his original ship a legend, or take a "career fast track" to command his or her own battle fleet?

Finally, we have **Helpful Hints** and **Designer's Notes**, with some advice and context on the decisions made in creating the *Darkstar* game and universe.

5.1 SCENARIO DESIGN

This section is going to cover how to set up individual games in *Darkstar*. What ships can fight? What is a "fair game?" What are the objectives? These are the questions we try to address below. The overall objective of scenario design is to create games that are . . .

- More or less fair
- Fun and challenging for both players
- Clearly defined
- Interesting (i.e., not repetitive)

1. A **Scenario** in *Darkstar* is basically one individual game. It lists the ships involved on both sides, covers in broad terms what the mission is, lists any astrophysical bodies present and any of their properties (gravity or movement), and any special rules that will apply to this game.

2. Scenario Types: There are three basic scenario types in *Darkstar*. These are **Assault** games, **Raid** games, and **Mission** games.

A. Assault Games are the most straight forward. Two forces meet in a battle space that both sides' high command has deemed is important enough to fight over. The game lasts eight turns. Sometimes a specific point on the table (like an orbital installation) must be taken, destroyed, or defended. The two sides are playing for keeps, and glory goes to the last ships standing.

i. Winner: the side with the **most forces left** on the table at the end of the game.

B. Raid Games are a little faster and more subtle. The two sides are meeting for a fight, but not necessarily concerned with control of this patch of space. This is a game about zooming in fast, hitting the enemy as hard as you can, all while minimizing the damage you take in turn. This could easily mean that you break off after delivering your attack. Since control of the battle space is not an issue, there is no "dishonor" in successfully withdrawing ships. The game usually lasts six turns.

i. Winner: the side that has **knocked out the most** at the end of the game. Ships that have left the table voluntarily are not considered destroyed or disabled.

C. Mission Games are basically any other kind of scenario that does not fit into the Assault or Raid category. As we'll cover below, the parameters for Assault and Raid games can be very clearly defined, can be calculated to within a fraction of a percent, and there is never any doubt as to the exact outcome. The balance and math built into Mission games, on the other hand, can be a little more nebulous.

i. Also, many of the details required for a Mission scenario will only be covered in future references.

ii. That said, players are always free to experiment with whatever "narrative-driven" games with which they feel inspired and comfortable.

iii. With any Mission scenario, players should definitely agree ahead of time to have a "friendly" game, as the objective and narrative-specific parameters of a Mission scenario make *definitive* balance approximate at best. One way to handle this is to agree to award both sides "winning" campaign points from the outset (see **Rules Section 5.5**, below), so no one feels bad if a narrative-driven scenario turns out to be unbalanced against their side.

iv. Some very basic examples of Mission scenarios:

- **Convoy:** One side has been charged with protecting a convoy of slow, unarmed cargo ships. The other side has to attack not only the escort force, but must also destroy cargo vessels.
- **Invasion:** One side has to maneuver a planetary assault ship toward a specific hex of a large asteroid, moon, or terrestrial planet. Assault boats have to be launched and make it to the target hex. A defending force has to stop them, and victory is determined by the proportion of how much of the ground assault force reached the drop zone, and how much didn't.
- **Kidnap/Rescue:** One side has targeted a specific ship on the opposing force. That ship *has* to be crippled (*not* destroyed or driven off). After the battle, the crippled ship is boarded to either kidnap or rescue a VIP known to be aboard. To prevent the enemy from simply zooming off the board with that particular ship, the exact *identity* of the target ship is not revealed to that player (hidden objectives).

3. Scenario Balance: Scenarios are built, at least partly, on the basis of a points system. The more powerful a warship is judged to be, the higher its cost in scenario points. Both sides should start with *approximately* equal scenario points, at least in beginning games.

A. The scenario point cost of a warship is listed in the lower right corner of the **Warship Record Sheet**.

B. The *baseline* for point costs start at the warship's **Type**.

i. Gunboats start at 5 points.

ii. Corvettes start at 10 points.

iii. Frigates start at 20 points.

iv. Destroyers start at 40 points.

v. Light Cruisers start at 70 points.

vi. Heavy Cruisers start at 100 points.

vii. Battleships start at 200 points.

C. This base score can then be modified by many factors, including (bot not limited to):

i. A ship's aerospace complement adds to its price.

ii. Carriers are warships that carry very little integral armament. Instead they carry large hangar bays for aerospace fighters, bombers, or assault boats. They can be any **warship type** (i.e., any size). In general, they cost half price of their type (e.g., a destroyer-hull carrier would start at costing 20 points rather than 40 points). However, they must then pay for their aerospace group, which always makes them more expensive than their class' base cost. **Fighters and Bombers** cost 2 points each. **Scouts and Assault Boats** cost 1 point each.

iii. Ships can be designed with certain advantages or flaws that inherently effect their price. Most commonly, this is the "Advanced" or "Dated" power plant, which has added or subtracted available power on their base design tables, and affecting the ship's available shields, thrust, weapons, and other systems.

iv. Ships, commanders, or crews can be upgraded through Upgrades (see **Rules Section 5.6**)

v. Ships can start the game with pre-existing battle damage.

vi. Full details on warship class design may be covered in a future reference. Details on Upgrades and their costs are found in **Rules Section 5.7** of this reference.

Power Plant Type	Standard
Base Scenario Cost	40
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**42**

Power Plant Type	Advanced
Base Scenario Cost	24
Aerospace Group Cost	26
Campaign Modifiers	4
FINAL SCENARIO COST	**54**

An example of warship scenario costs. To the left we have a standard destroyer which starts at 40 points, carries two scouts (1 point each), which yields a final cost of 42 points. To the right we have a destroyer-type aerospace carrier, which is a little more complicated in this example. As a carrier, the ship starts at 50% base cost, which for a destroyer is 40 / 2 = 20. However, the ship carries an advanced power plant, which add 20% to base ship cost. Then, the carrier carries four bombers, eight fighters, and two scouts, or (4x2) + (8x2) + (2x1) = 26. Also this carrier in particular has now purchased (through campaign points) the **ECM / Shielding** upgrade (giving her +1 shielding on all sides), which costs a further 20% of base ship cost (not including aerospace cost). The final cost for the destroyer type aerospace carrier (advanced engines, one Battle Upgrade) is 54.

D. For Assault and Raid games, simply add up the points of the ships on both sides, taking into account any of the modifiers listed above. At least for beginning games, players should try to get this balance as close as possible. However, you may not be able to (or wish to) attain a perfect balance. In such cases, consider some of the options below:

i. Aerospace craft can be removed from the side with "too many" points. Aerospace scouts may be down for maintenance or detached on other missions. Fighters or bombers may be missing, losses not yet recouped from previous battles or detached on other missions.

ii. Conversely, additional aerospace craft can be added to the side with "not enough" points. Perhaps there is a friendly carrier close by (but not actually engaged on the gaming table), or there is a friendly installation within aerospace bomber range.

iii. If players truly want an "asymmetrical" game, simply find the difference between the two sides in starting scenario points, and apply that difference as victory points *already won* by the weaker side (often called "balance points." In this way, an unfair *battle* can be made into a fair *game*. The stronger side has more ships or better ships (or both), but must now make a much steeper climb to win. Essentially, his superiors have given him additional resources, and they expect that he deliver results to show for it.

5.2 SCENARIO SCORING

Many times in a *Darkstar* game, the winner will be clear. Other times it will be close, and specific math will be needed to determine a clear winner. Other times, such as in a campaign or a tournament, the exact *degree* of victory will need to be ascertained. In such cases, use the guidelines below:

1. Assault Games: In these games (which last 8 turns or until one side concedes), points are awarded for warships and aerospace craft left operational in the battle area at the end of the game. Disabled ships obviously do not count. Ships which have left the table (voluntarily or otherwise) do not count. These are battles to the death, or at least the last man standing.

A. A ship which has been forced to break off the action (**Rules Section 4.9.4**) but technically remains on the board at the end of the game, counts for half points.

B. Do not forget to count up any remaining aerospace craft still on the table (launched or in bays).

C. Compare the total scenario point values of any / all remaining combat units (warships and aerospace craft). The winner is the one with the higher score. The **Determining Margin** is simply the loser's score subtracted from the winner's score.

i. Exceptions: The **Determining Margin** must be at least 5% of one side's beginning scenario value. If the two sides do not have equal beginning scenario points, use the larger side. If the victor did not win by margin

equaling at least 5% of this number, the battle is considered a draw. High command has deemed the engagement "too close to call."

ii. If the **Determining Margin** between the winner's and loser's score is between 5% and 40% of the larger side's beginning scenario point value, the game is considered a **Tactical Victory.**

iii. If the **Determining Margin** is more than 40% of the larger side's beginning scenario point value, the game is considered a **Decisive Victory**.

iv. Tactical and Decisive victories can be used as general terms to describe the outcome of a game. In full-scale *Darkstar* campaigns (covered in a future references), these levels of victory have different effects on the overall operational and strategic balance of an ongoing war.

2. Raid Games: In these games (which last 6 turns or until one side concedes), points are awarded for warships and aerospace craft disabled or destroyed by the end of the game. Ships which have left the table *voluntarily* do not count as victory points for the other side at all. Ships that were forced to break off (**Rules Section 4.9.4**) count for half victory points.

A. Do not forget to count up any aerospace craft shot down by mass drivers or enemy aerospace craft.

B. Compare the total scenario point values of any / all combat units destroyed, disabled, or broken off (half points). The winner is the one with the higher score. The **Determining Margin** is simply the loser's score subtracted from the winner's score.

i. Players *must* destroy at least 30% of the enemy's force (measured by scenario points) to claim success in a raid. If a commander doesn't destroy at least 30% of the enemy's starting scenario points, he cannot claim a successful raid to his superiors, even if he had the higher score. If neither side destroyed 30% of the other, both sides are considered defeated. *That wasn't a "raid," captain. That was a fly-by. Try again*.

ii. The **Determining Margin** between the winner's and loser's score must be at least 5% of the larger beginning scenario value. If it is not, the battle is considered a draw. High command deems the engagement "too close to call."

iii. If the **Determining Margin** is between 5% and 40% of the winning side's beginning scenario point value, the game is considered a **Tactical Victory.**

iv. If the **Determining Margin** is more than 40% of the winning side's beginning scenario point value, the game is considered a **Decisive Victory**.

v. Tactical and Decisive victories can be used as general terms to determine the outcome of a game. In full-scale *Darkstar* campaigns (covered in a future reference), these levels of victory have different effects on the overall operational and strategic balance of an ongoing war.

3. Mission Games: These are much more fluid in the way players can determine goals or victory. For instance, in a Convoy Battle, the defender might be awarded one point for each cargo ship that successfully traverses the board, the attacker may one point for every cargo ship disabled or exploded (or even captured). In a planetary assault game, the defender wins if more than half the attacker's beginning assault boats don't make it to the target surface. "Kidnap / Rescue" games can be "all or nothing," where the VIP aboard the one target ship in question is either taken, or not.

4. In many cases, the victory in a given *Darkstar* game will be self-evident, without the need for all these calculations. But in case the game is very close, or players are interested to see the exact margins of victory, or if the parameters of a campaign or tournament require precise measurements, the framework is provided.

5. Here are some examples:

A. Assault Game: An American light cruiser (72 points), a destroyer (42 points), and two frigates (21 points each - all these points include the scouts carried aboard) engage a Prussian battlegroup. The American force has a starting total of 72 + 42 + 21 + 21 = 156 points. The Prussian force is slightly smaller, with only 148 points. This means the Prussian force starts off with 8 "balance" victory points already earned. At the end of the battle, the Americans have lost the light cruiser and one frigate, but cripple or drive off the whole Prussian battlegroup with the exception of one torpedo corvette and some scouts. So the score is calculated by the American player having 40 + 20 points left (the destroyer and one frigate), along with three scouts (3 more points) = 63. The Prussians have their one corvette (10 points) and 5 scouts left. That's 10 + 5 points + the 8 "balance points" they started with = 23. So the Americans win by 63 - 23 = 40. They started with 156, so they had to win by at least 8 (5% their total). They made this goal easily. If they win by a margin of 40%, they can call this a **Decisive Victory** (156 x 40% = 62). But with a determining margin of 40, they don't quite reach this goal, and so they are awarded a **Tactical Victory** (Determining Margin between 5% and 40% of larger side's beginning points).

B. Raid Game: A Japanese carrier strike group consists of a destroyer-type light carrier (20 points + 26 points in aerospace), and two strike frigates (21 points each) has a

beginning total of 88 points. They engage in a raid game against a Russian battlegroup that also has 88 points. In order for either side to win, they must destroy at least 30% of the enemy's force (26 points), and destroy at least 4 points more points of enemy forces than they suffer themselves (5% of 88). The Japanese launch their strike, and destroy a Russian destroyer and a frigate (40 + 20 points), so they easily meet the 30% minimum requirement for a raid. However, they also lose one of the frigates and virtually their whole aerospace group (26 points). This gives the Russians a score of 47, against the Japanese 60. The Japanese thus win by 13 (15%), giving them a tight **Tactical Victory** in this raid.

5.3 SAMPLE SCENARIOS

Here are a few sample scenarios players can either play with ships and rules available in this reference, or use as models to build their own scenarios.

1. Cruiser Clash At Contested Gas Giant Moon: In the Greywolf star system (HD 84117, Second Band colonies of the Hydra Constellation), a 50-year Imperial Prussian lease has run out on a series of silicate-rich moons previously claimed by a corporation with close political ties to the Treasury Department of the United States. The Prussians are contesting the terms of the original treaty, and the first American ships to approach the installations were fired on by Prussian "perimeter attack boats" (*Umfangangriffboote,* or "U-boats"). Now the US Navy's *Nashville* battlegroup has orders to hit the Prussians at the first of these moons, destroying or scattering any "illegal" naval presence. A *Saipan*-class planetary assault ship is waiting out in the system's Oort Cloud, ready to jump in an land a battalion of US Marines on the contested moon. But first the Prussians must be cleared from orbit, and their navy is naturally contesting the issue.

Scenario Type: Assault
Factions: United States vs. Imperial Prussia
American Forces:

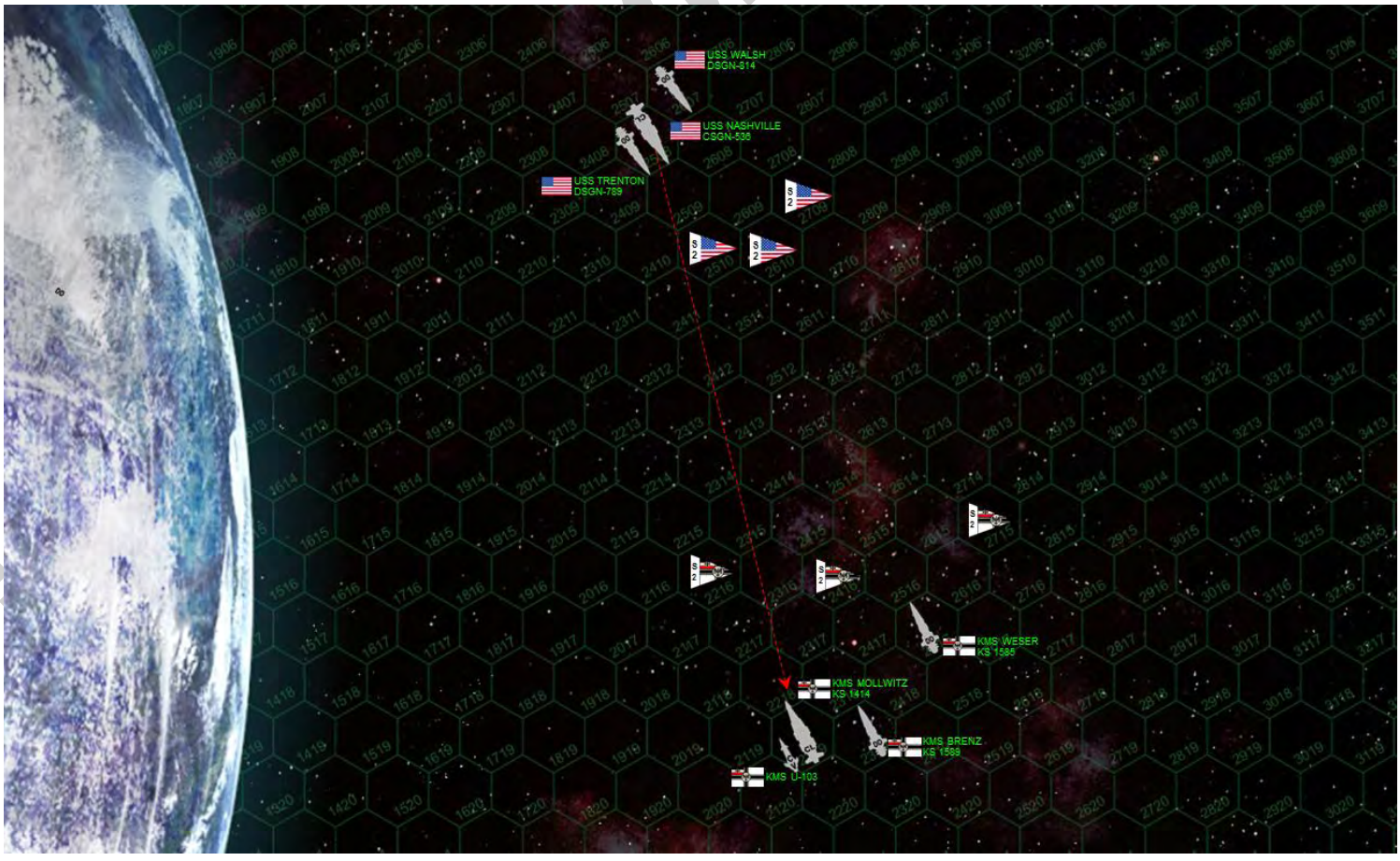
- USS *Nashville* (CSGN-536, *San Antonio* class light cruiser)
- USS *Trenton* (DSGN-799, *Valcour* class destroyer)
- USS *Walsh* (DSGN-814, *Clarino* class destroyer)

(86 + 42 + 50) = 178 points

Prussian Forces:

- KMS *Königgratz* (KS-1416, *Hipper* class light cruiser)
- KMS *Leuthen* (KS-1421, *Hipper* class light cruiser)
- KMS *Koblenz* (KS-1728, *Emden* class frigate)
- U-103 (Type XII Corvette)

(72 + 72 + 21 + 12) = 177 points



Astrophysics: The outer curve of a very large (earth-sized) moon covers the entire left hand side of the map. The moon exerts one movement hex's worth of gravity out to a distance of ten hexes from the surface. The planet is not moving in game terms.

Victory Conditions: This is an **Assault**, with points awarded for ships left on the table at the end of the game (Turn 8). Ships that have been forced to break off but are still on the map by the end of the game are worth half points.

- Win by at least 9 points: Tactical Victory
- Win by at least 70 points: Decisive Victory
- Prussians start with 1 balance victory point.

2. Aerospace Strike in Outer System Debris Belt: Smoldering tensions have again snapped loose in the ever-contentious Psi Serpentis stellar group, this time in the Russian-held system of Psi Serpens C ("Tsarina's Jewel"). In an effort to help the Russians see sense at the negotiation table, the Japanese Navy (based out of the nearby Kokura Prefecture, governed from Psi Serpens D) has been given orders to raid a Russian perimeter deployment and surveillance base, far out in the frozen "Kuiper Belt" fringes of Psi Serpens C. But this surveillance outpost has picked up the gravity distortions of the approaching Japanese Darkstar wave, and has just enough time to summon a Russian intercept force from their lonely navy base here at Psi Serpens C, a tiny Pluto-analog planetismal known only as *Stradanye* ("Heartache").

Scenario Type: Raid

Factions: Japan vs. Holy Russian Empire

Japanese Forces:

- IJN *Nagai* (DCE 111, *Shimada* class light carrier)
- IJN *Kitakami* (CE 43, *Taiho* class light cruiser)

(50 + 86) = 136 points

Russian Forces:

- CPK *Poltava* (221, *Slava* class heavy cruiser)
- +7 bombers, 10 fighters

(102 + 14 + 20) = 136 points

Astrophysics: Place ten 1-hex asteroids on the map, with the each player placing five in alternating order. No asteroid can be within 5 hexes of another. Asteroids are moving in a direction determined by 1d6 roll of the dice. All asteroids are moving a 2 hexes per turn, in the same direction. No gravity effects.

Victory Conditions: This is a **Raid**, with points awarded for ships destroyed or disabled by the end of the game (Turn 6). Ships forced to break off are worth half points.

- Win by at least 7 points: Tactical Victory
- Win by at least 54 points: Decisive Victory
- Either side must destroy at least 40 points of enemy ships or aerospace craft to claim any kind of victory.

3. Convoy Attack: About 30 light-years from Sol, in the Libra-Sagittarius colonies, a lone British colony known as "Duchess Annabel's Star" forms the pivotal lynchpin for shipping lanes threading through Prussian, Japanese, Roman, and Panasian space. Needless to say, commerce convoys traversing this "Annabel's Corridor" rarely enjoy a tranquil voyage. Gravitic mines set off space-time distortions strong enough to disrupt a Darkstar drive, forcing ships to drop into normal space where they can be ambushed and attacked by marauding pirates. To counter this, such convoys are usually closely escorted by Royal Navy warships. One such battle has begun here, where a British convoy has been forced out of its Darkstar wave about two billion kilometers shy of Annabel's Star system's outermost gas giant.

Scenario Type: Mission

Factions: United Kingdom vs. Corporate Consortium (Pirates)

United Kingdom Forces:

- HMS *Singapore* (D 68, *Falklands* class destroyer)

(50 points)

- + five Q-90 class automated cargo barges

Pirate Forces:

- *Gabrielle's Luck* (*Baroness* class frigate)
- *Connor's Payback* (*Baroness* class frigate)
- *Devil's Darlin'* (*Twilight* class venture cutter)

(25 + 25 + 10) = 60 points

Astrophysics: This is technically interstellar space, in the helioshock boundary of Annabel Star's solar wind. Cosmic radiation and electromagnetic disturbance is severe. At the beginning of every turn, roll 1d6. On a 1-4, there is no effect. On a 5, subtract 1 from all to-hit numbers for that turn (sensors are partially blinded by electromagnetic interference). On a 6, subtract -2 from all to-hit targets for the turn.

Special Rules: The cargo ships move at whatever speed will carry them across the entire map in five turns (it depends what size map you're playing on). The cargo ships have no warship record sheets, they're assumed to have shields of 3 on all facings, no weapons, and always move at a constant speed. They can make one facing change per turn. They have 20 damage points. When a pirate weapon hits one of them, the damage number for that weapon at that range is simply subtracted from the 20, and when the ship reaches zero, it is considered disabled.

Victory Conditions: This is a **Mission**, with special victory points awarded based primarily on the state of the convoy. The British get one point for every convoy ship that survives until the end of the game. They also get one point for disabling / destroying the pirate blockade runner, or two points for a frigate. The pirates get one point for each cargo ship destroyed, and two if they can destroy / disable the British destroyer.

5.4 POST-BATTLE RESOLUTION

After a few games of *Darkstar*, players will quickly realize that a great majority of the warships involved will be driven off or disabled. This is especially true in **Assault** or **Mission** type scenarios. Players will also find that actually seeing a ship "destroyed" (i.e., explode in a fantastic sci-fi blast) is really quite rare.

Given these facts, players new to *Darkstar* can be forgiven for thinking that it is nearly impossible to …

- actually "kill" a ship in this game.
- build up a "career" or campaign (**Rules Section 5.5**).

The answers lie in understanding that *Darkstar* isn't just a sci-fi starship game, it's also an homage to 20th Century naval combat and operations. Reading about these battles, we find that with some notable exceptions (Jutland, 1916), ships almost never just "blow up and sink" right there on the spot. Ships are crippled and set adrift, starting what often becomes a heroic narrative in damage control, counter-flooding, firefighting, casualty evacuation, and so on. Ships usually sink hours or days later, or friendly ships take them in tow and somehow get them back to port. Sometimes enemy submarines finish them off during the night, sometimes their own crews have to scuttle them or friendly destroyers "put the old lady out of her misery" with a spread of "mercy torpedoes" (to prevent the ship falling into enemy hands, even if as a trophy).

In naval warfare of the 26th Century, the same things happen in space. Crews of crippled warships spend hours, days, or even weeks alone in the cold vacuum, trying to delicately weld their ship back together from the inside. Universal Rescue Beacons (URBs) have hopefully been launched, friendly ships try to take them in tow and assist in repairs. But enemy bombers, torpedo corvettes, and hunter-killer mines take their toll. Sometimes decompression and fire (or instability in the fusion reactors) is just too much, and the decision is taken to detonate the ship after everyone is safely evacuated.

Exactly what happens in the hours and days *after* a *Darkstar* battle is resolved in a quick, clean, and straight forward manner, described below.

1. Ships that have been **disabled** and **safely** drifted off the map (per **Rules Section 4.9.1.E.i-iii**) must, after the battle is over and victory decided, now roll on the **Warship Recovery Table**, found on the **QRS**.

A. Ships that exploded on the table, either through enemy fire or collisions with astrophysical objects, do not have the opportunity to make this roll. They are already considered lost and exploded, and the captain has to make survival rolls as described below.

B. Ships that broke off the action (voluntarily or not) and safely escaped, do not have to make this roll. They are considered to have automatically survived - perhaps a little worse for wear - but operational "under their own steam" nonetheless.

2. Target to Recover. This is the number found by cross-indexing the row of the ship's **Type** and the column that indicates whether that ship's side won or lost the battle that just took place (**Win-Draw** or **Lose**).

A. Essentially, larger ships have a better chance of being recovered than smaller ships. They have more air-tight compartments, bigger damage control crews, more redundant systems, and high command will honestly invest more effort in saving a 1500-man battleship than a 20-man gunboat.

B. Also, the side that just won the battle (and controls the local volume of battle space) has a slightly better chance of finding, saving, and recovering their own ships. Rescue teams can operate with more safety and freedom, communications and sensors aren't being as heavily jammed.

3. Roll to Recover: The roll to recover is 1d10. Any result that is *equal to* or *less* than the recovery target indicates that the ship has been **saved**. Any roll that *exceeds* the target indicates that the ship has been **lost**.

4. Lost Ships: To see what happened to ships that were lost, roll another d10. The results are at the foot of the Warship Recovery Table, and also listed here:

Type	Warship Recovery Table (disabled after battle)	
	Win-Draw	Lose
Battleship	9	8
Heavy Cruiser	8	7
Light Cruiser	7	6
Destroyer	6	5
Frigate	5	4
Corvette	4	3
Gunboat	3	2

Ships that fail this roll are lost. Roll 1d10 to see how. 1-4 = scuttled. 5-7 = destroyed by enemy. 8-9 = captured. 10 = vanished into space, never seen again (crew may have escaped beforehand).

A. 1-4: Scuttled by Crew. After a valiant attempt to save the ship, it's sadly become clear that she's just not coming back. Perhaps successive decompressions are rippling through her bulkheads, the reactor is overloading, or fires are out of control and no more compartments can be opened to space to snuff the flames. The skipper makes the difficult call, and all hands abandon ship. The ship's crew, log book, bell, and flag are carefully evacuated, and the ship is put out of her misery before falling into the hands of the enemy.

B. 5-7: Destroyed by enemy! Before the crew can either save the ship or be forced into the tough decision to scuttle, the enemy appears from the darkness and finishes her off. Prowling torpedo corvettes are a common "executioner" in this role, often sweeping the area after a battle to pick of enemy stragglers. "Hunter killer mines" are another hazard, basically dormant torpedoes left strewn through space, activating when unfamiliar IFF signals come too close. If the enemy had a carrier in the recent battle, fighters or bombers can easily pick off the derelict. In fact, if the opposing player had any operational warships left after the previous battle, players can agree (at their mutual option) for narrative reasons that any of those ships are actually responsible for the kill.

C. 8-9: Captured by the enemy! The enemy comes upon the crippled ship, and rather than destroys her, puts troops aboard and captures her! This is actually very easy, as the disabled ship has no weapons, no shields, no engines, cannot fight or flee, and is completely at the mercy of the enemy warship. Rarely does the enemy warship have to fight for the prize, simply sending a message:

We are observing "cruiser rules."
You have fifteen minutes. Abandon ship, or else.

The captain of the disabled ship still gets the normal survival check (see below), as the crew may have abandoned ship when the approaching enemy warship was detected.

D. 10: Vanished into space, never seen again. The disabled ship was seen, tracked, and recorded on a given trajectory. But when friendly rescue ships, tugs, or warships arrive at what should be a calculated rendezvous point, the disabled ship just isn't there. She is just gone, forever, lost in the icy, endless abyss of interstellar space. Even in the 26th Century, the "void" hides many mysteries and secrets. Sometimes such ghost ships are found years later, or decades, or centuries, or millennia. But most of the time they just disappear into some unknowable fate. Note that captains and crews still get the normal survival rates (see below), it is assumed that the bulk of the officers and crew were evacuated, perhaps to get help, or to come back with another ship and equipment to save their original ship. But she just isn't there. Outside of spooky old sailors' tales, she's never seen again . . .

5. Captain Survival Checks: If a ship is lost (exploded on the table, collided with an astrophysical object, or lost on the Warship Recovery Table), players who are interested in tracking the fate of the ships captain now roll on the Captain Survival Table, below. This is important if players are using the optional **Upgrade Rules (Section 5.5, 5.6, 5.7**), where captains must survive before taking command of new ships.

CAPTAIN SURVIVAL TABLE (d10)
Ship Explosion or Collision: roll 1-4 to survive.
All CIC boxes hit: roll 1-6 to survive.
CIC hit but at least one box left: roll 1-7 to survive.
Disabled, not Recovered (Scuttled, picked off my enemy): roll 1-8 to survive.
Captured: Roll d10. 1-4 = Escaped and OK. 5-7 = POW. 8-10 = KIA.
Disabled but Recovered: Survival is automatic.

6. Warship Repair Times: In detailed campaign games, it's sometimes important to know exactly how long a ship that has been heavily damaged, disabled but recovered, or even disabled and captured, is out of action.

A. If a damaged warship was not disabled, never lost power, and survived the battle under her own power, the time to repair is simple. It's **one day per box of internal structure** damage marked off.

i. Armor boxes are not counted.

ii. There is no time added for getting back to port, the crew is assumed to be effecting internal repairs during any transit time back to port where heavier external repairs can be made.

iii. If the conditions of an ongoing campaign demand that the ship enter combat before the allotted time has passed, simply allow the player to repair one box for however many days he has. Such boxes can be repaired in any order. In such a case, the ship will enter her next fight with partial battle damage already on her sheet. All armor boxes are considered repaired.

A. If a ship *was* disabled, but made her "saving throw" on the **Warship Recovery Table**, the time for repair is 1.5 days per internal structure box marked off, ***plus*** time needed to get the ship back to port.

i. Again, armor boxes are not counted.

ii. Consult the campaign map if you're using one, and assume 3 days per light-year between the battle site and the nearest friendly port. If less than one light year (base is in the same star system), stick with three days of tow time.

iii. Once at the port, add the additional repair time calculated by **Internal Structure x 1.5 days** for dry dock.

iv. Disabled warships cannot re-enter combat until full repaired. They cannot re-enter combat early with "partial battle damage" still on their sheets.

v. This is why engaging enemy forces in enemy-held star systems is so dangerous, and why it's important to establish (and defend) forward bases in key star systems early in any campaign.

American, Russian, and Panasian warships at the 2518 Battle of Xenia's Fortune.

5.5 CAMPAIGN POINTS

One of the big draws to playing *Darkstar*, and what keeps players coming back time and again, is the idea of building up a ship, captain, and crew. As players fight battles with the same ships over and over (assuming they can keep them alive), they can improve the abilities of their ship, crew, and captain, enhancing the abilities of the ship and making it a more effective force in ongoing *Darkstar* games.

1. This progression of commanders, crews, and ships is strictly optional. While it's fun to see cherished commanders and warships build in ability, survivability, and fame (until they potentially become the "USS *Enterprise*" or "*Millennium Falcon*" of *Darkstar*), this mechanic admittedly adds a little math and record keeping to the game. Accordingly, players are completely free to ignore it if they wish.

2. Campaign Points: This mechanic is driven by **Campaign Points**. These work almost like "xp", which ships accrue through continued play and spend to purchase **Upgrades** off a list (featured below). Each Upgrade enhances the ship's ability in some way.

3. Earning Campaign Points: A warship earns Campaign Points in the following manner:

A. One campaign point for every game in which a warship appears.

B. An additional campaign point is awarded if the warship was on the winning side of that game.

C. Special Award: Once per game, players may vote or agree on which ship had the best "epic moment" or otherwise played *the* key role in the battle. If the players all agree, that warship may get a **third** campaign point (is she was on the winning side) or a second campaign point (if she was on the losing side).

4. Spending Campaign Points: For every **six** Campaign Points a warship earns, the owning player can select an item from the list of **Upgrades**. This list is provided below (**Rules Section 5.7**).

A. The exact rules and game effects for each Campaign Advantage are listed in the rules for that upgrade.

5. Transferring Campaign Points: Campaign points can be transferred from one ship to another in a player's **Battlegroup, Task Force** or **Fleet**, but only under the following conditions:

A. The "donating ship" must have a **higher** Campaign Point score than the recipient, both before *and* after the Campaign Point transfer.

i. This represents a battlegroup, task force, or fleet commander managing his/her personnel, transferring experienced officers, technicians, and crewmen from one ship crew to another.

ii. Both donating and receiving ships must be in the same Battlegroup, Task Force, or Fleet (see **Rules 5.7.13**, **14**, and **15**, below).

iii. Campaign point transfers can only happen between games, not in the middle of a game.

6. Killed / Retired Captains: It does happen. Captains can fail a Captain Survival check (**Rule 5.4.5.**) and be killed in the game.

A. Also, a captain that has lost three ships, even if he or she has survived all of these events, is "retired" from play. Essentially, high command has concluded that combat duty just isn't your thing, and "promotes" you to command a training base or teach a class at the Academy. In either case, captains can have their *Darkstar* careers cut short.

B. When this happens, the player is allowed to start a new commander with **half** the Campaign Points that the killed or retired finished with. That new commander can be part of any faction.

5.6 UPGRADES

Upgrades are upgrades to a warship's performance. They are purchased by spending Campaign Points, which a warship earns through fighting in continued battles (**Rules Section 5.5**)

1. All **Upgrades** cost **six** Campaign Points to purchase.

2. All Upgrades are playtested to gave the same *general* benefit in gameplay. However, certain warships will have far greater use for certain Upgrades than others. A destroyer that carries no fighters or bombers won't get much use out of "Elite Aerospace" while a carrier that carries no rail guns probably wouldn't buy "Gunnery Impact." Players are advised to choose carefully for their particular warship.

3. Most Upgrades can be bought only twice. The only exceptions to this are the "Command Upgrades" (**Rules 5.13, 14, and 15**), which need only be bought once. Also, **Promotions** (**Rule 5.16**) and **Ship Type** (**Rule 5.16**) can be bought more than once, at the player's option.

4. Upgrades already purchased **can be traded** for other Upgrades. For example, if you've bought "Electronic Warfare" and you feel it hardly provides you with benefit in gameplay, you can trade it for Gunnery Accuracy or SLD Thrust. This represents captains transferring skilled officers and technicians into his crew, or prioritizing the training for his crew, focusing on some skill sets over others.

A. So long as the total number of Upgrades does not exceed the amount allowed by the number of Campaign Points earned by that ship / captain.

B. Players should be reserved with how often they switch Upgrades. Switching Upgrades between every battle is cheesy and excessive. Usually, Upgrade switches are allowed only at the beginning of a **campaign**, not the beginning of an individual game.

5. IMPORTANT: Upgrades come in two basic categories: those that effect the **Scenario Point Cost** of a warship, and those that don't.

A. Battle Upgrades are those that have an effect in actual tactical *Darkstar* game play. They make the ship measurably "better" in the game, and so always increase the base Scenario Point cost of the warship.

B. Campaign Upgrades are still vital and can really help you build up your ship and your commander. However, they don't come into use during actual game turns. The ship doesn't actually become a more powerful unit in tactical *Darkstar* game play, and so does *not* increase the scenario point value of the ship.

C. Whether an Upgrade effects warship scenario points is clearly listed in the rules descriptions of each Upgrade (see Rules Section **5.7**, below).

D. If you buy a Campaign Advantage that effects your ship's scenario point cost, be sure to annotate it on your Warship Record Sheet, as shown:

Power Plant Type	Standard
Base Scenario Cost	70
Aerospace Group Cost	2
Campaign Modifiers	14 + 14
FINAL SCENARIO COST	100

An example of Campaign Points and Upgrades. Here's the lower right hand corner of a light cruiser's WRS. She starts at 70 points (standard), plus 2 for scouts. She's been in many battles, and has earned 18 Campaign Points. This allows her to buy three Upgrades. She buys "Commander's Luck" (Campaign Upgrade - no scenario point cost), "ECM/Shielding", and "Gunnery Accuracy" (Battle Upgrades, which have a scenario point cost). So the scenario point adjustments for the two Battle Upgrades are recorded, bringing her new adjusted total to 100 scenario points.

5.7 UPGRADES LIST

Listed below are the Upgrades currently available in *Darkstar*, itemizing their specific rules effects and whether they are considered **Battle Upgrades** (adds to a warship's scenario point value) or **Campaign Upgrades** (no addition to warship scenario point value).

For **Battle Upgrades**, the adjustment to a warship's scenario point value is always 20% of the ship's **base** scenario points, without the cost of any aerospace craft carried aboard. For easy reference, the standardized scenario point costs for **Battle Upgrades** is listed below.

UPGRADE COSTS Scenario Point Cost per Upgrade		
Battleship	Battleship	**40**
	Supercarrier	**20**
Heavy Cruiser	Heavy Cruiser	**20**
	Fleet Carrier	**10**
Light Cruiser	Light Cruiser	**14**
	Light Fleet Carrier	**7**
Destroyer	Destroyer	**8**
	Light Carrier	**4**
Frigate	Frigate	**4**
	Escort Carrier	**2**
Corvette	Corvette	**2**
	Patrol Carrier	**1**
Gunboat	Gunboat	**1**

1. Commander's Luck (Campaign Upgrade): Some commanders, some crews, and some ships are just "charmed," as if angels stand on the deck beside them. Time and again these ships survive situations they shouldn't. They may not always win, but somehow they always return to fight another day.

A. Commander's Luck allows the ship to **make one re-roll** any result on the **Warship Recovery Table** or the **Captain Survival Table**.

B. These re-rolls are *transferrable* between warships involved in the same battle. So if two ships were disabled and the first ship makes its Warship Recovery check on the first try, she *can* "lend" her re-roll to a friendly ship if she needs it.

C. These re-rolls *cannot* be used with any roll that actually takes place during the game (whether a ship is disabled, explodes, or is forced to break off). These re-rolls can *only* be used on rolls that take place during post-game resolution. Thus this is a **Campaign Upgrade**, and does not add to a warship's scenario point cost.

D. Players can, at their option, even use them to save *enemy* warships that might be failing Warship Resolution checks. There is a certain "chivalry" in space, even opposing commanders share a common foe in the sheer lethality of raw space. Commanders often deploy universal rescue beacons (URBs) or even send messages to enemy headquarters to help crippled ships get the help they need.

F. Buying the advantage a second time allows two such re-rolls per game.

G. Commander's Luck rolls cannot be saved from game to game.

H. Friendly hint, this is usually the first Upgrade players buy. It helps ensure your ship will survive even lost battles, and live long enough to earn future Upgrades.

2. ECM / Shielding (Battle Upgrade): The ship's engineers and electronic counter measures (ECM) technicians have built significant upgrades into the ship's defensive systems.

A. This Upgrade increases the effective ECM / Shielding ratings for all six sides of the warship **by one level** (shield ratings of 4 become 5, etc.).

B. This Upgrade is obviously used on the table in actual *Darkstar* tactical play (**Battle Upgrade**), so adds 20% to the warships **base scenario point** value.

C. Buying this Upgrade twice gives a +2 rating to all the ship's shields.

3. Gunnery Accuracy (Battle Upgrade): This ship's gunners have been endlessly drilled to a honed perfection, or the targeting software has been upgraded to deadly precision.

A. This Upgrade applies a +2 bonus to all To-Hit target numbers when the ship is using its **heavy guns only**.

B. This would apply to any rail guns, plasma projectors, EPCs, lasers, or syglex emitters.

C. It does *not* apply to any torpedo, mass driver, or aerospace attacks.

D. This a **Battle Upgrade**, and so adds to the ship's scenario point value.

E. Buying this Upgrade twice adds +4 to all To-Hit target numbers.

4. Gunnery Impact (Battle Upgrade): This ship's heavy guns have been tweaked to hit just a little but harder. Maybe there is just a little more power in the electromagnetic coils of the rail guns or lasers, or maybe the crew has gotten better an pinpointing weak points in enemy armor.

A. This Upgrade allows for heavy guns (only) to apply damage as if they were **one range bracket closer**.

B. This would apply to any rail guns, plasma projectors, EPCs, lasers, or syglex emitters.

C. It does *not* apply to any torpedo, mass driver, or aerospace attacks.

D. This a **Battle Upgrade**, and so adds to the ship's scenario point value.

E. Buying this Upgrade twice allows the heavy gun to apply damage on a hit as if it were *two* range brackets closer.

F. NOTE: This is *not* a straight "+1 to damage" bonus. If you're shooting at a range of 5 hexes, and your weapon has the same damage number at the next closest range b racket, no bonus is conferred. Conversely, if the damage number is +2 higher at the next closest range bracket (often the case with plasma projectors), you get +2 to your damage.

G. Also note, this Upgrade can also increase the *effective range* of some weapons at extended distances. If you're at range 16-20 and your guns normally do zero damage at this range, but they do 1 point at range 11-15, then your guns can actually hit a target at the 16-20 bracket.

5. Electronic Warfare (Battle Upgrade): The electronic warfare officers on this ship have received extra training or experience in not only ensuring guided weapons hit more often, but enemy guided weapons hit *less* often. Perhaps the EW suite or just the power of the emitters have also been upgraded.

A. This Upgrade gives a +1 bonus To-Hit for any torpedo attack made by this ship, and also to this ship's Mass Driver defensive fire rolls. It also applies a -1 to-hit penalty against any *enemy* torpedo, aerospace torpedo, or aerospace missile attack made on this ship. Finally,

enemy mass drivers have a -1 penalty to hit any of *this ship's* torpedoes.

B. This applies no bonus to (or penalties against) rail guns, plasma projectors, EPCs, lasers, or syglex emitters.

C. This a **Battle Upgrade**, and so adds to the ship's scenario point value.

D. Buying this Upgrade twice doubles all the above bonuses to this ship and penalties against enemy ships.

E. Note that the Electronic Warfare Upgrade applies *only* for attacks made by the upgraded ship, or enemy attacks made specifically *against* the upgraded ship. So if an EW-upgraded warship launches torpedoes that are part of a combined spread attacking an enemy warship, the -1 penalty assessed against enemy mass driver defensive fire applies *only* against the EW-upgraded warship's torpedoes in particular, not the other torpedoes in the spread (fired by other friendly ships).

6. SLD Thrust (Battle Upgrade): This ship's ion drives (sublight drives, or SLDs) have simply been "souped up" by an innovative chief engineer. When the captain needs more power, somehow this engines just always have that extra push. *Pour whiskey in the mix, it gives us an extra 50 rpms!*

A. This Upgrade adds +1 to the ship's **Thrust**. Note that since **Initiative Rolls** are always d6 + Ship Thrust, this Upgrade increases the ship's initiative score as well.

B. This a **Battle Upgrade**, and so adds to the ship's scenario point value.

C. Buying this Upgrade twice adds +2 to the ship's Thrust, and thus also adds +2 to the **Initiative Roll**.

D. Note that reduced Thrust resulting from damage to Engines and Reactors (**Rule 4.9.3.F**) works backward from this new adjusted (improved) number.

7. Darkstar Engineering (Campaign Upgrade): The ship's Darkstar Drive has been upgraded to dilate the curvature of space-time to a much sharper degree, allowing a more acute Darkstar wave and thus enhanced FTL speeds. Who knows, she may even "make the Kessel Run in less than twelve parsecs."

FTL TRAVEL TABLE

Darkstar Wave	x "c" (speed of light)	Darkstar Wave	x "c" (speed of light)
1	1	7	50
2	2	8	90
3	4	9	160
4	8	10	300
5	15	11	550
6	30	12	1000

A. This Upgrade increases the Darkstar drive on the warship by one level (usually 10th Wave to 11th Wave).

B. All combat in *Darkstar* is at sublight speed, so this Upgrade would have **no effect** on tactical tabletop play. Therefore it is a **Campaign Upgrade**, and **does not** increase a warship's scenario point value.

C. Buying this Upgrade twice increases the Darkstar wave capacity by two levels.

D. Although this Upgrade has no effect on tabletop play, in a detailed campaign it would be very useful indeed. Ships with enhanced FTL can get between star systems (and battle areas) in a little over half the time required by other ships. Operationally they can strike twice as far and almost seem to be in more than one star system at once.

E. Note that this also reduces **Tow Time** (**Rule 5.4.6.A.ii**) if the ship is disabled, from 3 days per light year, to 2 days (1 day if the Upgrade is bought twice).

8. Elite Aerospace (Battle Upgrade): The aerospace pilots and crew aboard this ship are crack "Top Gun" jocks, and their bravery, skill, and confidence can be enough to turn the tide of battle between even the largest of warships.

A. This Upgrade gives a +1 To-Hit bonus for *any* aerospace attack mounted by the fighters, bombers, or scouts carried by this ship. This means it gives a +1 To-Hit for any bomber missile or torpedo strike, any fighter missile strike, or any **Intercept** number in any dogfight for the ship's fighters, bombers, or scouts.

B. This Upgrade also adds +1 to the **Evade** of any fighter, bomber, or scout carried by the upgraded ship. In effect, this makes them harder to be shot down by enemy pilots.

C. This Upgrade also assesses a -1 against any Mass Driver attack fired against any fighters, bombers, or scouts carried by the upgraded ship. In effect, this makes them harder to be shot down by enemy mass driver gunners.

D. This Upgrade also gives a +1 to the target number to hit on any **strafing gunnery attack** made by fighters, bombers, or scouts carried by the upgraded ship. **However,** it does **not** give a +1 on the d6 "confirm damage" roll such strafing attacks require (**Rule 4.4.4.E**). Only the initial d10 to-hit roll gets the bonus.

E. This upgrade does **not** effect any assault boats carried by the ship (this is covered by **Elite Marines**, below).

F. This is a **Battle Upgrade**, and so increases the scenario point value of the upgraded ship, but not in the usual way (+20% of base ship value). Instead, it adds 50% to the total aerospace cost carried by the ship.

i. Each fighter now costs 3, each bomber now costs 3, and each scout now costs 1.5.

G. Buying this Upgrade twice makes the aerospace units carried by the upgraded ship "double elite," and doubles all the bonuses listed above. However, it adds 100% to the cost of the aerospace craft.

i. Each fighter now costs 4, each bomber now costs 4, each scout now costs 2.

H. Every ship that carries either elite or double elite aerospace crews adds a +1 to the d10 Aerospace Initiative Roll described in **Rule 4.3.2.B.**

I. Clearly, Elite and Double-Elite Aerospace can make carriers very expensive in scenario points. But a double-elite aerospace group launched by a fleet carrier or super carrier is horrifically effective, nearly unbeatable weapon.

9. Tactical Initiative (Battle Upgrade): This ship's senior staff, bridge crew, or even AI is simply operating at the next level. Somehow they always know what the enemy is about to do, and can anticipate accordingly. Perhaps the commander is just *that* good, he or she has seen dozens of battles and just isn't surprised by enemy actions anymore.

A. This Upgrade gives the warship a +2 bonus to all **Initiative** rolls.

B. Note that this does *not* increase the ship's available Thrust, only the initiative roll.

C. This a **Battle Upgrade**, and thus adds to the ship's scenario point value.

D. Buying this Upgrade twice gives a +4 to initiative rolls.

10. Resolute Crew (Battle Upgrade): They say the Age of Sail was the time of "wooden ships and iron men." The crew of this ship proves them wrong, and show that "iron" men and women still sail in the Age of Stars.

A. This Upgrade halves the percentage chance on any check to see if the warship must break off (**Rule 4.9.4.B.**). If this Upgrade is bought twice, the reduction is 75%.

B. Example: A light cruiser takes three boxes of Core Damage. Per the **Warship Elimination Table**, three core boxes hit on a light cruiser indicates a 45% chance that the crew will break off the action. For a **Resolute Crew**, this chance is reduced to 23%. For a **Double Resolute Crew**, this chance is reduced 11%.

C. A ship with this Upgrade always rolls on the Recovery Table at a +1 bonus to its target number. This crew just doesn't want to give up the ship.

D. A ship with this Upgrade can also not be boarded and captured on the Warship Recovery Table (**Rules Section 5.4.4.C)**. If she is disabled and fails a Recovery Check, and the result of that railed Recovery Check is "8-9: Ship Captured" - then the ship is not considered lost at all, never mind captured. Assume the ship was recovered safely, as if it had made the initial Recovery Check.

E. A ship with this upgrade can actually *repair* internal structure boxes damaged during game play. At the *beginning* of the **Resolution Phase**, roll a number of d6 dice (per ship type) as indicated below. Each 5+ result allows **one internal box** to be "repaired."

- Gunboats and Corvettes: 1d6
- Frigates and Destroyers: 2d6
- Light and Heavy Cruisers: 3d6
- Battleships: 5d6

F. Note that this roll and repair takes place at the *beginning* of the Resolution Phase, before checks to disable or explode the warship in question. It *cannot* be used to "un-disable" or "un-explode" a ship. It *cannot* be used to repair armor.

G. This a **Battle Upgrade**, and so adds to the ship's scenario point value.

H. Buying this Upgrade twice gives twice the listed repair chance dice.

11. Elite Marines (Battle Upgrade): Space battles are all well and good, but sooner or later war is always decided by a man with a rifle putting his boots on the ground.

A. Virtually all the benefits of this Upgrade are covered in advanced *Darkstar* rules - to be rolled out in future references. As such, we will only summarize them here.

B. This Upgrade extends to **Assault Boats** all the benefits given to fighters, bombers, and scouts in the **Elite Aerospace Upgrade**.

C. Elite Marines give a large bonus to contested boarding actions (advanced rules), either being mounted against enemy ships, or in defense against enemy Marines landing on your ship.

D. Elite Marines gives a victory point bonus and ground combat resolution bonus in planetary assault games (advanced rules).

12. Expert Repair (Campaign Upgrade): This ship's veteran crew has welded their ship together so many times they can now do it in their sleep. Often, by the time the ship limps back to base, the repairs are practically complete.

A. This upgrade halves the total time the ship needs to repair battle damage between games. This includes any tow time.

B. Buying this Upgrade twice cuts the time down to 25%.

C. This Upgrade is never used in tactical table top play (**Campaign Upgrade**), so does *not* add to the ship's scenario point value.

13. Battlegroup Command (Campaign Upgrade): A Battlegroup is the smallest naval unit in *Darkstar* larger than a single ship. This Upgrade allows a player's senior

commander to lead multi-ship Battlegroup costing up to 250 total points.

A. When a player starts a Battlegroup for campaign play (usually 2-3 ships), one commander of the player's choice may start with this upgrade for free. A battlegroup has to have a battlegroup commander, after all.

B. This Upgrade does not increase the ship's scenario point value.

B. A Battlegroup leader has to have the naval rank of at *least* Commander. This minimum requirement may be higher, depending on the ship he or she commands (see **Rank Table**, below).

C. Only ships in the Battlegroup get the benefits of being in that Battlegroup (transferred campaign points, etc.).

D. All warships in a Battlegroup that does not have a qualified commander suffers a -1 penalty to all initiative checks. This also applies if the Battlegroup commander's ship is disabled, destroyed, or driven off the table.

E. Any "character" starting a campaign at the rank of **Captain** or above gets this Upgrade automatically.

14. Task Force Command: A Task Force is the next largest naval formation in *Darkstar*. This Upgrade allows a player's senior commander to lead multi-ship Task Force costing up to 500 total points.

A. This upgrade does not increase the ship's scenario point value.

B. A Task Force leader has to have the naval rank of at *least* Captain. They must also previously have the **Battle Group Command** rating. This requirement may be higher, depending his or her ship (see **Rank Table**, below).

C. Only ships in the Task Force can get the benefits of being in that Task Force (transfer campaign points, etc.).

D. All warships assigned to a Task Force that doesn't have a qualified commander suffer a -1 penalty to all initiative checks. This also applies if the Task Force commander's ship is disabled, destroyed, or driven off the table.

E. Any commander starting a campaign at the rank of **Commodore** or above gets this Upgrade automatically.

15. Fleet Command: A Fleet is the largest naval formation likely to be seen in *Darkstar*. This Upgrade allows a player's senior commander to lead multi-ship Fleet costing up to 1000 total points.

A. This upgrade does not increase the ship's scenario point value.

B. A Task Force leader has to have the naval rank of at *least* Commodore. They must also previously have the **Battle Group Command** and **Task Force Command** ratings. This minimum requirement may be higher, depending on the ship he or she commands (see **Rank Table**, below).

C. Only ships within the Fleet can get the benefits of being in that Fleet (transferred campaign points, etc.).

D. All warships assigned to a Fleet that doesn't have a qualified commander suffer a -1 penalty to all initiative checks. This also applies if the Fleet commander's ship is disabled, destroyed, or driven off the table.

E. Any commander starting a campaign at the rank of **Rear Admiral** or above gets this Upgrade automatically.

RANK TABLE	
Rank "Level"	**Rank, Ship Allowed, Formation Command**
14	Rear-Admiral (Fleet Command)
13	Commodore, Battleship
12	Captain, Battleship
11	Captain, Heavy Cruiser (Task Force Command)
10	Captain, Heavy Cruiser
9	Captain, Light Cruiser
8	Commander, Light Cruiser
7	Commander, Destroyer (Battlegroup Command)
6	Commander, Destroyer
5	Commander, Frigate
4	Lieutenant-Commander, Frigate
3	Lieutenant-Commander, Corvette
2	Lieutenant-Commander, Gunboat
1	Lieutenant, Gunboat

16. Promotion (Campaign Upgrade): The commander of this ship receives a promotion in rank. This is often a required step before assuming command of larger warships or larger naval formations in *Darkstar*.

A. This upgrade does not increase the ship's scenario point value.

B. See the **Rank Table** for guidelines on what ranks are allowed to command certain warships and certain naval formations in *Darkstar*.

17. Ship Type (Special): The commander (and select members of his or her crew) transfer to a new, larger ship.

A. Whatever the old ship's type was, the new ship is the next type larger (frigate skippers take command of destroyers, destroyer skipper take command of light cruisers, etc.).

B. While this upgrade does not increase any ship's scenario point value by 20%, the new

ship probably does cost more than the old ship (light cruisers cost more than destroyers, etc.).

C. All Upgrades purchased for the old ship are fully transferred to the new ship. This represents the captain "pulling strings" to get his best officers transferred with him, thus ensuring that he or she takes all that expertise into his new command.

D. Please note, however, that the scenario point costs for these transferred Upgrades are immediately assessed upon the new ship, at the 20% rates of the new, larger type. This can often make the new ship very, very expensive in scenario points.

i. Example: A destroyer captain has four upgrades, Commander's Luck, ECM/Shielding, Tactical Initiative, and Darkstar Engineering. Two of these are Battle Upgrades, two of these are Campaign Upgrades. The Battle Upgrades cost 8 points each (20% of a destroyer's base cost), meaning the ship costs 58 points to bring on the table (40 + 2 aerospace scouts + 8 ECM/Shielding + 8 Tactical Initiative). Now the destroyer captain earns a fifth upgrade, and decides to use it to transfer to a light cruiser (the next type of warship up from destroyer). He takes all his Upgrades with him. The two Campaign Upgrades (Darkstar and Commander's Luck) are free. The ECM/Shielding and Tactical Initiative, however, cost 14 points each (see Upgrade Costs Table). So the cost of this new light cruiser would be 70 +2 for the two scouts, +14 for the ECM/Shielding, +14 for the Tactical Initiative = 100 points.

E. See the **Rank Table** for guidelines on what ranks are allowed to command certain types of warship and command certain naval formations in *Darkstar*.

5.8 HELPFUL HINTS

In addition to the basic *Darkstar* rules now presented, I also wanted to offer this section of friendly tips. Some are hints for winning game strategies, some are just to help your first *Darkstar* games run more smoothly. Especially for new players, I'm hoping these pointers will help not only make *Darkstar* run "correctly," but also provide a more dynamic and engaging experience.

These hints are presented in three general categories, suggestions pertaining to Gameplay, Scenarios, and Campaign Play.

1. Tactical Gameplay. Here are a few tips you can use on the actual *Darkstar* hex grid.

A. **Keep Your Ships Together**. While there are certainly exception cases where this might not be the case, keeping your ships together in at least a loosely-bound formation usually makes tactical sense in a *Darkstar* game for a host of reasons.

i. Ships that stick together have an easier time offering mutual mass driver support against enemy aerospace and / or torpedo attacks.

ii. Ships that stick together have an easier time combining fire from multiple ships onto a single target, ideally on the same target facing.

iii. However, note that the range brackets in *Darkstar* are designed for maximum "point-blank" value at a range of 0-1 hexes. This goes for both main weapons and mass driver weapons. This means that while keeping your fleet and cohesive is a good idea, there's no reason to jam everything you have in a single hex.

iv. Keeping your ships *too* closely bound also carries the risk of limiting your faster, more agile, and higher-initiative ships, "shackling" them to your slow heavyweights and throwing away the speed and flexibility that is their trump card.

B. **Beware Big Space Rocks**. Whenever you can possibly help it, never *ever* end a warship's movement phase with the warship facing toward a planet, moon, or asteroid.

i. Actually having a ship blow up (and probably losing her commander) is actually pretty hard in *Darkstar*, until you start crashing into astrophysical objects.

ii. Ships can be crippled very quickly by torpedo or aerospace attacks, and once a ship is disabled, she's doomed to drift on her last speed and heading until she either leaves the map, or hits something.

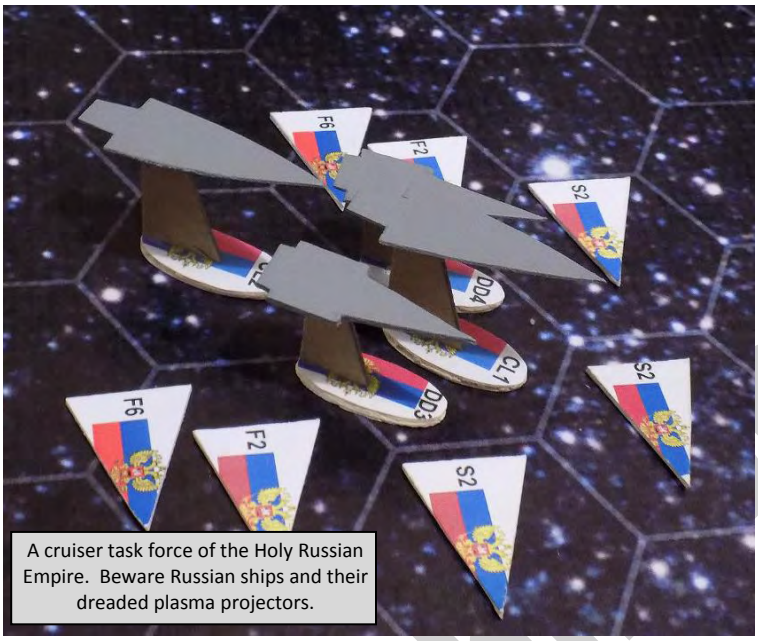
C. **Watch Your Six**. The stern is by far the most vulnerable area of a warship. This is where all the "red meat" of engines and reactors are, the critical hit components that cause a ship to lose power (thus disabled) or even explode.

i. Conversely, this means that hitting a ship from directly astern is usually the quickest route to disabling an enemy ship. Getting a close-range broadside across the enemy's stern ("raking the fantail") is probably the most devastating maneuver warships can make in Darkstar, it puts all your guns on the enemy's most vulnerable spot, all while limiting the enemy's counterfire to an absolute minimum. Note that many warship designs carry higher ECM/Shielding ratings on this facing just for this very reason.

ii. Port and Starboard Quarters are the second most vulnerable facings. They also contain many of the engine and reactor critical hit boxes, but it takes more hits to reach them.

iii. Port and Starboard Bows are the next most vulnerable facings. It's tough shooting, but magazines can be hit from these angles, as well as the bridge. It *is* possible to score broadsides against these facings without taking a broadside in turn, but it takes some planning and geometry.

iv. The bow is the least vulnerable facing on almost any ship. You have to shoot your way through almost half the ship before you hit anything vital. This is intentional, warships designers don't want these ships crippled straight away while they're still making their initial approach.



A cruiser task force of the Holy Russian Empire. Beware Russian ships and their dreaded plasma projectors.

D. Focus Your Fire. Whenever possible, combine the firepower of several of your ships at the same enemy ship. Perhaps even more importantly, you want to hit a chosen enemy ship as often as possible in the same facing.

i. As with any "winning strategy," concentration of firepower can be overdone. You risk wasting firepower on overkill or worse, earning a reputation as a spiteful player who explodes ships rather than disabling them. Always bear **Rule 4.6.4.F** in mind, which allows you to declare fire targets *per ship*, so you can change targets part way through a fire phase if you feel you've put enough rail gun fire into a hapless hulk.

ii. Conversely, if you're trying to stay alive (particularly against a heavier opponent), keep presenting enemy with different sides of your ship. Never forget "Rolling" (**Rules Section 4.2.5.**). Forcing the enemy to put fire onto new facings of your ship is one of the best ways to make the most of your armor and stay alive longer.

E. Swarm with Your Aerospace. Aerospace craft, aerospace missiles and torpedoes, and torpedoes fired from warships are all pretty easy to shoot down. This means that if they aren't managed properly, they can seem like "nerfed" weapons that never land a solid hit. When it comes to utilizing these assets, numbers count, but so does timing.

i. A good rule of thumb when using weapons that are subject to enemy mass driver defenses: try to have as much as possible hit one ship, on the same facing, and on *the same turn*.

ii. Having aerospace or ordinance hitting a target in successive waves or from different directions can allow enemy mass drivers multiple chances to shoot down your incoming attack, and spread the damage that *does* get through across too wide an area of armor.

iii. Better to hit the enemy all at once, and all from the same direction, Mass drivers can only shoot once a turn, so it's an effective tactic to *swarm* a target with as many aerospace craft and warheads as possible.

iv. If a particular enemy ship has "drifted from the pack" a little and is slightly further away from her friends, consider hitting *that* ship. Remember that mass driver fire is subject to range penalties, and even if her friends can support her, that support won't be as effective.

v. Torpedoes can also provide great cover for valuable fighter and bomber pilots. Enemy warships who are too busy throwing mass driver fire against torpedoes that might blow them out of the stars probably won't reserve too many mass drivers for shooting at aerospace craft.

F. Disable for the Win. Never feel the need to *blow up* an enemy warship. In no scenario model do you get extra points for actually *destroying* an enemy warship.

i. This is by design. It helps keep games friendly (especially in a campaign setting where people are trying to build up veteran warships and commanders), and it also makes sense given "neo-Victorian chivalry" described in the *Darkstar* - balanced against the sheer lethality of deep space.

ii. Tactically, ships that are disabled have already given you full points, and can't damage you anymore. They can be used as targets for torpedo launches.

iii. Furthermore, shooting weapons into disable ships in an attempt to blow them up only reduces the firepower you could be throwing at enemy warships that are still active and trying to kill you.

G. **Live to Fight Another Day**. They say discretion is the better part of valor. In *Darkstar*, that is often the case.

i. Unless you're in a strict, point-driven campaign tournament, there's no real reason in hanging around a battle where your ships may very well be badly disabled or even explode.

ii. This isn't to say that games can't turn around on a dime. But if you really like one of your warships and want to ensure its survival no matter what, never *completely* discount the notion of simply accelerating off the map.

iii. Remember that you always get one point for being in the battle. Even six straight losses (while frustrating) will still earn you that next upgrade.

2. Scenario Setup. Here are a few tips that might prove useful when it comes to setting up scenarios in *Darkstar*. Again, these are not "roolz" by any means, so feel free to disregard at will.

A. **Avoid Carriers at First**. Again, feel free to disregard this if you want, and by all means, play the ships that most interest you. But unless your group has a veteran player, consider working your way *into* carrier-type warships rather than jumping straight into them.

i. Carriers aren't warships so much as *fleets* of small warships, and the rules for managing launches, recoveries, reloading ordinance, strafing, torpedo and missile launches, dogfights, and working all these rules in your favor can be tough for a new player.

ii. Also, carriers somewhat be somewhat unforgiving if mismanaged. Most aerospace strike groups will get *one big* swing with its full "Sunday punch," and if it's not handled just right, the game can go south pretty fast.

iii. Finally, carriers are very vulnerable. Most classes have practically no weapons of their own other than mass drivers, and if their aerospace group is badly shot up or separated from the carrier, the carrier can find herself in very deep trouble.

B. **Basic Battlegroups**. A good force for a beginning scenario is one **destroyer** and two **frigates** (usually, 42 + 21 + 21 = 84 points) per side.

i. This allows players to learn most of the game mechanics and fundamentals of multi-ship tactics. These ships are also fast (so movement and thrust management is pretty easy), and the weapons are pretty light (so weapons profiles and damage numbers are easily learned at this level).

C. **Basic Astrophysical Objects**. Always have *some* astrophysical objects on the table. A simple void of empty space is not only boring, but unrealistic. Opposing fleets never fight over a few million cubic kilometers of vacuum.

i. For opening games, a few one-hex asteroids are suggested perhaps with a medium-sized moon. Don't have these objects be moving, have any atmospheres, or exert any game-relevant atmospheres.

DARKSTAR COLONIAL NAVAL COMBAT IN THE 26TH CENTURY

TASK FORCE ORISKANY

Commander	Rank	Ship(s)	Campaigns	Battles	Points (Ttl)	Spent	Net	Bonuses
Matthew A. Spencer 	Captain (Task Force)	USS *Oriskany* (DSGN-797) 	19 Draconis IK Pegasi Andromeda Arc Xi Scorpio Scorpion's Tail	52	84	84	0	Commander's Luck (1) Promoted (3) Darkstar Drive (2) ECM/Shielding (2) Gunn Accuracy (1) Electronic Warfare (2) Gunn Impact (1) SLD Thrust (1) Tactics (1)

Matthew Spencer was born 2470 in San Diego, California, the son of an orbital factory manager. He paid his own way through the ROTC program, and barely graduated Officer Candidate School at Quantico in 2493. As an officer he is strict yet compassionate, allowing no shortcuts in yet almost never filing official action against his men. In his off-hours he comes across as a blue-collar, self-made academic with a passion for literature, history, and astrophysics. As a commander he is a keen, brave, and duty-bound officer, somewhat cold and yet very protective of the officers and crew under his command. As a result, his crew feels tremendous loyalty for him, as evidenced by the Oriskany's combat record.

A stellar performance in the 19 Draconis War was followed up by his first command tour in IK Pegasi, where he initially stumbled under the weight of new responsibility before leading his battlegroup to an undisputed American victory in this key sector. Despite the American defeat in the subsequent Andromeda Arc War, his performance bordered on the legendary (although not quite true, Oriskany is renowned as the "tin can that crippled a battleship"), and was soon given command of an expanded destroyer battlegroup.

Next he fought extensively in the Xi Scorpio War and subsequent "Scorpion's Tail" war, where he had to fight shoulder-to-shoulder against personal enemies he'd made in the Japanese Navy, dating back to the Draconis 19 and Andromeda Arc Wars. Although difficult at first, he soon proved that he could not only set aside old hatreds and win the respect of these new allies (sometimes even serving under their command), but also command an expanded destroyer task force. By now the Oriskany's combat record was approaching legendary status, regularly taking on ships four tims her weight, and Spencer's "Task Force Oriskany" responsible for fighting and winning the Scorpion's Tail War almost singlehandedly.

Having finally won that war, however, Spencer and his task force have been transferred back to Sol for an extended tour of duty near Earth, a well-deserved rest after nearly seven years in near-constant combat and deep space duty.

2. Campaigns. Here are a few suggestions for getting started in the campaign options for *Darkstar* - including starting your new battlegroup of warships, company of commanders, and cadre of crews.

A. **Beginning Battlegroups**. Again, a good place to start may be a destroyer and two frigates. Looking at the **Rank Table** presented in **Rules Section 5.7**, the battlegroup commander in this example would be "Rank Level 7" (rank: Commander / Destroyer / Battlegroup Command qualified). The two frigate commanders would be either Rank Level 5 or 4 (either Commander / Frigate or possibly Lt. Commander / Frigate).

B. **Start a Group of Commanders.** Players new to *Darkstar* may be wary of all these rules and charts, and so only want to "tentatively" try the game with a single ship commander. While there's nothing wrong with this, it misses some of what *Darkstar* offers, a "fleet" based game where you try to cultivate a *group* of commanders (two, three, or four for example) and their ships.

i. Having a group of commanders increases the odds that at least of a few of them will survive their first few battles, which will be unusually lethal because they don't have the **Commander's Luck** upgrade yet.

ii. A group of commanders can also have more than one ship type, and players can see which one they really like. Leading commanders in this group can transfer campaign points, and **Commander's Luck** re-rolls that really enhance the group's overall survivability.

C. Available Ships. Twenty-eight ship classes are being provided with this reference. Many more are available and being rolled out in future references. They can be made available upon request, or even designed upon request.

D. Buy Commander's Luck First. As your commanders finally accrue their first six campaign points and its time to buy that first upgrade, I *strongly* recommend buying the **Commander's Luck** upgrade first.

i. This is the upgrade that allows you to survive long enough to buy other upgrades. You may not win, but you have a higher chance of staying alive long enough to become a force to be reckoned with.

ii. Also, this upgrade doesn't add to the scenario point value of the warship, so it keeps the game simpler for beginning *Darkstar* players.

E. Don't Get Discouraged. It happens. One of your ship was crippled while pointing toward an astrophysical object, or you were unlucky with a torpedo in the engine room, or you just didn't make it off the Warship Recovery Table. One of your commander has died or, at the very least, you have lost your first warship.

i. Hopefully you have a group of commanders, so if you lose one its okay.

ii. Once your group gets the **Commander's Luck** upgrade, lethality of the *Darkstar* drops dramatically (especially if a *group* of commanders all buy it together). In short, it gets better.

iii. Also remember that lost commanders get to "spawn" a new commander with half campaign points, so it's not a complete loss.

4. **Questions**? If you run across any further issues or questions regarding *Darkstar*, feel free to reach out via PM to userID: **Oriskany** on the OnTableTop.com, or you can send an e-mail to **jamesjohnsonwriter@gmail.com.**

5.9 DESIGNER'S NOTES

Darkstar started in a single sleepless week in February 2012. One lazy Sunday afternoon, the local cable channel was running all of the old *Star Trek* movies (I-VI, *The Motion Picture* through *The Undiscovered Country*), and I would up re-watching all of them. By the time I finished the last one, I was beyond nostalgic for the old games of FASA *Star Trek: Starship Tactical Combat Simulator* I used to play with my friends in the early 1990s, and *Renegade Legion* FASA games back in the mid and late 1980s. We'd even re-worked the "combat" system in West End Games' old 1980s d6-driven *Star Wars Role Playing Game* so we could have larger tactical space battles in the Star Wars universe (this is long before the prequels, mind you).

The next day I e-mailed friends in my local gaming group and started asking about starship tactical role playing. They were huge fans of *Eve*, *BSG, Mass Effect*, and other franchises. So naturally they were interested, especially when I mentioned some of the factions I was interested in featuring and the kind of universe I wanted to build.

We all had a meeting, where we sat down and made a bucket list of all our favorite sci-fi franchises, listing things we liked, and *didn't* like, about each one. *Star Wars* placed heavy emphasis on fighters, which we liked. Jedis and "magic powers," we didn't like. *Battlestar Galactica* (Reimagined) had a heavy military theme running through it, which we liked . . . but excessive FTL "jump tactics" which we didn't. *Star Trek* had ties to real-world history, which we liked, but a "United Nations in Space" and restrictive factions vibe we didn't like.

These were just a few examples. In all we looked at *dozens* (not kidding on that number) of movies, book series, TV shows, comics, anime, computer games, RPGs, tactical

board games, we literally pulled in everything we could think of. What we liked, we kept. What we didn't, we "spaced."

Finally, we came up with a list of what we wanted. By then we were midway through that first incredible week, so Wednesday, Thursday, and Friday I was feverishly working up beginning rules and backgrounds on the first ten factions. That Friday night I literally didn't sleep. Saturday my first documents were presented to the group, and I came away with still more revisions and additions. Saturday I didn't sleep, *again*.

Finally, on Sunday afternoon, we played our first *Darkstar* game, exactly one week after that *Star Trek* movie marathon. The game was a flawed wreck, but five players had a great time. Yes, USS *Oriskany* was there, a ship that still endures as the legendary "USS *Enterprise*" of the *Darkstar* universe.

Suffice it to say, *Darkstar* was born.

Since then we've played on-and-off for over six years, and through hundreds of games the system has been *heavily* modified, updated, streamlined, and improved.

One thing that hasn't changed with *Darkstar* has been it's "vision," if I can be forgiven for using so grand a term. Every set of dice that hits the table, every word of background that's written for a new warship class, still carries the echo of that first workshop meeting where the "soul" of the game was first conceived.

The basic problem I faced was that while we were all fans of sci-fi and loved the idea of starship tactical combat, no existing wargame presented the ideal solution. The underlying problem seems to be that 95% of all space combat wargames out there are based on a movie, TV show, comic, anime, novel series, or other pre-existing media. The "rules" for these settings were designed for these media, not for a wargame. The wargame has to accommodate the fundamentals of these media-driven settings, which results in a "flawed" game. Inconsistencies that are overpowered, tactically imbalanced, or just plain silly . . . like the Jedi in *Star Wars*, FTL and artificial intelligence in *BSG*: Reimagined, transporters in Star Trek, and the Wave Motion Gun in *Space Battleship Yamato*, all wind up putting the game in an unenviable position. Either present a "silly" game, or be unfaithful to the source franchise.

As such, *Darkstar* is set in its own "sandbox," one I created specifically to establish a universe in which all the wargame elements that we wanted make tactical sense. In this sense, *Darkstar* was almost built "backwards," from wargame to universe, instead of from universe to wargame.

A few of the most important "pillars of *Darkstar*" are listed below:

Some Science. We liked how *Star Trek* paid at least a small degree of lip service (okay, *very* small) to the principles of astronomy, physics, and quantum mechanics. I wanted more of this for *Darkstar.* This is why the battles, campaigns, and wars all take place in real star systems (NASA is my sourcebook), many of the planetary systems are based on actual exoplanet findings, and why there are no quasars, black holes, or other exotic astrophysical phenomena within the rough 200 light-year limit outlined as "Known Space" in the universe of *Darkstar*.

It's also why the Darkstar Drive is shamelessly based off the "Alcubierre Drive" theories of Dr. Miguel Alcubierre, first published in the mid 1990s and still under serious review by NASA and other agencies. While of course the idea remains completely theoretical, and probably impossible in a practical sense for a host of reasons (Hawking radiation, energy demand singularities, and causality violations just to name a few), it's the closest anyone's come to "seriously" talk about real FTL travel, besides simply shouting "warp speed, Mr. Sulu!" or "punch it, Chewie!"

James Johnson, Jennifer Lemon, and Justin McAuley present *Darkstar* in a Let's Play video featured on OnTableTop.com.

The descriptions of how artificial gravity works in *Darkstar*, the effects of light speed on communications, sensors, and subsequently, naval operations and warship tactics, such factors are built into the of the setting and universe (Sections One and Two). While much of this is only background "fluff," it's

also baked into the scenario construction guidelines, victory conditions, and even base rules of *Darkstar*. Examples include why ships can't just hit their Darkstar drives while on the table, why ships can't "warp *onto*" the table, why you can't call in reinforcements partway through a game, why the hexes aren't one million kilometers instead of 180 kilometers, etc.

Perhaps an even more fundamental example is in the very core of the movement system, an admittedly very rudimentary approximation of Newtonian physics in space, where slowing down is just as important as speeding up.

People are Center Stage. Current trajectories in both warfare and space exploration are overwhelmingly trending toward into robotics, remotely-piloted vehicles, drones, and AI. But no one wants to play a robot. We wanted captains, crewmen, heroes and cowards. In short, we wanted stories. This is the reason elements like the Blue Plague, the backlash of religiosity that followed, and the "AI Barrier" were written into the background. I wanted to put huge brakes on this certain kinds of science, and kickstart the further development of other fields, and ensure that while computers of unthinkable power remain at the disposal of 26th naval commanders, they work for us, and not vice-versa.

Friendly Games. Readers may have noticed there is no rule for ship-to-ship collisions, no ramming, no self-destruct, no activating the Darkstar Drive while your ship is still on the table (thus creating catastrophic gravity shear and killing everyone on the table including yourself). In short, there is no "flipping the table" if a game goes wrong. If you lost, you lost. Better luck next time.

No Aliens. God, I'm so sick of aliens. Leaving aside the postulations of the Fermi Paradox and other science that suggests that it's less and less likely that we'll *ever* find any, they're just cheesy. In *Darkstar*, I wanted conflicts that felt more real, more grounded, more gritty. I can put French and British starships against each other and without uttering a word, I have 800 years of real antagonism and history behind that scenario, without writing 400 pages of quasi-cultural gobbledygook that no one will read or shouting insults at people in Klingon.

Commanders in Command. In short, the *Darkstar* setting has no provisions whatsoever for FTL communications. This is by design. Not only are the possibilities for superluminal communications even more far-fetched than FTL travel (no, quantum entanglement would *not* work for a variety of reasons), but I also wanted the battlegroup, task force, and fleet commanders to be truly "in command" of their situation and mission when deployed to a distant star system.

One thing I always disliked about *Star Trek* and *Star Wars* is just how easy and instantaneous communications is. Especially in *The Next Generation*, Captain Picard can get Admiral Nacheyev on subspace simply by stepping into his ready room and hitting the "coded message" button. This takes away the "loneliness" of space, the isolation, the danger, the mystery. In *Star Wars*, they even have communications and sensors in hyperspace. So apparently they can speak *between dimensions* as well (which is basically what hyperspace is). So why are they having a "war" in *Star Wars* in the first place?

In *Darkstar*, the FTL travel is limited and slow, and FTL communication just doesn't happen outside of very small and very fast courier ships (one reason every warship carries at least a few cutters, launches, and/or yachts). This means naval commanders (or colonial governors) are sent out for months or years at a time, with an envelope of orders that are opened only once the fleet is in its Darkstar Wave, and the commanders must then make that mission happen. They are given *tremendous* leeway in how they accomplish their mission, since help and advice are, well . . . non-existent.

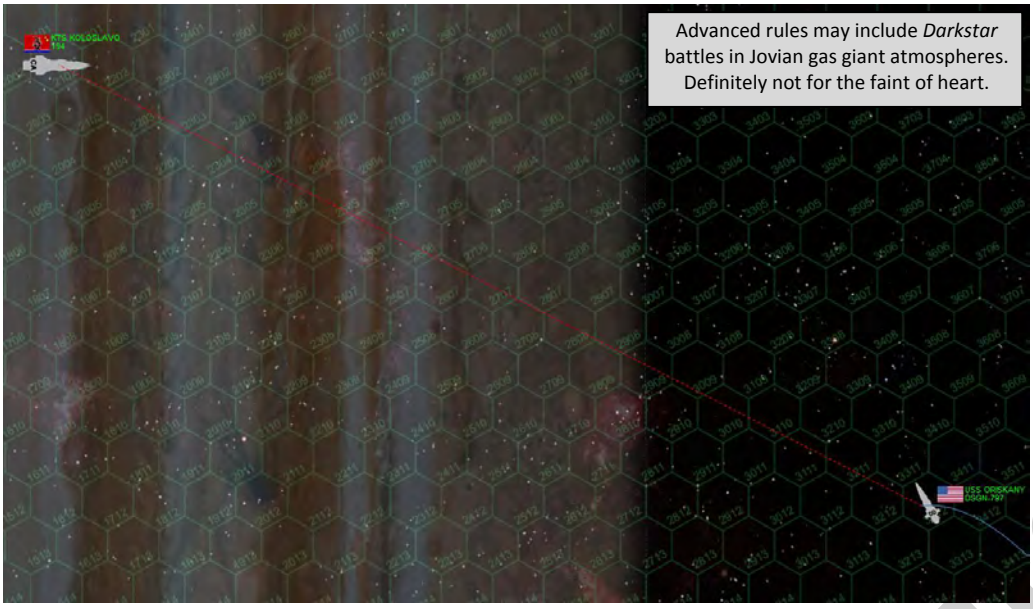
This was built into the setting to increase player agency. When you have a battleship of ships on the table in *Darkstar*, the fate of that star system really *is* in your hands. If you lose, you can't call "Starfleet Headquarters" back in San Francisco for more ships (well, at least not easily or quickly).

In short, I wanted the players to feel *important*, the games to feel heavy and vital, and interstellar space to feel empty, lonely, mysterious, and . . . yeah, more than a little scary. Step one in creating fear in any setting is to isolate the people in that setting.

Lastly, we wanted to give the commanders of these ships the greatest possible freedom in movement. This is why the *Darkstar* setting has no "warp gates" or "hyperspace highways." While such features make for great objectives in a tactical wargame, such universes always feel like glorified bus or train schedules to me. Ships aren't really "ships" in such a setting, but packages that are transported by trolley from point A to Point B. This is why we kept to a *Star Trek* model of "give me a tall ship and a star to steer her by."

Joining the Navy. Naval heritage, history, and tradition is one of the things I most enjoyed about franchises like Star Trek, BSG: Reimagined, Starfleet Battles, and even Space Battleship Yamato, a concept on which *Darkstar* definitely doubles down. *Darkstar* is shamelessly soaked in homage to the naval battles of the past, especially (but not limited to) naval operations of the 20th Century.

This is readily apparent in the names of the ships, the classifications of ship types, the pennant numbers, the rank structures through which commanders progress, even the individual weapons. It's no accident that the *Yamato* class



battleship carries 18-gigawatt rail guns, after all. And notice how all American warships always carry 40mm mass drivers strictly in groups of four (a callback to the Mk 12 quad Bofors guns carried on American Navy ships in WW2). The Japanese Ki-45 "Toryu" torpedo is a callback to the "Long Lance" torpedo that gave the US Navy such grief in the Battles of Guadalcanal, the name "Ki-45 Toryu" taken from a Japanese heavy fighter. The British "battlecruiser," the German "U-boat," the Russian *Slava* class heavy cruiser, the list goes on and on.

Of course, we didn't want to completely close the door on other ideas, which is why we have the Corporate Consortium (thus leaving a creative side-door open for smugglers and pirates) and breakaway rebel factions like the Black Dragons of the Khitan-Tunguska Free State (covered in a future reference).

"Equal Opportunity" Factions. One of the biggest drawbacks to historical wargaming (especially naval wargaming) is the limitations of factions. The Royal Navy dominated the waves for so long and to such an extent it's almost pointless to play anyone else in any kind of game where realism is paramount. After World War 2 we have the American Navy which presents pretty much the same problem. The German and Russian navies are always "bottled up" by geography, India and China are always at least one generation behind, and so on.

In *Darkstar*, the Blue Plague, Water Wars, and the leap into interplanetary and then interstellar space were written into the background in such a way that the "historical power deck" was completely reshuffled. The backlash of religiosity and advent of a Second Colonial Age were also written in so all factions presented equal mixtures of what can be broadly called "good and evil."

In short, all factions in *Darkstar* are roughly equal not only in strength, but also in morality. There are no good guys or bad guys, no Federation or Klingons, no Colonial Fleet or Cylons, no Rebels and Empire. All factions are presented in the same general feel of gray. Sure, in one particular war, a given faction may have "instigated an incident" or played the role of aggressor, thus making them the "villains." But that can be any faction equally, and the next war might see that same faction the victim of someone else's wrongdoing.

I've also always found the idea of "space geography" absurd. From the "Neutral Zone" or Star Trek to the "Frontier" of *The Last Starfighter*, the idea of a "border" in space just doesn't make sense when the actual dimensions of a given astronomical volume are considered. In *Darkstar*, colonial factions have colonies wherever they can get one started. A single star system (10 planets, plus 200+ moons, plus billions of asteroids in a "Kuiper" belt and trillions of comets in an "Oort" cloud) is more than enough for every single faction to theoretically have at least one colony if the players so wish it.

Not only that, but for *Darkstar* I wanted a universe where anybody can fight anybody. If you have some British ships and I have Japanese ships, we can have a battle one Saturday afternoon without worrying about where our colonies are in "space canon."

If there's a faction you're not interested in, ignore them, they're never "in the way." If there are factions you're more interested in, by all mans use them. Want to create your own faction by splitting off from one of those written? Go for it. It's not like *Darkstar* is going to run out of "space."

The Future. So that's where we are for *Darkstar* at the moment. The rules in this reference will allow players to get started with some beginning and intermediate-level games, and even try out the introductory steps of campaign play.

Looking forward, there's plenty more material to be published and possibilities to explore. These include, but are not limited to:

Many more warship classes are waiting to be presented. There are well over a hundred in all.

New factions are represented, like the New Roman Republic (Italy, Spain, France), Panasian League ("super" China), Arab League, Indian Republic, and the Black Dragons of the Khitan-Tunguska Free State.

We can also roll out the rules and record sheets for including installations in game play, both orbital and ground. These can make not only great objectives, but are freakishly powerful in their defensive capabilities because they don't have to actually move anywhere (and thus reserve available power for thrust or Darkstar Drives).

Expanded rules for Marines, either in planetary assaults or ship docking and boarding actions, can also be introduced in future references.

Full campaign guidelines (I hesitate to call them "rules") are also hammered out and could be published. I would recommend these only for *Darkstar* veterans who fully enjoy the universe, have 20+ games under their belt, and are ready to put some serious administration time into the construction of their own sectors, regional history, and wars. If you have a particular aversion to record keeping and paperwork, this may not be the option for you. Perhaps a published "source book" for certain sectors (Psi Serpentis is a good example) is in the cards.

Lastly, I've always liked the idea of "crossover" games. The *Darkstar* warship design spreadsheets are sufficiently detailed and flexible where just about any starship from any universe could be converted into *Darkstar* stats, assuming some kind of "conversion" could be established. Here is where questions like how powerful is a Prussian rail gun compared to a Star Trek phaser or disruptor and a Star Wars turbolaser, and how do the weapons of one universe scale and interrelate to the shields, armor, and other defensive systems of another universe? Of course the internet is full of books, blogs, and videos about how powerful, fast, and long-ranged these ships and weapons are compared to others in their own universe, but translating from one 'verse to the other would require some basic ground rules.

In very basic terms, however, the *Millennium Falcon* is a very powerful gunboat, most Star Trek ships would fill out the ranks of light and heavy cruisers (albeit very advanced, heavily upgraded, and expensive ships of these types) while battlestars of BSG and star destroyers of Star Wars would be battleships on one description or another.

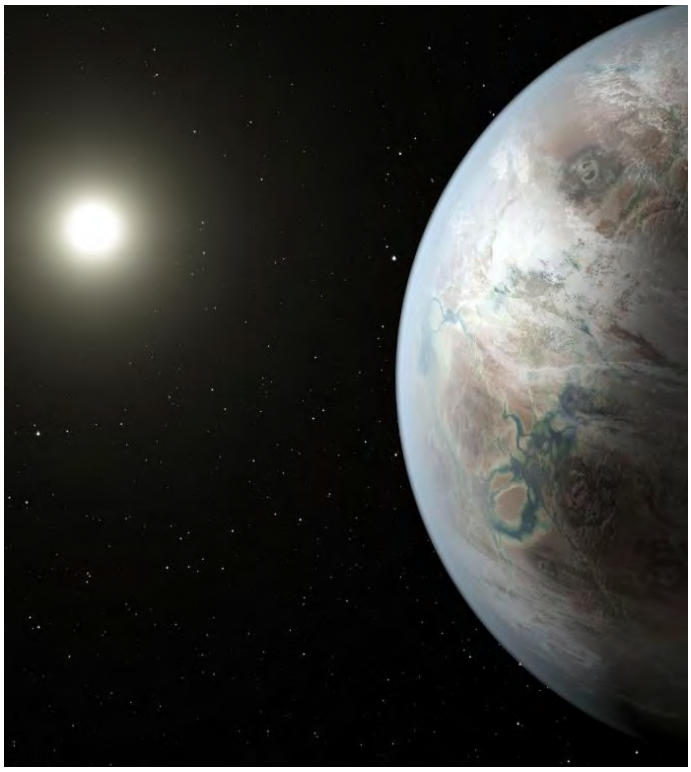
Such a campaign would be fun to try if nothing else. Perhaps a *Darkstar* battle around a very large installation results in the explosion of that installation, a collapse of such incredible mass and energy that a tiny singularity is created (just for a nanosecond before it explodes via Hawking radiation), but long enough to pull a handful of *Darkstar* warships into another universe, where they must fight Imperials or Rebels of Star Wars or the Romulans of Star Trek. Perhaps there's another such singularity 100 light years away, and our *Darkstar* heroes have to campaign across that distance to get to it and hopefully find a way home. Perhaps the initial collapse and universe transfer pulled in ships from opposing sides of the original battle, now these enemies have to find a way to work together if they want to get home.

Conclusion. In the end, *Darkstar* is about imagination and fun. It's a sandbox in which we invite the players to pick up some toys and engage their imagination. I certainly hope you enjoy playing it one tenth as much as I've had putting it together.

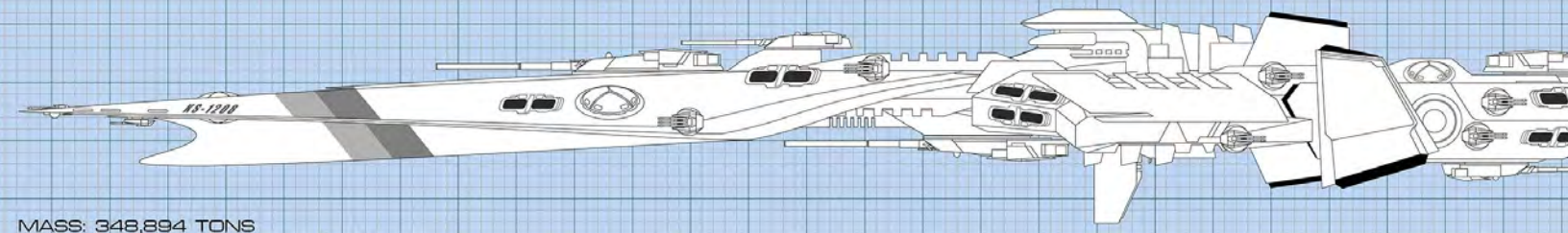
I'd also like to thank all the people who've helped me playtest it over the years, especially Jennifer Lemon, Alex Carney, and Jeff Porro - as well others who have supported the project such as Warren Johnston, Justin McAuley, Jonathan Turek, Ben Johnson, Dave Hawes, Rasmus Petersen, Dennis Cross, Damon Brenthall, Nick Quin, S. W. Shaw, Howard Wood, Andrew Lea, Lawrence Oberst, Chris Buckland, Mario Clarino, Michael Houston, Matt Buck, David Boyle, and Dylan Asmus.

What else is there to say at this point, other than . . .

You have your orders, commander!
Report to your ship, muster your crew!
You sortie tomorrow at dawn.
Good luck and God speed!



KMS VON DER TANN
SCHARNHORST-CLASS POCKET BATTLESHIP
REGISTRY: KS-1208
COMMISSIONED: MARCH, 2516



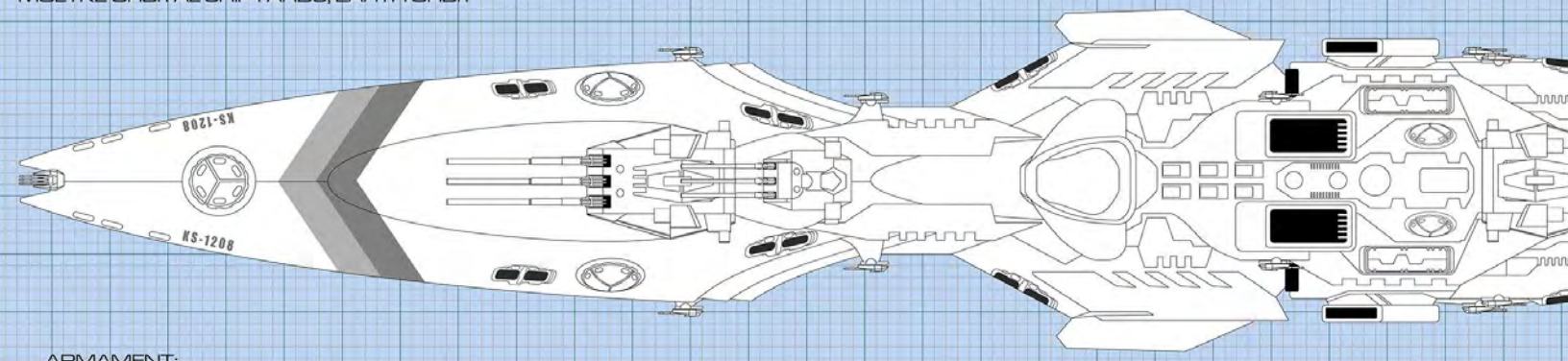
MASS: 348,894 TONS
LENGTH: 3,489 FEET (1,057 METERS)

COMPLEMENT: 1,425
PASSENGERS: 18
MARINES: 64
SLD THRUST RATING: 4
DARKWAVE: 10 MAG (x300 c)

SCOUTS: x2 FOCKE WULF-991
x1 LAUNCH (600 TONS)
x1 CUTTER (1,200 TONS)
x1 YACHT (4,000 TONS)

CIC / TARGETING OPS:
ATLAS-ELEKTRONIK EG-3000

CONSTRUCTED: BLOHM & VOSS / THYSSEN STAR MARINE GMBH
MOLTKE ORBITAL SHIPYARDS, EARTH ORBIT



ARMAMENT:
x9 12 GIGAWATT RAIL GUNS
(HENSCHEL-KRUPP EGK-5100)
x3 TRIPLE TURRETS
x6 6 GIGAWATT RAIL GUNS
(HENSCHEL-KRUPP EGK-2950A)
x2 TRIPLE TURRETS

x42 35MM MASS DRIVER POINT DEFENSE GUNS
(RHEINMETALL GROSSPREUßEN GWA-301/35)
x6 TRIPLE TURRETS
x12 DOUBLE TURRETS

SECTION SIX - WARSHIPS

INTRODUCTION

In this section, some of the classes designed for use in the *Darkstar* universe are presented. Each warship classes has a write-up explaining some of its background and design history, service record, mission profile and role the doctrine and operations of the navy of which it is a part, and famous ships in the class. Furthermore, a complete **Warship Record Sheet** (**WRS**) for that class is also provided for use in *Darkstar* gameplay. Players are encouraged to print copies of these sheets for use in their own *Darkstar* wargames.

We also include a complete set of blank warship record sheets players can use, either to supplement the other sheets or for their own *Darkstar* warship designs. Copy the sheets as required for use in either "physical" tabletop games or e-formats like D20, Tabletop Simulator, etc.

Of course, the warship classes presented here represent only a "First Wave" fraction of the designs available for use in Darkstar. In all, twenty-eight designs from the navies of six factions are provided here. Although only a sample, these designs were chosen to provide a good starting point for players starting out in Darkstar, with an interesting cross-section of the warship types, available classes, and factions in the Darkstar universe and setting. So far, we present some of the more "mainstream" classes from the navies of the United Kingdom, United States, Imperial Prussia, Holy Russian Empire, Japan, and Corporate Consortium.

In all, there are over 100 warship designs already available, as well as other factions such as the New Roman Alliance (predominantly Italy, Spain, France, and many Latin American countries), the Panasian Union, the Indian Republic, the Arab League, and the "Black Dragons" of the Khitan-Tunguska Free State. Furthermore, new warship classes can be designed on request.

One thing we don't provide is a lot of illustrations. To a certain extent, this is intentional. While the "look and feel" of some classes in *Darkstar* is laid out in excruciating detail, I wanted players to be free to create their own designs, wargaming pieces, or (if nothing else) images in their minds of how their starships look.

CORNWALLIS CLASS

Escort Frigate – United Kingdom

SHIP TYPE:	Frigate
MASS:	28,481 tons
POWERPLANT:	Standard
COMPLEMENT:	140 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Cornwallis* class frigate, named for generals and brigadiers in British and Commonwealth military history, are stubby, inglorious ships, but expressly designed for a vital role. They are fleet and convoy escorts, designed around the concept of protecting and screening larger warships in a task force or merchantmen in a threatened sector.

For this reason, speed was not a priority, and the Cornwallis class is one of the slower frigate designs still in service. Nor are her weapons terribly impressive, designed strictly around engaging smaller ships like Prussian *umfangangriffboote*, Chinese missile frigates, or Arab League "*shabbak*" gunboats, the kind of craft that might attack a British merchant convoy.

The *Cornwallis* class does carry a quadruple array of the newer Model 41 gravitic torpedo, although for many missions this mounting is loaded with mines, sensor buoys for patrol duties, or decoy drones to set off enemy mines. Indeed, many analysts have commented that the *Cornwallis* is more of a "coast guard" ship than an actual naval vessel, well-suited to carry out a wide array of vital, if less than magnificent, roles.

The one area where the *Cornwallis* class does excel, however, especially for a ship her size, is in mass driver protection. Note the Vickers 061 "Longbow" 30mm mass driver arrays, triple and quad-mounted around the ship. These provide not only a great volume of defensive firepower for protection against aerospace craft, torpedoes, and missiles, not only the frigate herself, but also flagships, freighters, troop ships, and tankers from marauding raiders.

Typical Royal Navy doctrine is to deploy at least two *Cornwallis* frigates with an important convoy in a threatened system, two with a task force, or up to four with a battleship or carrier strike fleet. While the *Cornwallis* class is never the star of a fleet show and certainly won't win any beauty contests, they nevertheless serve a vital role in the mission of the Royal Navy and the stability of the British Empire.

SHIPS IN CLASS:

Commissioned 2488-2509

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

F 161	HMS *Cornwallis*	On Duty
F 162	HMS *Howe*	On Duty
F 163	HMS *Clinton*	On Duty
F 164	HMS *Burgoyne*	Scuttled, Psi Serpentis
F 165	HMS *Abercrombie*	On Duty
F 166	HMS *Alderson*	On Duty
F 167	HMS *Alexander*	On Duty
F 168	HMS *Blair*	On Duty
F 169	HMS *Tarleton*	On Duty
F 170	HMS *Cordingley*	On Duty
F 171	HMS *Creagh*	On Duty
F 172	HMS *Dempsey*	On Duty
F 173	HMS *Fergusson*	On Station, Battlegroup Raven
F 174	HMS *Foote*	On Duty
F 175	HMS *Fraser*	On Duty
F 176	HMS *Gage*	On Duty
F 177	HMS *Hakewill-Smith*	On Duty
F 178	HMS *Keatinge*	On Duty
F 179	HMS *Leach*	On Duty
F 180	HMS *McLeod*	Exploded, Andromeda Arc
F 181	HMS *Montgomery*	Lost in action, 2508
F 182	HMS *Norrie*	On Duty
F 183	HMS *Prescott*	On Station, Cruiser Squadron "K"
F 184	HMS *Wingate*	On Duty
F 185	HMS *Stirling*	On Duty
F 186	HMS *Ramsden*	On Station, Cruiser Squadron "K"
F 187	HMS *Smyth*	On Duty
F 188	HMS *Urquhart*	Under repair
F 189	HMS *Wellesey*	On Duty
F 190	HMS *Vandeleur*	On Station, Cruiser Squadron "K"

Ship Name:		Ship Class:	*Cornwallis* Class	Status:		Thrust:	6
Captain		Ship Type:	Escort Frigate	Points:		CIC (+/-)	+0

Mass:	28,481 tons	Cargo:	150 tons	Crew / Passengers:	140 officers and men, 10 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	5 GW Rail Gun (2,2,1,1,0,0,0)	Bow
1	4 MgKv Laser (2,2,1,1,1,0,0)	Bow
2	5 GW Rail Gun (2,2,1,1,0,0,0)	Stern
1	4 MgKv Laser (2,2,1,1,1,0,0)	Stern
4	Class IV Torpedo	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	30mm Mass Driver Array	Bow
4	30mm Mass Driver Array	P Bow
4	30mm Mass Driver Array	S Bow
4	30mm Mass Driver Array	P Quarter
4	30mm Mass Driver Array	S Quarter
4	30mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Scout	Forward
16	Marines	Troop Bay
1	Cutter	Aft

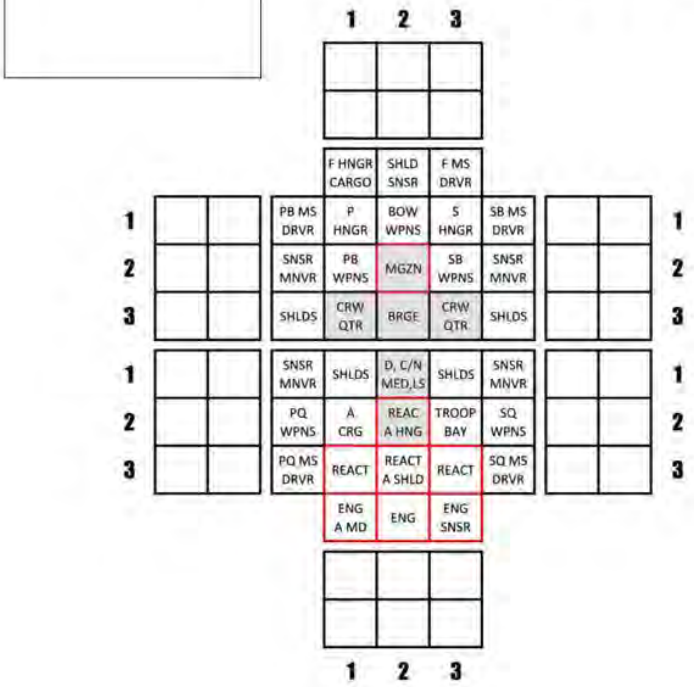
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Initiative Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
15
13 - 10 - 8 - 5 - 3



ENGINEERING		
TURN	VEL	INIT
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7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	1
Campaign Modifiers	
FINAL SCENARIO COST	21

FALKLANDS CLASS

Destroyer – United Kingdom

SHIP TYPE:	Frigate
MASS:	39,99 tons
POWERPLANT:	Advanced
COMPLEMENT:	248 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Falklands* class destroyer is a new design coming out of British shipyards, intended to finally replace the aging *Bristol* class which has served the Royal Navy for the last thirty years. As they turn the page, however, the normally hidebound British naval review boards seem to have thrown out the entire book. For the first time in the history of the Empire, the Royal Navy has turned from the big rail gun, embracing instead the relatively untested Syglex (Synchronized Gravitically-Lensed X-ray) Emitter.

Needless to say, this has caused quite an uproar among British naval circles. Another curiosity has been the speed with which these ships have been built, no fewer than twenty vessels in just over a decade, with at least four more planned. Both these unusual facets can be traced back to the father of the *Falkands* class, Lord Nathaniel Byron Annistaire. One of the most successful admirals of the 2470s and 80s, Lord Annistaire's prestige grew to such an extent that upon retiring from the navy, he joined the Royal Navy Review Board, where he advised on the design of the *Relentless* and *Iron Duke* cruisers.

Everything changed, however, when his son Daniel was killed while serving as chief gunnery officer aboard the *Bristol* class destroyer HMS *Stamford*. Lord Annistaire was convinced that the tragedy was caused by weaknesses in the aging *Bristol* design, particularly a lack of penetrating firepower. He thus immediately cashed in all of his mountainous political, military, and financial capital to hurl the Royal Navy into design and construction of a new destroyer class. Such was Lord Annistaire's clout that many "classic" elements of British naval design were cast aside in favor of bold, if untested, new features.

Protection seems to suffer, a curious drawback considering the loss that stimulated the *Falklands* design in the first place. Firepower, however, offers a protection all its own, especially when slaved to the new Hawkinge Electronics 01A fire control system. Model 41 gravitic torpedoes are also a modern feature, making the *Falklands* class the most progressive ship yet deployed by the Royal Navy.

Whether the class will stand the long-term test of combat, however, remains to be seen. It bears noting that the ships are no faster than most other destroyers despite their rather substandard shielding. This, compounded with maintenance problems stemming from rushed design and construction, leaves many Royal Navy officers wary of Lord Annistaire's "pet destroyers."

It should also be noted that some of these ships have been commissioned by close allies of the United Kingdom. While their captains, officers, and crew are all drawn from the ship's home country, these "Commonwealth" class ships often operate in close coordination with larger Royal Navy fleet formations.

SHIPS IN CLASS:

Commissioned 2504-2514

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

D 55	HMS *Falklands*	On Duty
D 56	HMS *Hebrides*	On Duty
D 57	HMS *Orkneys*	On Duty
D 58	HMS *Gibraltar*	On Duty
D 59	HMS *Malta*	On Duty
D 60	HMS *Essex*	On Duty
D 61	HMS *Shetland*	On Duty
D 62	HMS *Oxfordshire*	Exploded, Andromeda Arc
D 63	HMS *Glasgow*	On Station, Andromeda Arc
D 64	HMS *Jersey*	On Duty
D 65	HMS *Jamaica*	On Duty
D 66	HMS *Bombay*	On Duty
D 67	HMS *Southampton*	Vanished, Andromeda Arc
D 68	HMS *Singapore*	On Station, Battlegroup Raven
D 69	HMS *Capetown*	On Duty
D 70	HMS *Cardiff*	On Duty
D 71	HMS *Sheffield*	Undergoing refit
D 72	HMS *Guernsey*	On Duty
D 73	HMS *Alderney*	On Duty
D 74	HMS *Wight*	On Duty
DC 11	HMAS *Tasmania*	On Duty
DC 12	HMCS *Ottawa*	On Duty
DC 13	HMJS *Kingston*	On Duty
DC 14	HMNZS *Aotearoa*	On Station, Cruiser Squadron "K"
DC 15	HMAS *Canberra*	On Duty
DC 16	HMAS *New South Wales*	On Duty
DC 17	HMCS *Vancouver*	On Duty

Ship Name:		Ship Class:	*Falklands / Commonwealth* Class	Status:		Thrust:	6
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	+1

Mass:	39,994 tons	Cargo:	200 tons	Crew / Passengers:	248 officers and men, 12 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	8 MgKv Laser (Beam 3,3,2,2,1,1,1)	Bow
2	8 MgKv Laser (Beam 3,3,2,2,1,1,1)	Stern
1	60 eHz Syglex (5,5,4,3,2,1,0)	Bow
1	60 eHz Syglex (5,5,4,3,2,1,0)	Stern
2	Class IV Torpedo	P Bow
2	Class IV Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	35mm Mass Driver Array	Bow
3	35mm Mass Driver Array	P Bow
3	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Quarter
4	35mm Mass Driver Array	S Quarter
4	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
1	Cutter	Aft
30	Marines	Troop Bay

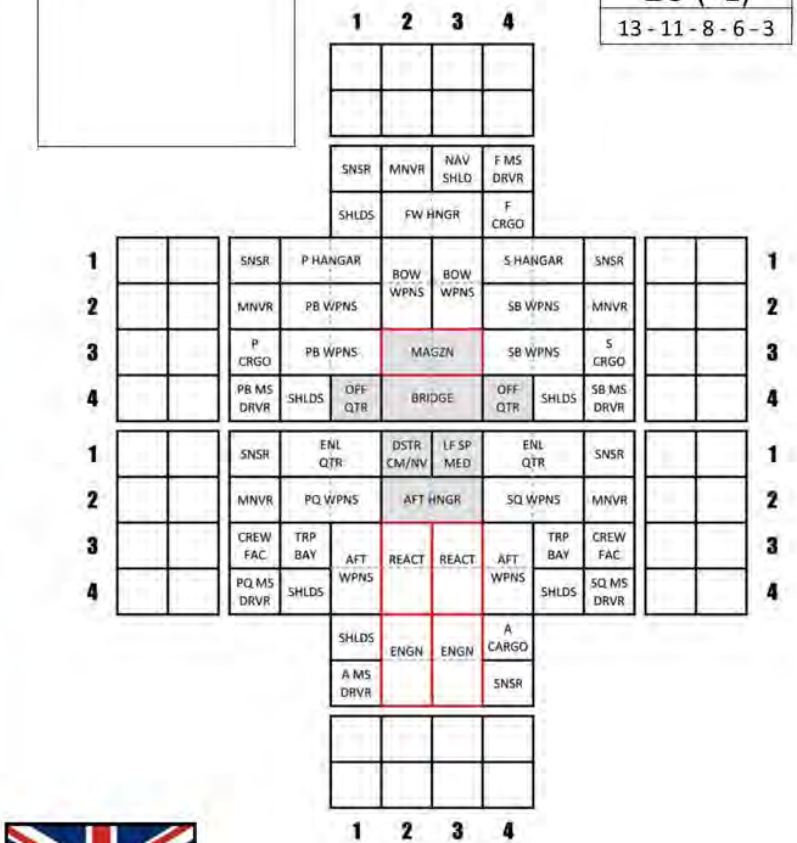
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Initiative Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
16 (+1)
13 - 11 - 8 - 6 - 3



ENGINEERING		
TURN	VEL	INIT
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9		
10		

Power Plant Type	Advanced
Base Scenario Cost	48
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**50**

PQ SHD	AFT SHD	SQ SHD
4	4	4

OSPREY CLASS

Light Carrier – United Kingdom

SHIP TYPE:	Destroyer
MASS:	42,403 tons
POWERPLANT:	Standard
COMPLEMENT:	428 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

Named for birds of prey, the *Osprey* class light carrier is a relatively new breed of small, fast carriers being deployed by the Royal Navy. With aerospace groups made up of the Supermarine Starfire fighter, the Nebula-Typhoon light bomber, and the De Havilland Buccaneer scouts, an *Osprey* can deliver a nasty helping of punishment to enemy capital ships, installations, or planetary bases.

Like all carriers, it remains somewhat vulnerable if not escorted, a weakness the *Osprey* tries to overcome with its dual triple-tube torpedo launchers. Aerospace defense was originally rather thin, but recent refits have seen this issue addressed with additional batteries of 25mm "Tempest" model chain guns. But the advanced suite of ECM and gravitic shielding more than make up for this, making the *Osprey* class a rather well-protected ship for its class.

With a speed comparable to most destroyers, the class was originally intended to range out into lesser-traveled systems, overpowering lightly defended targets with its aerospace group. After the loss of HMS *Eagle*, however, to a Chinese missile installation that put up more of a fight than expected, these *Ospreys* are kept on a somewhat shorter leash. All the same, however, when properly escorted by frigates and corvettes, or as part of a larger battlegroup or task force, an *Osprey* class carrier can make a valuable contribution to the Royal Navy's offensive capability.

In one recent battle at New Glasgow, the HMS *Falcon* was instrumental in the annihilation of a much larger *Slava* class heavy cruiser. One of her sister ships, HMS *Raven*, has recently scored heavy victories in Duchess Annabel's War.

** A planetary assault version of this design has also been deployed, known as the *Argonaut* class. Named for famous characters of the Greek naval epic, these ships have had extensive modifications made to their hangar bays to carry assault boats and marines instead of aerospace craft. In this configuration, the *Argonaut* class carries 8 assault boats, 1 cutter, and 192 Royal Marines (no scouts, fighters, or bombers).

SHIPS IN CLASS:

Commissioned 2500-2512

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

CC 03	HMS *Osprey*	On Duty
CC 04	HMS *Peregrine*	Destroyed, Psi Serpentis
CC 05	HMS *Falcon*	Destroyed, Psi Serpentis
CC 06	HMS *Eagle*	Destroyed, Xiangzhou, Taurus
CC 07	HMS *Hawk*	On Duty
CC 08	HMS *Harrier*	On Duty
CC 09	HMS *Kite*	On Duty
CC 10	HMS *Eagle II*	On Duty
CC 11	HMS *Seahawk*	Captured, Returned, Andromeda Arc
CC 12	HMS *Sea Falcon*	On Duty
CC 13	HMS *Cormorant*	On Duty
CC 14	HMS *Shrike*	On Duty
CC 15	HMS *Raven*	On Station, Battlegroup Raven

Argonaut Class

LCC 21	HMS *Argonaut*	On Duty
LCC 22	HMS *Boreas*	On Duty
LCC 23	HMS *Philoctetes*	Exploded, Andromeda Arc
LCC 24	HMS *Peleus*	On Duty
LCC 25	HMS *Telamon*	On Duty
LCC 26	HMS *Orpheus*	Exploded, Andromeda Arc
LCC 27	HMS *Atalanta*	On Duty
LCC 28	HMS *Euphemus*	On Duty

Ship Name:		Ship Class:	*Osprey* Class	Status:		Thrust:	6
Captain		Ship Type:	Light Carrier	Points:		CIC (+/-)	+0

Mass:	42,403 tons	Cargo:	350 tons	Crew / Passengers:	428 officers and men, 16 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3	Class IV Torpedo	Bow
3	Class IV Torpedo	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	25mm Mass Driver Array	Bow
4	25mm Mass Driver Array	P Bow
4	25mm Mass Driver Array	S Bow
4	25mm Mass Driver Array	P Quarter
4	25mm Mass Driver Array	S Quarter
6	25mm Mass Driver Array	Stern

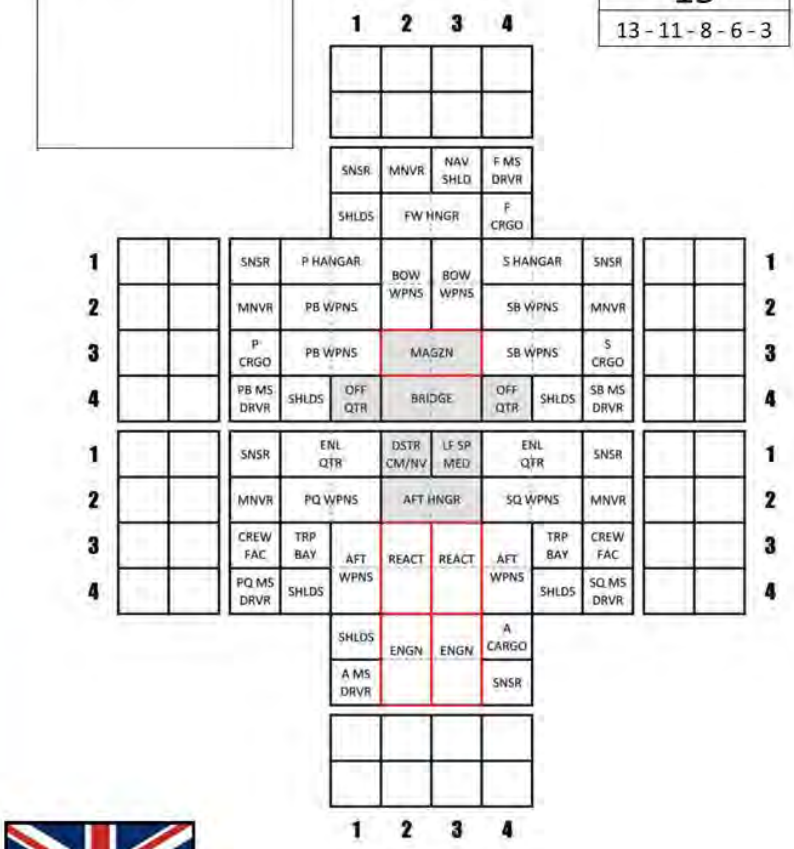
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
4	Fighters	Port
2	Bombers	Port
4	Fighters	Starboard
2	Bombers	Starboard
2	Scouts	Aft
30	Marines	Troop Bay

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses

MASS DRIVERS: 15 — 13 - 11 - 8 - 6 - 3



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Initiative Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
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6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
5	5	5

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	26
Campaign Modifiers	
FINAL SCENARIO COST	46

MAECENAS CLASS

Expedition Cruiser – United Kingdom

SHIP TYPE:	Light Cruiser
MASS:	107,094 tons
POWERPLANT:	Advanced
COMPLEMENT:	779 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *Maecenas* class is definitely one of the most unusual warships in the Royal Navy, not only in the time of *Darkstar* but perhaps all of British history. Technically designed off of the basic hull of a *Relentless* class light cruiser, they are officially classified as "expedition ships," combining a curious blend of mission profiles. Part gun cruiser, part aerospace carrier, and part planetary assault ship, these are true "jacks of all trades," multirole platforms of nearly unlimited flexibility.

The name of the class is also unusual, honoring Gaius Maecenas, ancient Roman patron of arts and poetry in the time of Caesar Augustus. While the Royal Navy has often borrowed from Classical Rome for the names of its warships, Maecenas may seems an odd choice until one considers the unusual history of this class.

In the wake of the brutal Psi Serpentis War of 2512-2514, a consortium of British industrialists (brothers Warren and Lloyd Johnston, together with Justin McAuley of Johnston-McAuley Aerospace) in the New Glasgow star system (Psi Serpentis E), were appalled by the war's violence and collateral damage. They petitioned the Royal Navy to build a new class of multirole "expedition" ships to help protect their industrial facilities, safeguard their shipping lanes, and expand into new colonies for further industrial and economic development. The request was denied, so JMA simply bought the derelict wreck of a *Relentless* class light cruiser lost in the Psi Serpentis War (HMS *Ruthless* - C 238 - cost undisclosed, but rumored to be in excess of £2 billion) and rebuilt it into what would become HMS *Maecenas.* Rather than name the ship after themselves, the executives of JMA named the ship after a famous patron of Classical Rome, as they were also well-known patrons and benefactors of British arts, literature, and science throughout Known Space.

Building a warship on this scale is one thing, but operating and maintaining it for years, with a flotilla of escort ships, is something else. So JMA "donated" the ship (as the famous patrons they were) to the Royal Navy, again petitioning for a class of warships to be designed on this model. Beset with such a gift (along with undisclosed contributions to several key members of Parliament), the Royal Navy this time agreed and the *Maecenas* class expedition ship was born.

The *Maecenas* class are truly remarkable warships. A battery of six BAE Systems "Warhammer" class 8-gigawatt rail guns is arrayed in three double turrets, in classic British "Atlantic Pattern" layout. These are comparable in caliber to other light cruisers like the Prussian *Hipper* class and larger than the 7-gigawatt guns of the Russian *Konstantin* class and 6-gigawatt guns of the American *Sacramento* class, but fewer in number. The secondary battery is made up of two double turrets of Harland and Wolff "Nebula" 8-megakelvin laser emitters. A Hawkinge Electronics 01B fire control system is also mounted (a downscaled variant of the model carried on the *Iron Duke* and *Trafalgar* heavy cruisers), giving the *Maecenas* enhanced gunnery accuracy, especially at longer ranges. This also augments the guidance systems of two bays of Model 41 (British standard Class IV) gravitic torpedoes, mounted in an "assault configuration" in the port and starboard bow.

For defense, *Maecenas* class mounts an array of Hispano-Vickers 25mm chain gun mass drivers, and an ECM / gravitic shielding suite comparable to other light cruisers currently in service across Known Space.

But its in the greatly expanded hangar bays that the *Maecenas* class really stands out. Each cruiser carries eight Supermarine *Starfire* class aerospace superiority fighters and four Hawker *Typhoon* class strike bombers, as well as two De Havilland *Buccaneer* scouts. This is the same complement as carried by the Royal Navy's *Osprey* class light carrier. The aft bays carry four Griffon Hoverwork *Conqueror* class assault boats. The usual mission load out for these assault boats is for one to carry a pair of *Excelsior* battle tanks, one to carry three *Rapier* class APCs, and two to carry 48 Royal Marine infantry.

The extra power needed to support such a diverse load of facilities is provided by the very advanced Johnston-McAuley deuterium-tritium reactors and powerplant. These are among the most advanced powerplants in Known Space, and absolutely critical to the *Maecenas'* multirole platform capability.

The *Maecenas* class is still very new, and critics are still unconvinced that this unusual design will prove effective. After all, "jack of all trades" also means "master of none." She can't stand up to a gunnery duel against other full-design light cruisers like an American *San Antonio*, Prussian *Hipper*,

Russian *Kutusov* or Japanese *Taihō* class. She can't compete with the aerospace capability of British *Valiant* class light fleet carriers, or the American *Endeavors*, Japanese *Kagoshimas* or Russian *Gagarins*. She can't hit a planet nearly as hard as similar-weight dedicated planetary assault ships like the American *Saipan* class or Prussian *Valkyrie* class.

But whereas these ships are all built specifically for one role, the *Maecenas* can perform them all to a remarkable (if partial) extent. This makes them incredibly flexible, operationally perhaps one of the most well-rounded designs in Known Space. They can Darkstar Wave into a new system, establish a colony, and then defend that colony. If resistance is moderate, she can probably eliminate enemy defenses and take an existing colony. While she might have trouble against other cruisers in pitched battle, anything destroyer-sized or smaller would do well to approach a *Maecenas* with no small amount of caution.

In the end, however, only time will tell whether these innovative "expedition" ships will find a role, and widespread success in Royal Navy service.

** The ships of the *Maecenas* class are actually named for OTT/BoW community members who have donated to the writing of the Darkstar Rules Set v 1.0 or contributed materially in some way to the success of the project.

** Note that the ship design tables include double the extra available power conferred by the "advanced powerplant" feature. All the additional power this confers is invested in the assault boat / ground troops package, which isn't used in the vast majority of games. If the *Maecenas* class is being used in a planetary assault scenario, or if the assault boats are removed for more fighters and bombers, the scenario cost of the ship increases to 107 points *plus* the points of the additional fighters, bombers, and scouts.

SHIPS IN CLASS:

Commissioned 2509-2520

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

C 261	HMS *Maecenas*	On Duty
C 262	HMS *Quin*	On Duty
C 263	HMS *Wood*	On Duty
C 264	HMS *Lea*	On Duty
C 265	HMS *Shaw*	On Duty
C 266	HMS *Petersen*	On Duty
C 267	HMS *Oberst*	On Duty
C 268	HMS *Hawes*	On Duty
C 269	HMS *Houston*	On Duty
C 270	HMS *Buck*	On Duty
C 271	HMS *Boyle*	Undergoing Trials
C 272	HMAS *Asmus*	Under Construction
C 273	HMS ???	Planned

Ship Name:		Ship Class:	*Maecenas* Class	Status:		Thrust:	5
Captain		Ship Type:	Expedition Cruiser	Points:		CIC (+/-)	+1

Mass:	106,134 tons	Cargo:	600 tons	Crew / Passengers:	749 officers and men, 18 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	8 GW Rail Gun (4,4,3,3,2,1,0)	Bow
2 (+1)	8 GW Rail Gun (4,4,3,3,2,1,0)	Bow
2 (+1)	8 GW Rail Gun (4,4,3,3,2,1,0)	Stern
2 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
2 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Stern
4 (+1)	Class IV Torpedo	Bow
4 (+1)	Class IV Torpedo	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	25mm Mass Driver Array	Bow
6	25mm Mass Driver Array	P Bow
6	25mm Mass Driver Array	S Bow
6	25mm Mass Driver Array	P Quarter
6	25mm Mass Driver Array	S Quarter
8	25mm Mass Driver Array	Stern
1	Cutter	Port
1	Yacht	Starboard

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
6	Fighters	Forward
2	Scouts	Forward
2	Bombers	Port
2	Bombers	Starboard
4	Assault Boats	Aft
48	Marines	Troop Bay
3	APCs	Troop Bay
2	Tanks	Troop Bay

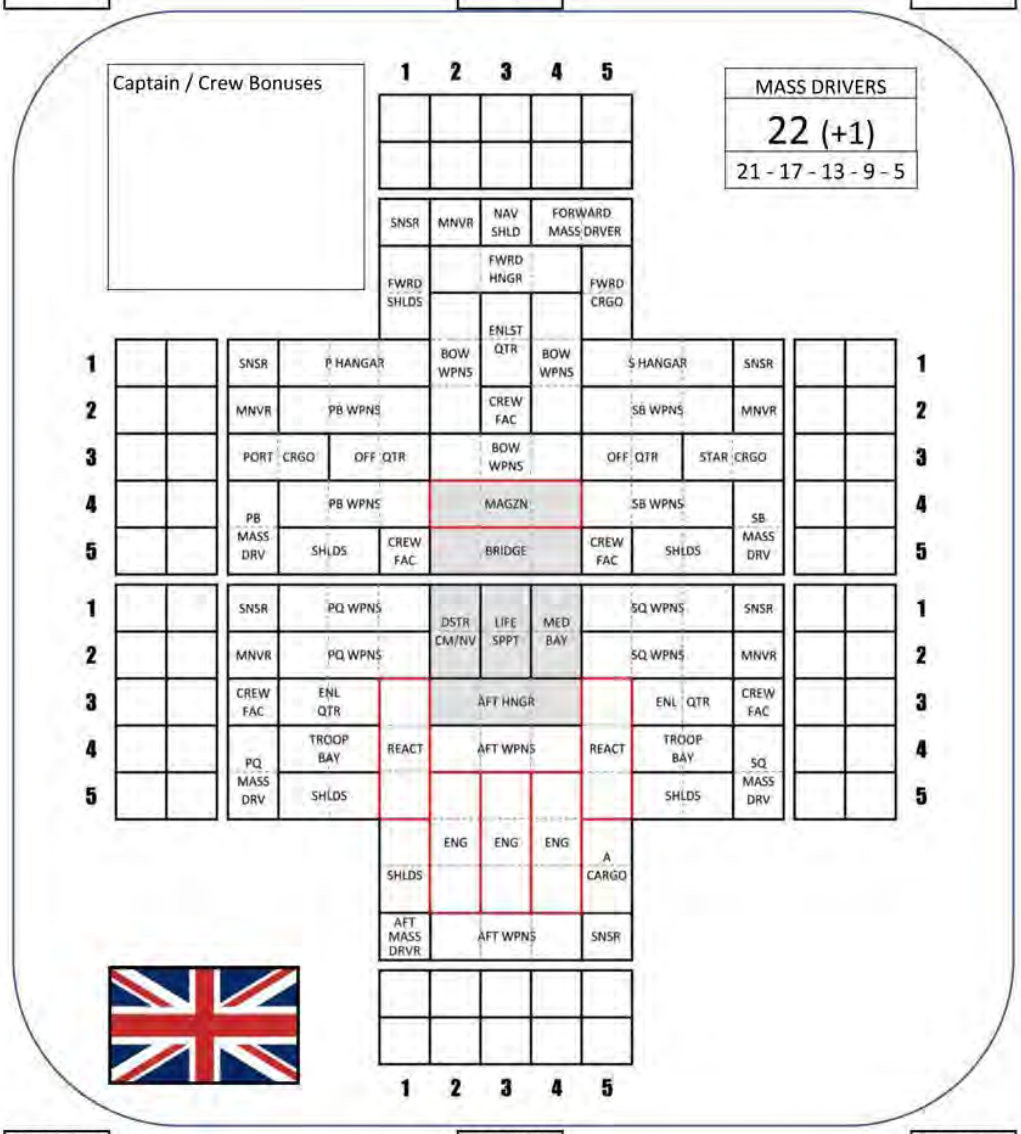
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Initiative Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS: 22 (+1) — 21 - 17 - 13 - 9 - 5



PQ SHD	AFT SHD	SQ SHD
4	5	4

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Adv (+)
Base Scenario Cost	60
Aerospace Group Cost	22
Campaign Modifiers	
FINAL SCENARIO COST	**82**

IRON DUKE CLASS

Heavy Cruiser – United Kingdom

SHIP TYPE:	Heavy Cruiser
MASS:	157,703 tons
POWERPLANT:	Advanced
COMPLEMENT:	727 officers and men
SLD THRUST:	4
DARKSTAR WAVE:	10th

The *Iron Duke* class heavy cruiser is something of a paradox in the Royal Navy. On the one hand, it is proof that the Royal Navy has finally come to terms with the fact that the older *Titan* class needs to be replaced after nearly forty years in service. On the other hand, the *Iron Dukes* are really little more than up-gunned versions of the *Titans* they are meant to replace. In fact, in some ways the *Iron Dukes* are inferior to the *Titans*, at least in regards to protection. However, the *Iron Duke* embraces the notion that the best form of defense is a good offense, and in so doing has mounted a truly devastating array of firepower.

Note that the old Model 33 torpedoes have finally been replaced by the newer Model 41 gravitic torpedoes mounted on the *Osprey* class light carriers. Furthermore, these torpedoes have been mounted in swivel-racks that can turn with the ship's main gunnery turrets. While this means that the *Iron Duke* can never fire a full torpedo spread forward or aft (as is traditionally the case with such weapons), it does mean that the cruiser can unload these weapons when already presenting a broadside, clearly her preferred vantage of engagement. It's in this broadside, after all, where the *Iron Duke* really shines. The four double turrets of 10-gw rail guns can match those mounted of ships like the *Leopold*, *Slava*, and *Chikuma*, especially daunting since they are slaved to the new Hawkinge Electronics 01A fire control system. Furthermore, the 6 MgKv lasers formerly mounted with the *Titans* have been replaced with larger 8 MgKv models, thus rounding out the *Iron Duke's* armament with a very solid secondary battery.

The *Iron Dukes* are all named for famous military leaders (especially naval commanders) in Britain's history. The one exception to this is the HMS *Kraken*, definitely the most famous ship of the class.

HMS *Kraken* was originally laid down at the New Londonium Shipyards (Titan, Saturn) as HMS *Gibraltar*. However, she was re-named while under construction after the loss of the original HMS *Kraken*, famous ship of the *Titan* class, during the Battle of New Seville in the bloody Psi Serpentis War in early 2013. The captain and bridge crew of the original *Kraken* took command of the new ship once she was completed and commissioned, returning to Psi Serpentis just in time for some of the closing victories in that war. Carrying the old ship's bell, log book, and battle ensign, the *Iron Duke* class HMS *Kraken* (C 173) has racked up an impressive combat record in the Andromeda Arc War, the Olympian Path War, the Hercules Gate War, and Duchess Annabel's War, engaged in fiery combat with Japanese, Panasian, Prussian, Russian, Black Dragon, and New Roman adversaries. She has something of a rivalry going with both the French of the *Leclerc* battlegroup and the Prussians of "Kampfgeschwader Gold." Sometimes revered, sometimes hated, always respected, there aren't many star systems in the Known Space where the naval officers of any navy haven't at least heard of HMS *Kraken*.

SHIPS IN CLASS:

Commissioned 2505-2520

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

C 161	HMS *Iron Duke*	On Duty
C 162	HMS *Hawkins*	On Duty
C 163	HMS *Jellicoe*	On Duty
C 164	HMS *Marlborough*	On Duty
C 165	HMS *Agincourt*	On Duty
C 166	HMS *Howe*	On Duty
C 167	HMS *Rodney*	On Duty
C 168	HMS *Drake*	On Duty
C 169	HMS *Howard*	On Duty
C 170	HMS *Blake*	On Duty
C 171	HMS *Fisher*	On Duty
C 172	HMS *Cromwell*	On Duty
C 173	HMS *Kraken*	Flagship, Cruiser Squadron "K"
C 174	HMS *Camperdown*	On Duty
C 174	HMS *Churchill*	Undergoing trials
C 175	HMS *Gibraltar*	Under Construction

Ship Name:		Ship Class:	*Iron Duke* Class	Status:		Thrust:	4
Captain		Ship Type:	Heavy Cruiser	Points:		CIC (+/-)	+1

Mass:	157,703 tons	Cargo:	600 tons	Crew / Passengers:	727 officers and men, 36 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	10 GW Rail Gun (5,5,5,4,3,2,1)	Bow
2	10 GW Rail Gun (5,5,5,4,3,2,1)	Bow
2	10 GW Rail Gun (5,5,5,4,3,2,1)	Stern
2	10 GW Rail Gun (5,5,5,4,3,2,1)	Stern
2	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
2	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
6	Class IV Torpedo	Bow
6	Class IV Torpedo	Stern

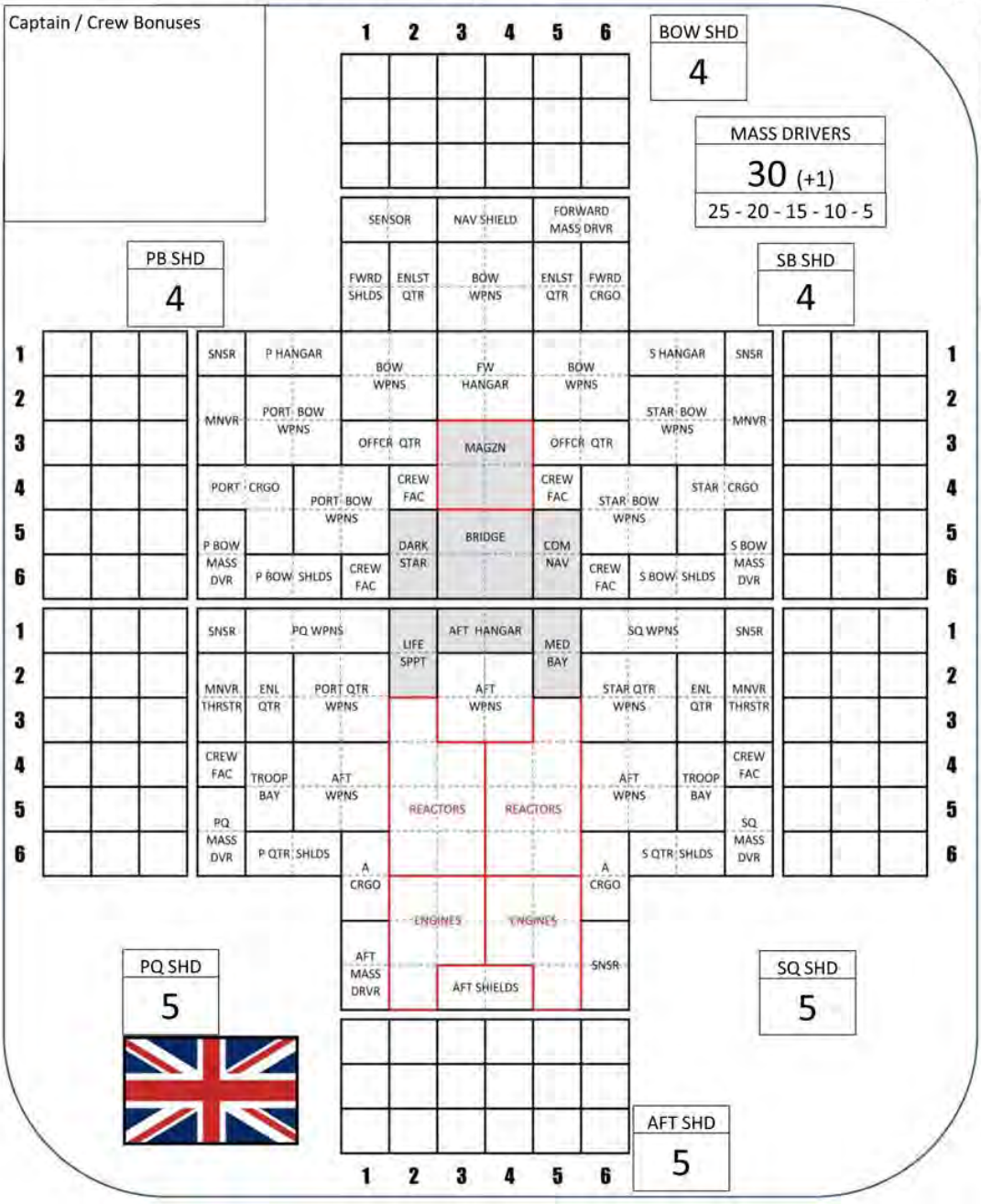
SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	45mm Mass Driver Array	Bow
4	45mm Mass Driver Array	P Bow
4	45mm Mass Driver Array	S Bow
6	45mm Mass Driver Array	P Quarter
6	45mm Mass Driver Array	S Quarter
6	45mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scout	Port
1	Scout	Starboard
1	Yacht	Aft
64	Marines	Troop Bay

Captain / Crew Bonuses



STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Advanced
Base Scenario Cost	120
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**122**

TRAFALGAR CLASS

Heavy Cruiser – United Kingdom

SHIP TYPE:	Heavy Cruiser
MASS:	146,461 tons
POWERPLANT:	Advanced
COMPLEMENT:	677 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *Trafalgar* class heavy cruiser represents a radical break from the typical design philosophy and operational doctrine of the Royal Navy. Originally the brainchild of Vice-Admiral Sir Damon Brentnall (famed battlecruiser squadron commander during the Psi Serpentis War of 2514-16), the *Trafalgar* design turns its back on the large-caliber rail gun, staple of British naval design for at least the last 70 years. Instead the *Trafalgar* looks to the relatively new electron particle cannon, perhaps influenced by designs like the American *Gettysburg* class, Japanese *Katana* class, and Russian *Kutusov* class.

In many ways, the *Trafalgar* is simplicity itself. Packing the newest Harland and Wolff "Quasar Sigma" series reactors and engines (the same type mounted in the successful *Iron Duke* class), she's able to generate an enormous power-to-weight ratio for her size, allowing her to keep pace with most light cruiser classes in Known Space. She also carries the same advanced Hawkinge Electronics 01A fire control system, giving her weapons a deadly-accurate reach.

There, however, the similarities end. Whereas Royal Navy heavy cruisers like the *Iron Duke* or *Titan* classes are built for firepower, the *Trafalgar* is built for speed. She sacrifices a fair amount of shielding for this speed, and also carries no torpedoes of any kind. Her secondary battery is also something of a down-step, trading in the British Aerospace Systems 8 MgKv lasers of the *Iron Duke* for the older, smaller 6 MgKv emitters carried on the *Titan* class. She also carries smaller 25mm Hispano mass driver arrays, although many more of them.

Notably, the *Trafalgar* class also carries additional cargo and 54 Royal Marines, which, in addition to her carrying no torpedoes, makes her ideal for longer-ranged, extended war cruises deeper into Second Band conflict zones.

Still, the *Trafalgar* class packs an enormous punch. Thundering towards the enemy in a high-speed run, these cruisers are designed to unleash a withering EPC broadside, punching deeper through ruined armor and exposed hull compartments with her follow-up laser emitters.

Accordingly, *Trafalgar* captains are chosen for their grit and aggression and expected to follow Nelson's mandate of seven hundred years ago: “No captain can do very wrong if he places his ship alongside that of the enemy.” In the officers’ mess on each *Trafalgar* class heavy cruiser hangs a painting of Nelson, beneath which is the inscription;

“Our country will, I believe, sooner forgive an officer for attacking an enemy than for letting it alone.”

Of course, the *Trafalgar* class is still very new. Only a few of the ships have traded fire in anger, and there isn’t nearly enough real-combat data to determine whether this design doctrine portends a new outlook for the Royal Navy into the 2520s, or an “evolutionary dead end.”

SHIPS IN CLASS:

Commissioned 2510-2520

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

C 181	HMS *Trafalgar*	On Duty
C 182	HMS *Temeraire*	On Duty
C 183	HMS *Bellerophon*	On Duty
C 184	HMS *Neptune*	On Duty
C 185	HMS *Orion*	On Duty
C 186	HMS *Mars*	On Duty
C 187	HMS *Thunderer*	On Duty
C 188	HMS *Ajax*	Undergoing Trials
C 189	HMS *Colossus*	Under Construction
C 190	HMS *Agamemnon*	Planned

Ship Name:		Ship Class:	*Trafalgar* Class	Status:		Thrust:	5
Captain		Ship Type:	Heavy Cruiser	Points:		CIC (+/-)	+1

Mass:	146,461 tons	Cargo:	700 tons	Crew / Passengers:	677 officers and men, 20 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	15 Teravolt EPC (4,4,4,3,2,2,1)	Bow
2 (+1)	15 Teravolt EPC (4,4,4,3,2,2,1)	Bow
2 (+1)	15 Teravolt EPC (4,4,4,3,2,2,1)	Stern
2 (+1)	15 Teravolt EPC (4,4,4,3,2,2,1)	Stern
2 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
2 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Stern

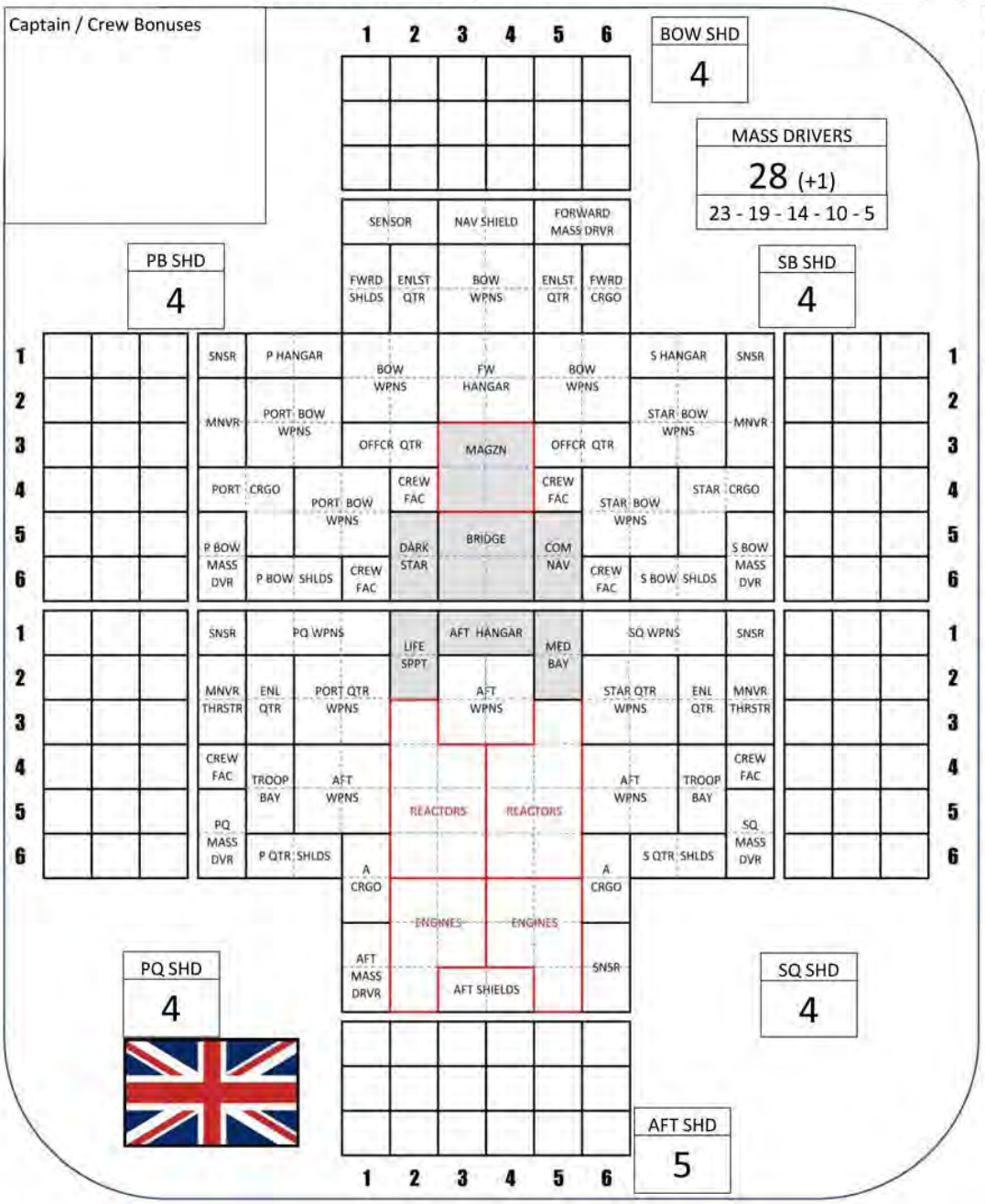
SECONDARY ARMAMENT

NO.	TYPE	MOUNT
8	25mm Mass Driver Array	Bow
8	25mm Mass Driver Array	P Bow
8	25mm Mass Driver Array	S Bow
8	25mm Mass Driver Array	P Quarter
8	25mm Mass Driver Array	S Quarter
8	25mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scout	Port
1	Scout	Starboard
1	Yacht	Aft
54	Marines	Troop Bay

Captain / Crew Bonuses



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Advanced
Base Scenario Cost	120
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**122**

CROSS CLASS

Battlecruiser – United Kingdom

SHIP TYPE:	Battleship
MASS:	376,747 tons
POWERPLANT:	Advanced
COMPLEMENT:	1,532 officers and men
SLD THRUST:	3
DARKSTAR WAVE:	9th

The *Cross* class battlecruiser is one of the newer designs coming out of Royal Navy shipyards in recent years, part of an attempt to update the aging line of British battleships and "star dreadnoughts" like the *Royal Sovereign* class or the ancient *Barnham* class. As faster battleships like the American *Colorado* class, New Roman *Constantine* class, and the Prussian *Scharnhorst* class "pocket battleships" begin to show their capabilities in recent conflicts, the Royal Navy has initiated a project that hearkens back to the early 20th Century battlecruisers of Jackie Fisher, warships with the size and firepower of a battleship, but the speed of a cruiser.

In these ancient “blue water navy” days, the trade-off for the battlecruiser’s speed and firepower was a terrible shortfall in armor protection, which led to a wholesale die-off of the "battlecruiser" line in battles like Jutland and the Denmark Strait. Learning from these lessons, the *Cross* design balances the cost of speed equally between protection and firepower. Additionally, advanced Harland and Wolff "Magnetar Delta" deuterium-tritium reactors in a highly-advanced "superconducting convection" powerplant allows these battlecruisers to push a much sharper sublight acceleration curve - yet still mount plenty of armor and a strong ECM / shielding suite, especially around engines and reactors. Mass driver protection may be a little light compared to designs like the *Royal Sovereign, Colorado*, *Yamato* and *Tirpitz*, but designers insist the advanced Hawkinge Electronics 01A fire control system more than makes up for this.

The lead ship of the class is named for Admiral (later First Star Lord) Sir Dennis Cross, winner of the gigantic Battle of Europa (October 18, 2396), the massive battle against Spanish, French, Italian, and Holy Russian Empire fleets that effectively ended the "Four Moons" Jovian War of 2394-2396. This was mankind's largest off-world war to date, securing Europa (one of the most valuable moons in the Sol System) as a British possession for at least 100 years, and the Royal Navy’s place as a major power in the new "black water" era of naval history. As such, Cross was hailed as a "second Nelson" (at the Battle of Europa his fleet of sublight cruisers was outgunned at least three-to-one), named Viceroy of Europa and First Star Lord, and played a key role in building the Royal Navy that would eventually make the interstellar leap with the invention of the Darkstar drive.

Other ships are named for Admiral Ramsay (Savior of Dunkirk and naval commander of Overlord), Vice-Admiral Beatty (battlecruiser commander at Jutland), King George VI, and Admiral Sir Christopher Buckland, victor of the "Marianna's Hope" War of 2448 (Sirius star system, one of the UK's first major interstellar conflicts).

The *Cross* class battlecruisers are just that, nothing less and nothing more. They carry no torpedoes or sizable aerospace groups, instead focused on speed, maneuverability, protection, and hard-hitting firepower. They carry eight 15-gigawatt rail guns in the classic "Atlantic Layout" - four double turrets, two forward, two aft. The secondary battery is a little more unusual, with two triple turrets of Harland and Wolff "Nebula” 8-megakelvin laser emitters mounted in flanking positions of the forward dorsal main gun turret. A third such laser array is mounted aft. The unusual arrangement of the two flanking laser emitters means the *Cross* can never get a full true "broadside" with these secondary weapons, but with more of them mounted forward, a *Cross* battlecruiser can sling out more long-range opening fire on the initial approach.

The *Cross* class battlecruiser is a solid design, able to outpace many of her rivals but not suffer from the classic "glass cannon" weaknesses of her spiritual ancestors. The class is still being constructed, no one knows for sure just how many the Royal Navy will build. They are *not* cheap ships by any measure, so the investment may soon slow somewhat until the Cross class really proves itself in prolonged campaign combat.

SHIPS IN CLASS:

Commissioned 2514-2520

- Scapa Flow Orbital, Earth
- New Londonium Shipyards, Saturn
- Horatius Installation, Omicron Eridani

BC 21	HMS *Cross*	On duty
BC 22	HMS *Ramsay*	On duty
BC 23	HMS *Beatty*	On duty
BC 24	HMS *George VI*	On duty
BC 25	HMS *Buckland*	On duty
BC 26	HMS ??	Under Construction

Captain / Crew Bonuses

PB SHD 4

PB SHD 4

PB SHD 4

MASS DRIVERS
42 (+1)
35 - 28 - 21 - 14 - 7

PB SHD 5

PB SHD 5

PB SHD 5

	1	2	3	4	5	6	7	8	9	10
1					FORWARD SHLD	NAVIGATION SHIELD	BOW WEAPONS	FORWARD MASS DRIVERS	SENSORS	
2										
3										
4										
5										
6										
7										
8										
9										
10										

	1	2	3	4	5	6	7	8	9	10
1				SENSORS	FWD CARGO				FWD CARGO	SENSORS
2				PORT CRGO	PORT HANGAR	BOW WEAPONS	BOW WEAPONS	BOW WEAPONS	STARBOARD HANGAR	STAR CRGO
3										
4				PORT BOW MASS DRIVERS	PORT BOW WEAPONS	OFF QTR		OFF QTR	STARBOARD BOW WEAPONS	STAR BOW MASS DRIVERS
5							FORWARD HANGAR			
6				PORT BOW WEAPONS	OFF QTR	MAGAZINE		MAGAZINE	OFF QTR	STARBOARD BOW WEAPONS
7										
8				MANEUVER THRUSTERS	PORT SHIELDS	ENLISTED QUARTERS	COMM NAV	ENLISTED QUARTERS	STARBOARD SHIELDS	MANEUVER THRUSTERS
9							FLAG BRG	FLAG QTRS		
10				PORT CARGO			BRIDGE			STAR CARGO

	1	2	3	4	5	6	7	8	9	10
1				TROOP BAY	PORT QUARTER WEAPONS		DARK STAR	LIFE SUPPORT	STARBOARD QUARTER WEAPONS	TROOP BAY
2				PORT QTR MASS DRIVERS						STAR QTR MASS DRIVERS
3					CREW FACILITIES		MEDICAL		CREW FACILITIES	
4				TROOP BAY	PORT QUARTER WEAPONS	AFT WEAPONS		AFT WEAPONS	STARBOARD QUARTER WEAPONS	TROOP BAY
5							AFT WEAPONS			
6				MANEUVER THRUSTERS	PORT QTR SHIELDS	REACTORS		REACTORS	STAR QTR SHIELDS	MANEUVER THRUSTERS
7										
8				SENSORS	TROOP BAY				TROOP BAY	SENSORS
9					CREW FACILITIES	ENGINES		ENGINES	CREW FACILITIES	
10				AFT CARGO						AFT CARGO

	1	2	3	4	5	6	7	8	9	10
1				SENSORS	AFT SHIELDS				AFT MASS DRIVERS	
2				AFT HANGAR			AFT HANGAR			
3										
4										
5										
6										
7										
8										
9										
10										

Ship Name:		Ship Class:	*Cross* Class	Status:	Thrust:	3
Captain		Ship Type:	Battlecruiser	Points:	CIC (+/-)	+1

Mass:	376,729 tons	Cargo:	800 tons	Crew / Passengers:	1,526 officers and men, 28 passengers	Darkstar Wave:	9th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	15 GW Rail Gun (8,8,7,6,5,4,3)	Bow
2 (+1)	15 GW Rail Gun (8,8,7,6,5,4,3)	Bow
2 (+1)	15 GW Rail Gun (8,8,7,6,5,4,3)	Stern
2 (+1)	15 GW Rail Gun (8,8,7,6,5,4,3)	Stern
3 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	P Bow
3 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	S Bow
3 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	30mm Mass Driver Array	Bow
4	30mm Mass Driver Array	P Bow
4	30mm Mass Driver Array	S Bow
4	30mm Mass Driver Array	P Quarter
4	30mm Mass Driver Array	S Quarter
4	30mm Mass Driver Array	Stern
10	20mm Mass Driver Array	Bow
8	20mm Mass Driver Array	P Bow
8	20mm Mass Driver Array	S Bow
8	20mm Mass Driver Array	P Quarter
8	20mm Mass Driver Array	S Quarter
10	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
3	Scout	Forward
1	Cutter	Port
1	Cutter	Starboard
2	Yacht	Aft
70	Marines	Troop Bay

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

Power Plant Type	Advanced
Base Scenario Cost	280
Aerospace Group Cost	3
Campaign Modifiers	0
FINAL SCENARIO COST	**283**

TYPE XII CLASS

Umfangangriffboot – Imperial Prussia

SHIP TYPE:	Corvette
MASS:	11,755 tons
POWERPLANT:	Advanced
COMPLEMENT:	42 officers and men
SLD THRUST:	8
DARKSTAR WAVE:	11th

The Type XII "*Umfangangriffboot*" (U-Boat), or Perimeter Attack Boat, would technically be considered a corvette in most navies. However, because of how they are designed, built, and deployed, the Imperial Prussian Kriegsmarine regards them more like the classic submarines of old.

Deployed in wolfpacks of three to eight, prowling the outer heliospheres of enemy star systems or lurking in the eclipse shadows of uninhabited moons, they hunt and attack their prey with long-ranged volleys of their deadly torpedoes. They strike without warning, their impressive ion drives and fast Darkstar waves allowing them to seemingly be in many places at once. Their small size makes them almost impossible to detect in the outer reaches of a star system, making these *Umfangangriffboote* the perfect weapons of ambush, commerce raiding, or convoy attack. Indeed, the German "U-boat" has returned.

Of course, this isn't the North Atlantic of 1915 or 1940, and many of the similarities between the two generations of U-boats are strictly cosmetic. Because there is no water in which to dive, the modern *Type XII* must mount a sizable array of mass drivers for defense against enemy ordinance, rather impressive for a ship of this class. Note the advanced targeting, sensor, and CIC suite, adding a killer's accuracy to the daunting Blohm & Voss "*Sternjäger*" (Star Hunter) torpedo array. For action against very small ships or unarmed merchant vessels, the powerful Rheinmetall Rh-770 laser emitter is sometimes used, also useful for finishing off crippled victims without expending another expensive torpedo (harkening back to the old "deck guns" of the 20th Century U-Boats).

For all their capabilities, however, the *Type XII* is still a corvette and thus must use excessive care when operating in proximity to any kind of significant enemy naval presence. In such situations, the U-boat's speed, stealth, and powerful ECM shielding become its greatest assets. Note the frontal shields and ECM suite, strong enough to make the ship all but vanish from any enemy scanners at ranges exceeding 2,000 kilometers or so. This forward shielding and ECM screen is also vital when making torpedo approaches toward potential targets.

SHIPS IN CLASS:

Commissioned 2498-2520

- Moltke Orbital Staryards, Earth
- Kiel Staryards, Rhea (Saturn)
- New Wilhelmshaven, 61 Cygni

U-92	On Duty
U-93	On Duty
U-94	Lost in Combat, Hercules Gate War
U-95	On Duty
U-96	Captured, Psi Serpentis
U-97	On Duty
U-98	Lost in Combat, 19 Draconis
U-99	On Duty
U-100	On Duty
U-101	On Duty
U-102	On Duty
U-103	On Duty
U-104	On Duty
U-105	On Duty
U-106	Vanished, Orion Epsilon Frontier, 212 Quadrant
U-107	On Duty
U-108	On Duty
U-109	On Duty
U-110	On Duty
U-111	Lost in Combat, Psi Serpentis
U-112	On Duty
U-113	On Duty
U-114	On Duty
U-115	On Duty
U-116	On Duty
U-117	On Duty
U-118	On Duty
U-119	On Duty
U-120	On Duty
U-121	On Duty
U-122	On Duty
U-123	On Duty
U-124	On Duty
U-125	On Duty
U-126	On Duty
U-127	Lost in Accident, Eisenwolf Colony, Duchess Annabel's War
U-128	On Duty
U-129	On Duty
U-130	On Duty
U-131	Undergoing Trials
U-132	Under Construction

Ship Name:		Ship Class:	*Type XII* Class	Status:	Thrust:	8
Captain		Ship Type:	Umfangangriffboot (U-Boat)	Points:	CIC (+/-)	+2

Mass:	11,755 tons	Cargo:	100 tons	Crew / Passengers:	42 officers and men, 2 passengers	Darkstar Wave:	11th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
4 (+2)	Class IV Torpedo	P Bow
4 (+2)	Class IV Torpedo	S Bow
1 (+2)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	30mm Mass Driver Array	Bow
4	30mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Launch	Forward
4	Marines	Troop Bay

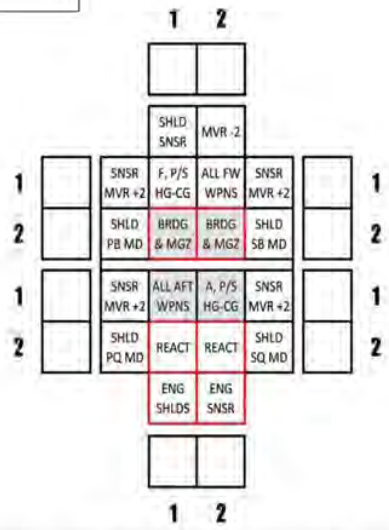
PB SHD	BOW SHD	SB SHD
6	7	6

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
5 (+2)
3



** Each ENG / REACT hit applies -2 Thrust.
** Each MVR hit applies +2 cost per turn.

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
6	6	6

Power Plant Type	Advanced
Base Scenario Cost	12
Aerospace Group Cost	0
Campaign Modifiers	
FINAL SCENARIO COST	12

EMDEN CLASS

Frigate – Imperial Prussia

SHIP TYPE:	Frigate
MASS:	27,127 tons
POWERPLANT:	Standard
COMPLEMENT:	132 officers and men
SLD THRUST:	7
DARKSTAR WAVE:	10th

The Prussian military has long been criticized for producing weapons and equipment that is, in a word, over-engineered. Systems are either too fragile, expensively built to exacting tolerances, not "soldier-proof," or over-specialized to a singular purpose. Even in the 26th Century, the Imperial Prussian Kriegsmarine seems guilty of this to a certain degree, with gun-heavy behemoths like the *Tirpitz* class on end of their battleship scale, and the super-fast (and super-lightweight) *Scharnhorst* class on the other.

The same holds true for smaller warship classes. While the Kriegsmarine seemed well-equipped with solid cruiser and destroyer designs like the *Leopold*, the *Hipper*, and *Maas* classes, their line of frigates seemed to suffer the old Prussian tendency for "one-trick ponies" - designs that excel in a very narrow focus, and suffer in virtually all others. On the one hand, we have the *Regensburg*, a gun-heavy "defense monitor." On the other, we have the new *Ostwind* class, which is superb at aerospace defense, helpless at everything else, and very few in number to boot.

Clearly, the Prussians had no "line frigate" for fleet escort, system reconnaissance, patrol, or the myriad of duties that basic frigates are built for. So the Kriegsmarine set to work on a new frigate class that was simple, inexpensive, versatile, and uniform ... everything that the Prussian Navy traditionally was not.

The *Emden* class is the result. Named for smaller cities of terrestrial Germany, they are robust, utilitarian ships, small and straightforward in their design, capable of carrying out all the screening, scouting, and patrol missions (thus taking a huge load off the overworked destroyers of the *Maas* class). This isn't to say they are completely conventional frigates, note the 6 gigawatt rail guns mounted fore and aft. It seems even when building frigates, the Prussians can't resist mounting the largest possible rail guns in a given hull. Nevertheless, torpedoes and mass drivers round out the armament, giving the *Emden* all the tools required to perform their often humble, but vital missions.

Production of these ships is now complete, with twenty units delivered. There is talk of a new upgraded line of "Emden II" frigates, but so far no ships have been launched.

SHIPS IN CLASS:

Commissioned 2495-2514

- Moltke Orbital Staryards, Earth
- Kiel Staryards, Rhea (Saturn)
- New Wilhelmshaven, 61 Cygni

KS-1711	KMS *Emden*	On Duty
KS-1712	KMS *Heidelberg*	On Duty
KS-1713	KMS *Paderborn*	On Duty
KS-1714	KMS *Darmstadt*	On Duty
KS-1715	KMS *Würzburg*	On Duty
KS-1716	KMS *Ingolstadt*	On Duty
KS-1717	KMS *Heilbronn*	On Duty
KS-1718	KMS *Ulm*	On Duty
KS-1719	KMS *Wolfsburg*	On Duty
KS-1720	KMS *Göttingen*	On Duty
KS-1721	KMS *Offenbach*	Scuttled, Hercules Gate
KS-1722	KMS *Pforzheim*	On Duty
KS-1723	KMS *Recklinghausen*	On Duty
KS-1724	KMS *Bottrop*	On Duty
KS-1725	KMS *Fürth*	On Duty
KS-1726	KMS *Reutlingen*	On Duty
KS-1727	KMS *Remscheid*	On Duty
KS-1728	KMS *Koblenz*	On Duty
KS-1729	KMS *Wiesbaden*	On Duty
KS-1730	KMS *Erlangen*	Destroyed, Psi Serpentis
KS-1731	KMS *Moers*	On Duty
KS-1732	KMS *Trier*	On Duty
KS-1733	KMS *Jena*	On Duty
KS-1734	KMS *Siegen*	On Duty
KS-1735	KMS *Hildesheim*	On Duty
KS-1736	KMS *Salzgitter*	On Duty
KS-1737	KMS *Cottbus*	On Duty
KS-1738	KMS *Lübeck*	On Duty
KS-1739	KMS *Osnabruck*	On Duty
KS-1740	KMS *Hagen*	On Duty

Ship Name:		Ship Class:	*Emden* Class	Status:		Thrust:	7
Captain		Ship Type:	Frigate	Points:		CIC (+/-)	+0

Mass:	27,127 tons	Cargo:	100 tons	Crew / Passengers:	132 officers and men, 6 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Stern
2	Class IV Torpedo	Bow
2	Class IV Torpedo	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	35mm Mass Driver Array	Bow
3	35mm Mass Driver Array	P Bow
3	35mm Mass Driver Array	S Bow
3	35mm Mass Driver Array	P Quarter
3	35mm Mass Driver Array	S Quarter
3	35mm Mass Driver Array	Stern

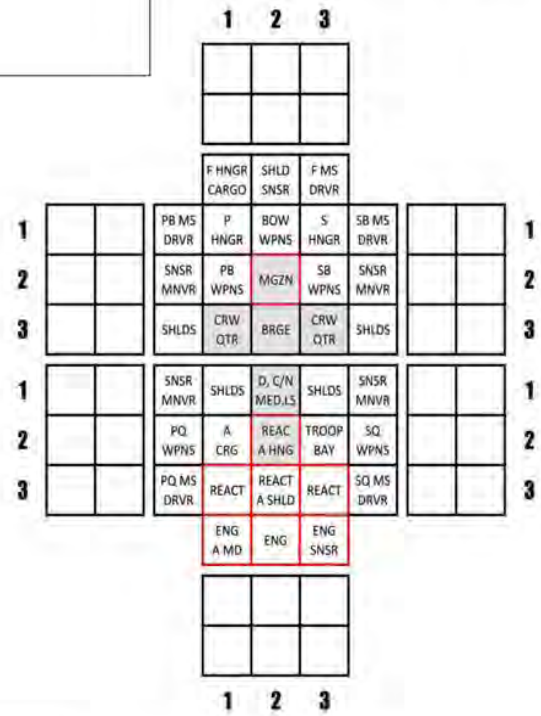
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Aft
1	Scout	Forward
16	Marines	Troop Bay

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses

MASS DRIVERS
13
11 - 9 - 7 - 5 - 3



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	5	4

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	1
Campaign Modifiers	
FINAL SCENARIO COST	21

HIPPER CLASS

Light Cruiser – Imperial Prussia

SHIP TYPE:	Light Cruiser
MASS:	97,744 tons
POWERPLANT:	Standard
COMPLEMENT:	496 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *Hipper* class light cruiser is something of a misnomer, there isn't very much "light" about it. Like a plate of Bavarian bratwurst, it is heavy, nasty, and mean, a typical product of Imperial Prussian naval design. Formidably protected with very powerful gravitic shielding, it mounts no less than ten 8 gigawatt rail guns, a battery to rival almost any *heavy* cruiser in Known Space. To make room for this, the Hipper forgoes any secondary armament like torpedoes, lasers, or plasma projectors, although an impressive array of 45mm mass drivers is installed for aerospace defense.

As a result of such firepower, these ships have rather unremarkable sublight speed and Darkstar capabilities, as is typical for mainstream Prussian design. Such advantages and drawbacks were well evidenced in one of the *Hipper's* first operations, in 2499, when the Schwartzberg colony in Ursa Minor came under attack by an American battle group built around the light cruiser *Baltimore*. Although the *Hipper* couldn't get to the battle area fast enough to save the colony, she handily defeated the *Baltimore* and three escorting destroyers in the shootout that followed.

The *Hipper*, *Admiral Scheer*, and *Prinz Eugen* are named for iconic figures of imperial Germanic history, while the *Soor*, *Mollwitz*, and *Kesseldorf* are named for victories of Frederick the Great. The *Koniggratz* is named for the battle of Prussia over Austria that presaged the foundation of a modern German state. Note the admiral's yacht, allowing the *Hipper* to serve as a flagship of a task force.

KMS *Rossbach* is probably the most famous ship of this class. Captain Valentin Goeritz is her skipper, a longtime veteran who commanded a *Regensburg* frigate in the 19 Draconis War and them *Maas* class destroyers at Hercules Gate. Suffice it to say, by the time he and his bridge crew took command of the *Rossbach*, they had accumulated enough experience to quickly turn her into one of the most fearsome cruisers in the fleet. Particularly in the recent Duchess Annabel's War, KMS *Rossbach* has been engaging French and Russian warships with pin-point, hard-hitting gunnery even at extreme ranges, once crippling a *Sovnya* class destroyer with a single salvo at the incredible distance of 3200 kilometers.

SHIPS IN CLASS:

Commissioned 2488-2509

- Moltke Orbital Staryards, Earth
- Kiel Staryards, Rhea (Saturn)
- New Wilhelmshaven, 61 Cygni

KS-1411	KMS *Admiral Hipper*	On Duty
KS-1412	KMS *Prinz* Eugen	On Duty
KS-1413	KMS *Soor*	On Duty
KS-1414	KMS *Mollwitz*	Destroyed, 19 Draconis
KS-1415	KMS *Kesseldorf*	Destroyed, Chernyeva Gas Giant
KS-1416	KMS *Koniggratz*	On Duty
KS-1417	KMS *Admiral Scheer*	On Duty
KS-1418	KMS *von Ingenohl*	On Duty
KS-1419	KMS *Hugo von Pohl*	On Duty
KS-1420	KMS *Rossbach*	On Station, Kampfgeschwader Gold
KS-1421	KMS *Leuthen*	On Duty
KS-1422	KMS *Güstow*	On Duty

Ship Name:		Ship Class:	*Hipper* Class	Status:		Thrust:	5
Captain		Ship Type:	Light Cruiser	Points:		CIC (+/-)	+0

Mass:	98,838 tons	Cargo:	300 tons	Crew / Passengers:	504 officers and men, 24 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	8 GW Rail Gun (4,4,3,3,2,1,0)	Bow
2	8 GW Rail Gun (4,4,3,3,2,1,0)	Bow
2	8 GW Rail Gun (4,4,3,3,2,1,0)	Bow
2	8 GW Rail Gun (4,4,3,3,2,1,0)	Stern
2	8 GW Rail Gun (4,4,3,3,2,1,0)	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
8	25mm Mass Driver Array	Bow
4	25mm Mass Driver Array	P Bow
4	25mm Mass Driver Array	S Bow
6	25mm Mass Driver Array	P Quarter
6	25mm Mass Driver Array	S Quarter
6	25mm Mass Driver Array	Stern
0		
0		

SMALL CRAFT / MARINES

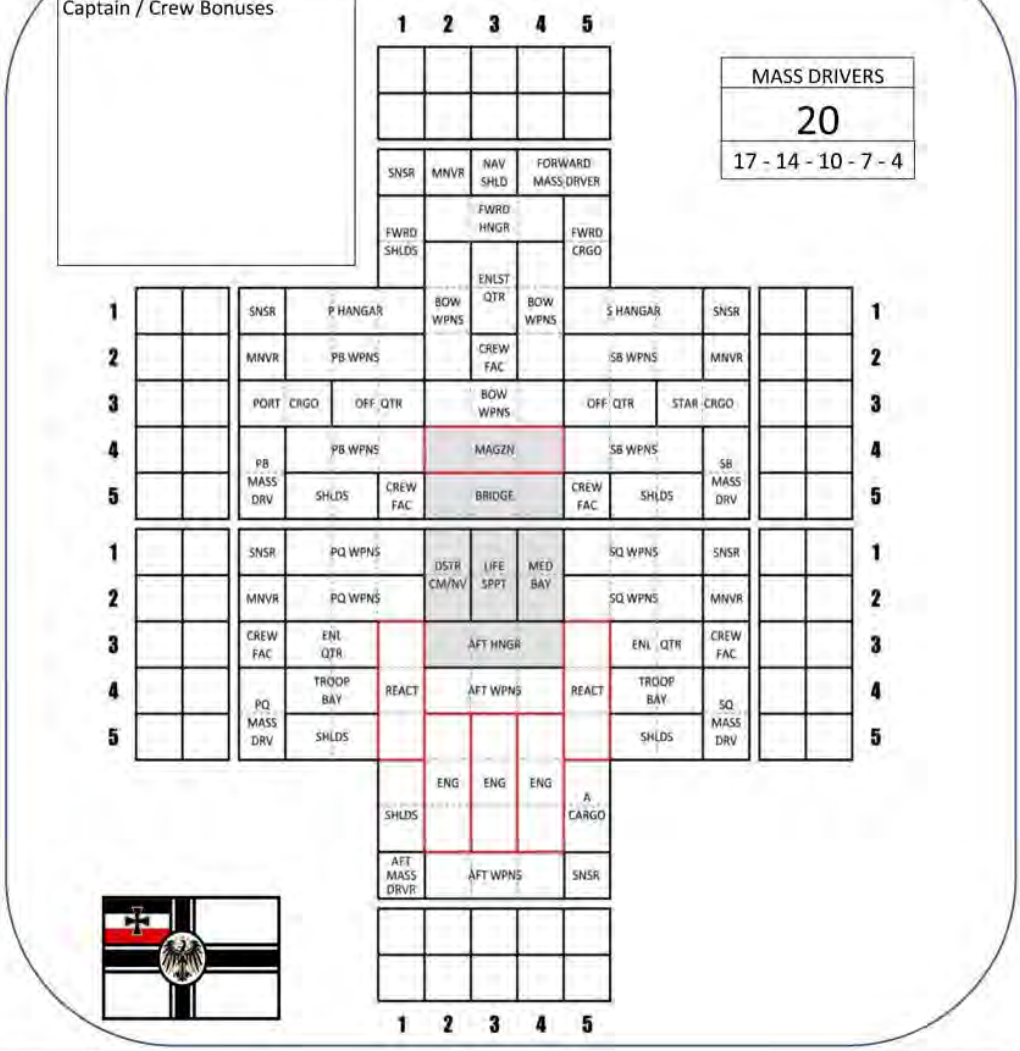
NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scout	Port
1	Scout	Starboard
62	Marines	Troop Bay
1	Yacht	Aft

PB SHD	BOW SHD	SB SHD
5	5	5

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses



MASS DRIVERS

20

17 - 14 - 10 - 7 - 4

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
5	5	5

Power Plant Type	Standard
Base Scenario Cost	70
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	72

LEOPOLD CLASS

Heavy Cruiser – Imperial Prussia

SHIP TYPE:	Heavy Cruiser
MASS:	175,926 tons
POWERPLANT:	Advanced
COMPLEMENT:	768 officers and men
SLD THRUST:	4
DARKSTAR WAVE:	10th

Built for heavy broadsides and named for the old Germanic kings of Prussia and Imperial Germany, the *Leopold* class stands perhaps as the epitome of the "classic" heavy cruiser. With its traditional "Atlantic Layout" of four double rail gun turrets, the *Leopold* breaks with convention only when it comes to the *size* of these weapons. The *Leopold* carries 11 gigawatt rail guns, the largest mounted on any heavy cruiser in Known Space, pushing them practically into the realm of the pocket battleship.

As if this were not enough, the *Leopold* class also mounts a staggering twelve 6 gigawatt rail guns for secondary armament, making this far and away the biggest battery of rail guns on anything short of a full battlecruiser or battleship.

This arsenal comes at the expense of speed, however, not to a complete lack of other weapons like the torpedo arrays of the rival *Slava* class or the advanced targeting suites of the *Iron Duke* or *Trafalgar.* Some critics also point to the mass driver defenses of the *Leopold*, which are admittedly slightly substandard for a ship of this weight. Designers counter this claim by pointing out that the *Leopold* is meant to serve as the flagship of a task force (wherever the Prussian Navy can't afford to send a true dreadnaught), and will always be deployed with sufficient escort to help with mass driver defense. Most notably this is the new *Ostwind* class escort frigate. Still, to look at a *Leopold* is to look perhaps at a design from another age, proof that Imperial Prussia remains committed to her long-standing "*grossgeschutzen*" (big gun) traditions in naval thought.

KMS *Franz Josef* was far and away the most famous ship of this class. For years she served as the flagship of Captain Matthias Gold's *Kruezergeschwader Franz Josef*, one of the most aggressive and heavily engaged formations in recent Prussian naval history. Gold and the *Franz Josef* won the Knight's Cross in the Psi Serpentis War at the Battle of Vancouver Polaris, a disastrous battle for the Prussians where the *Franz Josef* probably saved the Prussian flagship *Friedrich der Grosse* from complete destruction. The *Franz Josef* would win the Knight's Cross again at the Battle of Zubrin Prime, a smashing Prussian success that more or less handed them victory in the Hercules Gate War.

Her luck finally ran out in Duchess Annabel's War, however, where she was lost in the fiery clouds of the Chernyeva gas giant in a shoot out against cruiser groups of the Holy Russian Empire and the Royal Navy. So solid was Matthias Gold's standing in the Kriegsmarine, however, that not only did his career survive the loss of the *Franz Josef*, but he was given command of a *Scharnhorst* class pocket battleship.

SHIPS IN CLASS:

Commissioned 2408-2518

- Moltke Orbital Staryards, Earth
- Kiel Staryards, Rhea (Saturn)
- New Wilhelmshaven, 61 Cygni

KS-1345	KMS *Leopold*	On Duty
KS-1346	KMS *Ferdinand II*	On Duty
KS-1347	KMS *Freidrich Wilhelm*	On Duty
KS-1348	KMS *Franz Josef*	Lost, Chernyeva gas giant
KS-1349	KMS *Koenig Albert*	On Duty
KS-1350	KMS *Hohenstaufen*	On Duty
KS-1351	KMS *Blücher*	On Duty
KS-1352	KMS *Lutzow*	On Duty

Ship Name:		Ship Class:	*Leopold* Class	Status:		Thrust:	4
Captain		Ship Type:	Heavy Cruiser	Points:		CIC (+/-)	+0

Mass:	175,926 tons	Cargo:	500 tons	Crew / Passengers:	768 officers and men, 20 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	11 GW Rail Gun (6,6,5,4,3,2,1)	Bow
2	11 GW Rail Gun (6,6,5,4,3,2,1)	Bow
2	11 GW Rail Gun (6,6,5,4,3,2,1)	Stern
2	11 GW Rail Gun (6,6,5,4,3,2,1)	Stern
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Bow
2	6 GW Rail Gun (3,3,2,1,1,0,0)	P Bow
2	6 GW Rail Gun (3,3,2,1,1,0,0)	S Bow

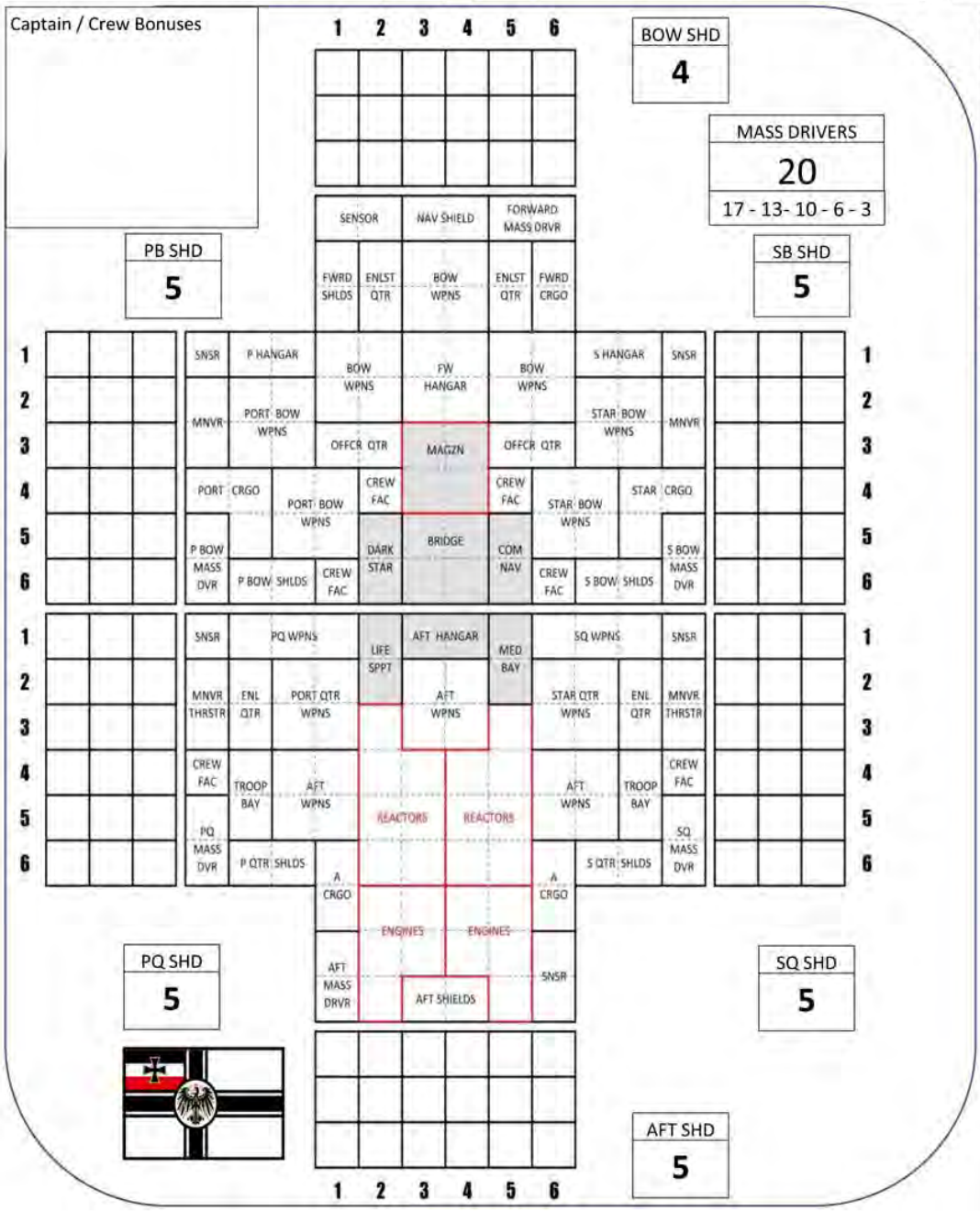
SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Stern
2	6 GW Rail Gun (3,3,2,1,1,0,0)	Stern
4	35mm Mass Driver Array	Bow
4	35mm Mass Driver Array	P Bow
4	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Quarter
4	35mm Mass Driver Array	S Quarter
6	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
1	Cutter	Port
1	Yacht	Starboard
60	Marines	Troop Bay

Captain / Crew Bonuses



STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Advanced
Base Scenario Cost	120
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**122**

SCHARNHORST CLASS

Pocket Battleship – Imperial Prussia

SHIP TYPE:	Battleship
MASS:	348,118 tons
POWERPLANT:	Advanced
COMPLEMENT:	1,412 officers and men
SLD THRUST:	4
DARKSTAR WAVE:	10th

The *Scharnhorst* class is the product of a recent effort within the Imperial Prussian Kriegsmarine to redress its overabundance on superheavy, super-gunned, and very slow "dreadnought" style warships. Quite the opposite, the *Scharnhorsts* are fast, agile raiders, able to easily keep pace with virtually any known heavy cruiser and even older light cruisers.

In a word, the *Scharnhorst* is a raider, designed to strike fast and hard from unexpected directions and unexpected times. Faster than any battleship in known space, both in FTL and sublight, it can form the nucleus of light cruiser or heavy cruiser strike squadrons, and mount lightning strikes practically anywhere in a given warzone. It takes battleship to stand up to a *Scharnhorst*, and of course no battleship can keep up with one. Its three triple-turreted Henschel-Krupp EGK-5100 12-gigawatt rail cannons give it an awesome punch, far exceeding any heavy cruiser that could hope to keep up with her. This threat is further sharpened by the Atlas Elektronik EG-3000 targeting and sensor array, giving the *Scharnhorst's* guns enhanced accuracy especially over longer ranges. While the *Scharnhorst's* 6 gigawatt rail gun secondary armament is curiously old, these guns are still more than suitable to finish off crippled freighters or tankers – or to "sweep" smaller escort ships from her path while her main guns concentrate on larger prey or heavier threats.

Note the scout ships carried to find enemy convoys, and the extended storage to support long raiding cruises and marines for boarding actions. All the same, the *Scharnhorst's* protection is relatively light for a battleship. Indeed, along its aft sections, the ECM and gravitic shielding are weaker even than those of some light cruisers.

Essentially, the Scharnhorst was envisioned as a ship that could outrun anything it could not outfight. Accordingly, the captain of a *Scharnhorst* would be very well advised not to engage in pitched battle with a "true" battleship. At just 349,000 tons, *Scharnhorsts* are outweighed by at least 35% by even "light" battleships like American *Colorado* class or the British *Cross* class battlecruiser. Really any kind of "slugging match" is not advised, in the recent Annabel's Star War, the pocket battleship *Von der Tann* was tied down by a squadron of Russian and British heavy cruisers and only barely escaped with her life. a

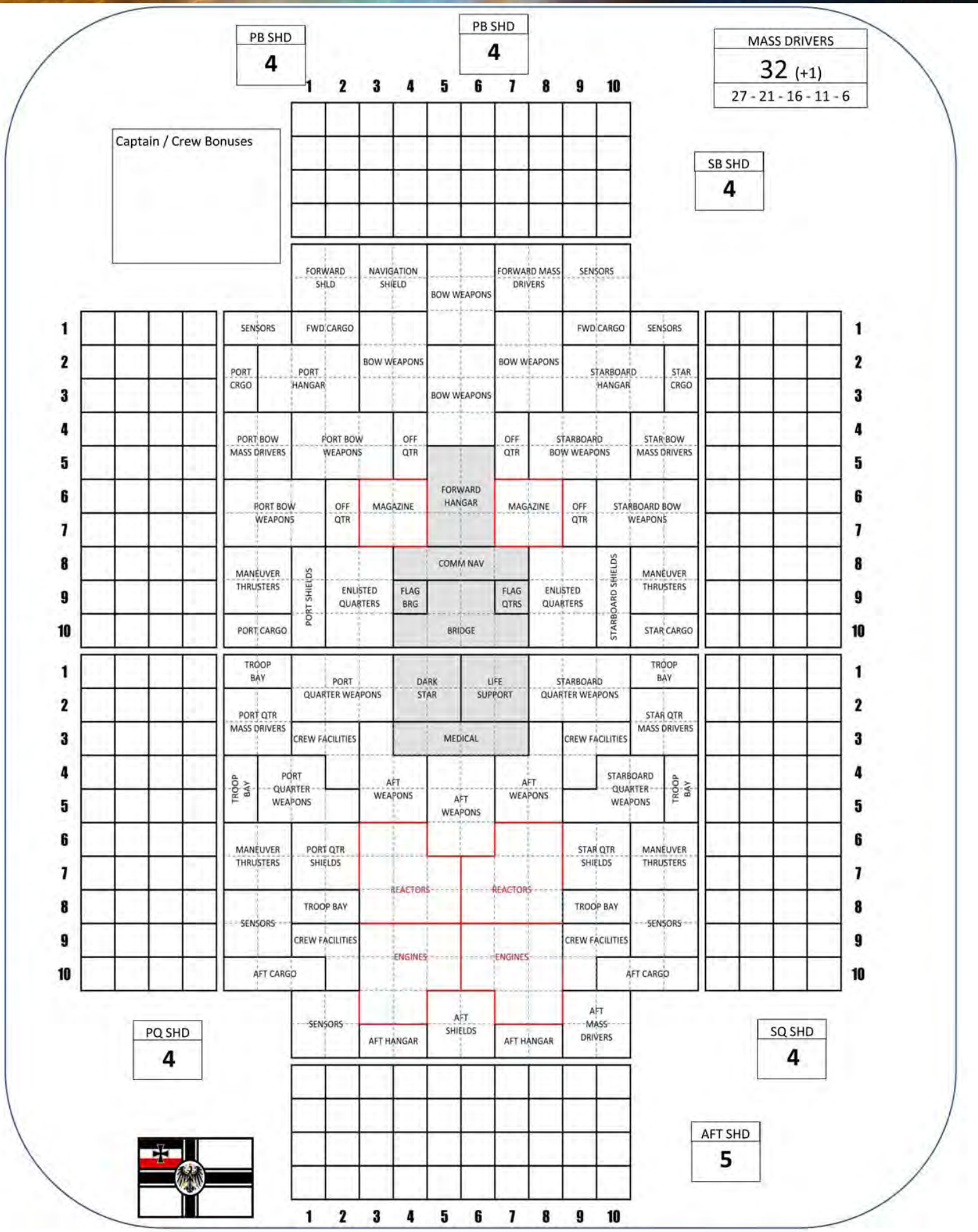
Perhaps the most startling design feature of the *Scharnhorst* class pocket battleship is its Darkstar drive. In FTL, these are the fastest battleships in Known Space, period. This makes them an incredibly dangerous threat, able to "appear" almost anywhere. And since it takes a battleship to stop one of these things, an enemy fleet must tie down battleships (or equivalent forces in heavy cruiser squadrons or defensive orbital installations) in far more star systems if they hope to cover all the potential targets a *Scharnhorst* could reach.

SHIPS IN CLASS:

Commissioned 2506-2516

- Moltke Orbital Staryards, Earth
- Kiel Staryards, Rhea (Saturn)
- New Wilhelmshaven, 61 Cygni

KS-1201	KMS *Scharnhorst*	On Duty
KS-1202	KMS *Gneisenau*	On Duty
KS-1203	KMS *Graf Spee*	On Duty
KS-1204	KMS *Stauffenberg*	On Duty
KS-1205	KMS *Graf Zeppelin*	On Duty
KS-1206	KMS *Seydlitz*	On Duty
KS-1207	KMS *Preussen*	On Duty
KS-1208	KMS *Von der Tann*	Flagship, Kampfgeschwader Gold


PB SHD
4
PB SHD
4
MASS DRIVERS
32 (+1)
27 - 21 - 16 - 11 - 6
Captain / Crew Bonuses
SB SHD
4
1 2 3 4 5 6 7 8 9 10
FORWARD SHLD
NAVIGATION SHIELD
BOW WEAPONS
FORWARD MASS DRIVERS
SENSORS
SENSORS
FWD CARGO
FWD CARGO
SENSORS
PORT CRGO
PORT HANGAR
BOW WEAPONS
BOW WEAPONS
BOW WEAPONS
STARBOARD HANGAR
STAR CRGO
PORT BOW MASS DRIVERS
PORT BOW WEAPONS
OFF QTR
OFF QTR
STARBOARD BOW WEAPONS
STAR BOW MASS DRIVERS
PORT BOW WEAPONS
OFF QTR
MAGAZINE
FORWARD HANGAR
MAGAZINE
OFF QTR
STARBOARD BOW WEAPONS
MANEUVER THRUSTERS
PORT SHIELDS
ENLISTED QUARTERS
COMM NAV
FLAG BRG
FLAG QTRS
ENLISTED QUARTERS
STARBOARD SHIELDS
MANEUVER THRUSTERS
PORT CARGO
BRIDGE
STAR CARGO
TROOP BAY
PORT QUARTER WEAPONS
DARK STAR
LIFE SUPPORT
STARBOARD QUARTER WEAPONS
TROOP BAY
PORT QTR MASS DRIVERS
CREW FACILITIES
MEDICAL
CREW FACILITIES
STAR QTR MASS DRIVERS
TROOP BAY
PORT QUARTER WEAPONS
AFT WEAPONS
AFT WEAPONS
AFT WEAPONS
STARBOARD QUARTER WEAPONS
TROOP BAY
MANEUVER THRUSTERS
PORT QTR SHIELDS
REACTORS
REACTORS
STAR QTR SHIELDS
MANEUVER THRUSTERS
SENSORS
TROOP BAY
TROOP BAY
SENSORS
CREW FACILITIES
ENGINES
ENGINES
CREW FACILITIES
AFT CARGO
AFT CARGO
SENSORS
AFT HANGAR
AFT SHIELDS
AFT HANGAR
AFT MASS DRIVERS
PQ SHD
4
SQ SHD
4
AFT SHD
5
1 2 3 4 5 6 7 8 9 10

Ship Name:		Ship Class:	*Scharnhorst* Class	Status:	Thrust:	4
Captain		Ship Type:	Pocket Battleship	Points:	CIC (+/-)	+1

Mass:	348,118 tons	Cargo:	450 tons	Crew / Passengers:	1,412 officers and men, 10 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3	12 GW Rail Gun (6,6,5,5,4,3,2)	Bow
3	12 GW Rail Gun (6,6,5,5,4,3,2)	Bow
3	12 GW Rail Gun (6,6,5,5,4,3,2)	Stern
3	6 GW Rail Gun (3,3,2,1,1,0,0)	Bow
3	6 GW Rail Gun (3,3,2,1,1,0,0)	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	35mm Mass Driver Array	Bow
6	35mm Mass Driver Array	P Bow
6	35mm Mass Driver Array	S Bow
8	35mm Mass Driver Array	P Quarter
8	35mm Mass Driver Array	S Quarter
8	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scout	Forward
1	Launch	Port
1	Launch	Starboard
1	Yacht	Aft
64	Marines	Troop Bay

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Power Plant Type	Advanced
Base Scenario Cost	240
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**242**

VALCOUR CLASS

Destroyer – United States

SHIP TYPE:	Destroyer
MASS:	48,246 tons
POWERPLANT:	Standard
COMPLEMENT:	249 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Valcour* class destroyers of the United States Navy, named for small engagements of the American Revolution, are considered by many naval experts as some of the best all-around destroyers in Known Space. Although possessing only average speed for a ship of its class, the *Valcour* makes up for this with protection, firepower, and an advanced suite of targeting, sensor, ECM, and comm/nav electronics.

While the *Valcour's* six 5 GW rail guns and 6 MgKv lasers can deliver a stinging punch, as with most destroyers, a *Valcour's* primary weapon is its torpedoes. With six tubes mounted for the Mark 48 gravitic torpedo, a careful *Valcour* skipper can engage and destroy targets larger than himself. Point-defense is also solid, with extensive batteries of 40mm and 20mm mass driver chain guns well-positioned around the hull. In summary, while the *Valcour* lacks the speed of some destroyer designs and the firepower of others, it is a well-balanced and reliable design that can encompass a diverse portfolio of mission profiles, both in independent deployments and combined fleet operations. Note the two scout craft and expanded cargo bays, making the *Valcour* an ideal design for extended and independent operations in deep space.

By far the most famous ship of this class is the USS *Oriskany*, or "Lady O" as she is known by her crew. A battle-scarred and richly-decorated veteran of the 19 Draconis, IK Pegasi, Andromeda Arc Wars, Xi Scorpio, and Scorpion's Tail Wars, she has destroyed over two dozen warships , fought in over fifty pitched battles, and logged some 620 light-years of travel in just six years.

Highlights of "Lady O's" career include an engagement against a crippled Japanese *Fuso* class battleship in the Andromeda Arc War, then hunting down and killing a Black Dragon *Slava* class heavy cruiser in the atmosphere of a gas giant in the Xi Scorpio War. USS *Oriskany* was also the defacto flagship and of a US-Arab League battlegroup in the IK Pegasi War (fought 151 light-years from Sol, making it one of the furthest pushes of the United States Navy to date), and outright commanded the American effort during the small "Scorpion's Tail" war of 2518-19. She now serves as the flagship for "Task Force Oriskany," a hunter-killer wolf pack of made up of herself, sister ships USS *Princeton* and *Valley Forge*, US Marine Corps light carrier / assault ship USS *Tarawa*, and *Mako* class torpedo corvette USS *Daggerfish*. This was the task force that all but won the Scorpion's Tail War singlehandedly, and now serves as one of the United States' premiere light response forces, with every ship in the task force capable of 12-magnitude Darkstar Waves as FTL speeds near 1,000c.

Of course, such a career would be packed with even more accolades if the *Oriskany* hadn't spent so much time in dry dock. But none of her victories have been cheap or easy ... and famous ship or not ... she has known her share of defeats as well.

SHIPS IN CLASS:

Commissioned 2498-2518

- New Virginia Orbital Yards, Earth
- Port Kennedy, Olympus Mons, Mars
- Triton Navy Shipyards, Neptune

DSGN-791	USS *Valcour*	On Duty
DSGN-792	USS *Princeton*	On Station, Task Force Oriskany
DSGN-793	USS *Bennington*	Scuttled, Andromeda Arc
DSGN-794	USS *Kaskaskia*	On Duty
DSGN-795	USS *White Plains*	Lost, Battle of 10 Taurus B
DSGN-796	USS *Bonhomme Richard*	On Duty
DSGN-797	USS *Oriskany*	Flagship, Task Force Oriskany
DSGN-798	USS *Cowpens*	On Duty
DSGN-799	USS *Trenton*	Drydock, Fort Dyron, Proxima Centauri
DSGN-800	USS *Hubbardton*	On Duty
DSGN-801	USS *Kings Mountain*	On Duty
DSGN-802	USS *Waxhaus*	On Duty
DSGN-803	USS *Chesapeake Capes*	On Duty
DSGN-804	USS *Valley Forge*	On Station, Task Force Oriskany
DSGN-805	USS *Stanwix*	On Duty
DSGN-806	USS *Vincennes*	On Duty
DSGN-807	USS *Ranger*	On Duty

Ship Name:		Ship Class:	*Valcour* Class	Status:		Thrust:	6
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	+1

Mass:	48,246 tons	Cargo:	200 tons	Crew / Passengers:	249 officers and men, 10 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Stern
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Stern
3 (+1)	Class IV Torpedo	P Bw
3 (+1)	Class IV Torpedo	S Bw

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	20mm Mass Driver Array	Bow
4	40mm Mass Driver Array	P Bow
4	40mm Mass Driver Array	S Bow
4	40mm Mass Driver Array	P Quarter
4	40mm Mass Driver Array	S Quarter
2	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

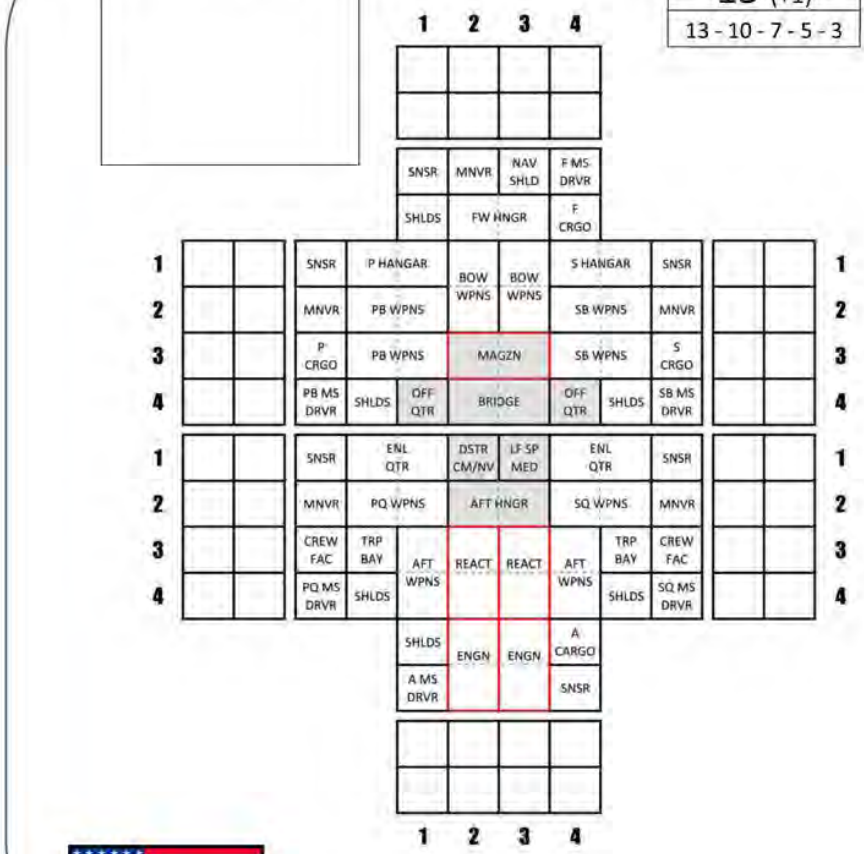
NO.	TYPE	HANGAR
24	Marines	Troop Bay
1	Scout	Port
1	Scout	Starboard
1	Cutter	Aft

PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
15 (+1)
13 - 10 - 7 - 5 - 3



ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Standard
Base Scenario Cost	40
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	42

PQ SHD	AFT SHD	SQ SHD
4	4	4

CLARINO CLASS

Heavy Destroyer – United States

SHIP TYPE:	Destroyer
MASS:	55,690 tons (US Navy Configuration)
POWERPLANT:	Advanced
COMPLEMENT:	288 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *Clarino* class is an unusual design for the United States Navy. The first ship of the class, USAGS *Salvatore J. Clarino Jr*., was actually laid down for use by the United States Aerospace Guard, the 26th Century descendant of the long-standing US Coast Guard. When the US Navy made the jump into interplanetary space in the 2200s and then interstellar space in the early 2400s, the US Coast Guard naturally followed suit with specialties in port security, defense of planetary orbital zones, safeguarding commerce, search and rescue, and enforcement of maritime law.

The *Clarino* Class started as a highly-advanced line of starships specially suited for the Aerospace Guard's mission portfolio. The larger, expanded Todd Shipbuilding hull accommodates the GE / JPL "Starwind 9100" reactor plant and engines, putting out more power than the Navy's recent *Valcour* class fleet destroyers.

But it's what the *Clarino* puts this extra power towards is what makes the design special. The *Clarino* is actually quite slow in sublight speed, her Hughes FDX-201 ion drives pushing her only at a 5G acceleration curve. Instead, the additional power is put into a very powerful weapons suite, including four double turrets of 5GW rail guns (as opposed to the *Valcour* class' three turrets). There are also expanded bays for additional troops, and a much larger cargo capacity for longer-ranged missions (the cargo and troops bays on a *Clarino* actually resemble those on a light cruiser). Passenger bays are also expanded for greater rescue capacity.

But where the *Clarino* really shines is in mass driver protection. The anti-aerospace protection is almost double that of a *Valcour* class, especially since it is guided by an advanced Raytheon "Able Archer" targeting and tactical CIC system. In fact the *Clarino* has more than the *Sacramento* and *San Antonio* class light cruisers, and runs side by side with *Endeavor* class light fleet carrier for sheer anti-aerospace and torpedo protection firepower.

For this reason, the US Navy also opened a contract for its own line of *Clarino* class, which they designated as "heavy destroyers." Opponents of the contract cited the *Clarino's* slow sub-light speed, but Navy strategists maintained that the *Clarino* is mostly to escort larger cruisers and battleships, classes which have slower SLD thrust anyway. As for actual fleet screening or interdiction missions, the Navy still has the superb *Valcour* class for such traditional destroyer roles.

There was also brief discussion of taking the Darkstar drives down to 9th Wave capacity, but this was quickly quashed. Slowed FTL capability would ruin the *Clarino's* ability to keep up with the ships she was meant to escort, and drastically cut the ship's ability for rescue and law enforcement interdiction, vital for the USAG's mission.

In fact, the stats shown on this page are for the US Navy's variant of the *Clarino* class. In true maritime USAG configuration, the *Clarino* removes one pair of Mark 48 gravitic torpedoes, carries an extra launch in the forward hangar bay, and an 11th Wave Darkstar drive. This faster, longer-ranged FTL drive allows the USAG to expand its envelope for deep space search and rescue operations, as well as interception missions against enemy corvettes, pirates, and smugglers (in this configuration, the *Clarino* costs 42 scenario points instead of 50).

The *Clarinos* are large, slow, and expensive, especially for a destroyer-type warship. But the value they bring in safeguarding American flagships, aerospace carriers, or ports is beyond dispute. They'll never outnumber the *Valcours* or the older Kinkaid class destroyers, but they will be a proud staple of the US Navy and US Aerospace Guard for decades to come.

SHIPS IN CLASS:

Commissioned 2509-2520

- New Virginia Orbital Yards, Earth
- Port Kennedy, Olympus Mons, Mars
- Triton Navy Shipyards, Neptune

US Aerospace Guard configuration

DSGA-109	USAGS *Salvatore J. Clarino Jr.*	On Duty
DSGA-110	USAGS *Douglas A. Munro*	On Duty
DSGA-111	USAGS *Russell Waesche*	On Duty
DSGA-113	USAGS *Elmer F. Stone*	Lost in Rescue Op, Greensea
DSGA-114	USAGS *Phillip F. Roach*	On Duty
DSGA-115	USAGS *Merrill W. Hoover*	Undergoing Trials

US Navy Configuration

DSGN-811	USS *Robert J. Yered*	On Duty
DSGN-812	USS *William P. Fessenden*	On Duty
DSGN-813	USS *Frederick C. Billard*	On Duty
DSGN-814	USS *Quentin Walsh*	On Duty
DSGN-815	USS *Dwight Dexter*	On Duty
DSGN-816	USS *Raymond Evans*	On Duty

Ship Name:		Ship Class:	*Clarino* Class (Navy Config)	Status:		Thrust:	5
Captain		Ship Type:	Escort Destroyer	Points:		CIC (+/-)	+1

Mass:	55,690 tons	Cargo:	300 tons	Crew / Passengers:	288 officers and men, 15 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	P Bw
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	S Bw
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Stern
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Stern
3 (+1)	Class IV Torpedo	P Bw
3 (+1)	Class IV Torpedo	S Bw

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	20mm Mass Driver Array	Bow
4	40mm Mass Driver Array	P Bow
4	40mm Mass Driver Array	S Bow
4	40mm Mass Driver Array	P Quarter
4	40mm Mass Driver Array	S Quarter
8	40mm Mass Driver Array	Stern
0		
0		

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Bow
1	Cutter	Aft
20	Marines	Troop Bay
20	Marines	Troop Bay

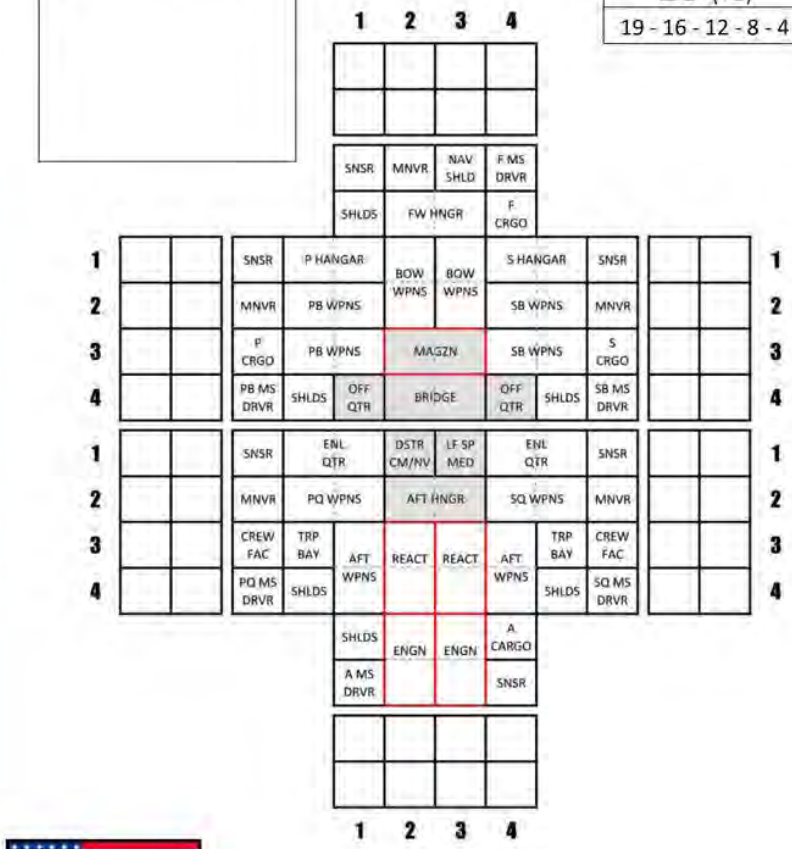
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
23 (+1)
19 - 16 - 12 - 8 - 4



ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Advanced
Base Scenario Cost	48
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	50

Ship Name:		Ship Class:	*Clarino* Class (USAG Config)	Status:		Thrust:	5
Captain		Ship Type:	Escort Destroyer	Points:		CIC (+/-)	+1

Mass:	55,022 tons	Cargo:	300 tons	Crew / Passengers:	289 officers and men, 15 passengers	Darkstar Wave:	11th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	P Bw
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	S Bw
2 (+1)	5 GW Rail Guns (2,2,1,1,0,0,0)	Stern
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
1 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Stern
2 (+1)	Class IV Torpedo	P Bw
2 (+1)	Class IV Torpedo	S Bw

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	20mm Mass Driver Array	Bow
4	40mm Mass Driver Array	P Bow
4	40mm Mass Driver Array	S Bow
4	40mm Mass Driver Array	P Quarter
4	40mm Mass Driver Array	S Quarter
8	40mm Mass Driver Array	Stern
0		
0		

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Bow
1	Cutter	Aft
1	Launch	Bow
20	Marines	Troop Bay
20	Marines	Troop Bay

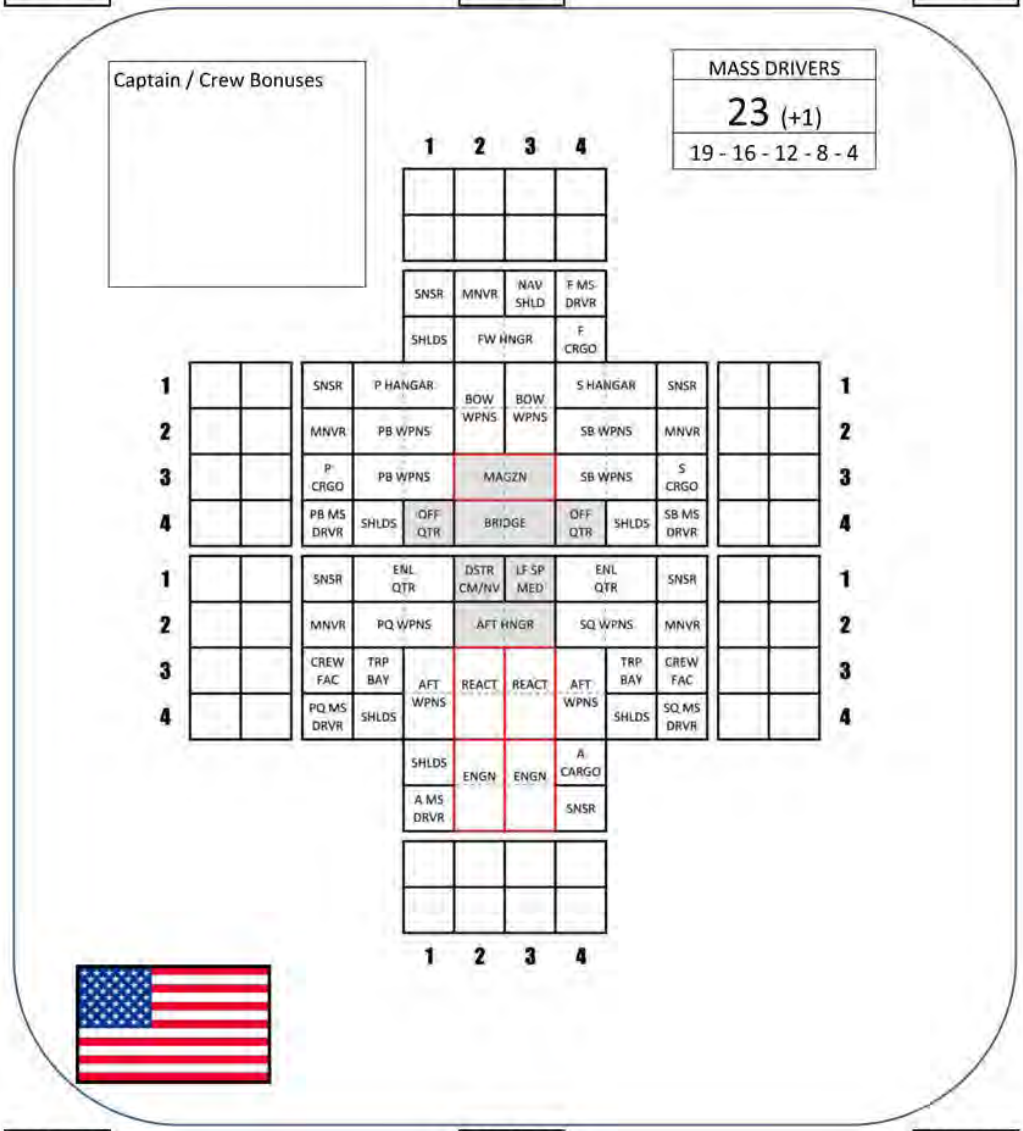
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
23 (+1)
19 - 16 - 12 - 8 - 4



ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Advanced
Base Scenario Cost	40
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	42

SAN ANTONIO CLASS

Light Cruiser – United States

SHIP TYPE:	Light Cruiser
MASS:	104,752 tons
POWERPLANT:	Advanced
COMPLEMENT:	458 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *San Antonio* class is a new class of light cruiser rolling out of American shipyards, replacing the old *Sacramento* class cruisers left over from the 2470s and 80s. The *San Antonios* are sleek, beautiful ships, and have already racked up a respectable combat record even though the production run of these units isn't even complete. In all, 20 ships are planned, with the USS *Bozeman* scheduled for commissioning in the year 2522.

The *San Antonio* class has good sublight maneuverability, transrelativistic speed, and protection for a ship of her size, but its her weapons suite that make her stand out. The 12-teravolt EPCs and 8-megakelvin lasers are mounted in double and triple turrets, but arrayed in a "Pacific Configuration" with two turrets forward and one aft. This allows the *San Antonio* to inflict heavy damage on her targets during the opening stages of an engagement, even as the combatants are still closing. The conventional arrangement of torpedo tubes along the port and starboard bow further support this "fast attack" doctrine, launching the standard and well-tested American Mark 48 gravitic torpedo. Note that the *San Antonio* has turned from the conventional armament suite for light cruisers (6-8 gigawatt rail guns) in favor of lighter, longer ranged (but more power hungry) particle and energy-beam based weapons. Cruisers of the *San Antonio* class usually hope to inflict heavy damage on approaching warships at long range in the initial stages of an engagement, where their advanced Raytheon-Hughes SPQ-910 sensor suite can be leveraged for best effect.

For all its dash and glamour, however, some critics have pointed out that while the *San Antonio* cruisers have indeed performed well in smaller skirmishes and "incidents," they had yet to be tested in a truly bloody war until the slaughter in the Andromeda Arc. Specifically, the *San Antonios* were heavily involved in severe fighting at Solomon's Star and the Outer Mariannas. While the ships performed well, the *Salt Lake* was blown up with almost all hands at the Battle of Santa Catalina, and the United States wound up losing that war against the Japanese. Accordingly, critics say that the jury may still be out on the *San Antonios*, pointing to their mediocre armor and shielding. Sleek, fast, beautiful, and hard-hitting, there are those who decry the *San Antonio* class as high-maintenance, expensive, and fragile "glass cannons." They may be right. Indeed, these "pretty ladies" may find themselves beat up when thrown in a knife-fight with other advanced light cruiser classes like the *Taihō* or the *Fochs*, let alone older-school bruisers like the *Hipper* and *Kutuzov*, or *Hokkaido* class. Only time will tell.

SHIPS IN CLASS:

Commissioned 2508-2522

- New Virginia Orbital Yards, Earth
- Port Kennedy, Olympus Mons, Mars
- Triton Navy Shipyards, Neptune

CSGN-521	USS *San Antonio*	On Duty
CSGN-522	USS *Portland*	On Duty
CSGN-523	USS *Albany*	On Duty
CSGN-524	USS *Pensacola*	On Duty
CSGN-525	USS *Phoenix*	On Duty
CSGN-526	USS *Salt Lake*	Exploded, Battle of Santa Catalina
CSGN-527	USS *Denver*	On Duty
CSGN-528	USS *San Diego*	On Duty
CSGN-529	USS *Atlanta*	On Duty
CSGN-530	USS *Spokane*	On Station, Task Force Liberty
CSGN-531	USS *Las Vegas*	On Duty
CSGN-532	USS *Boston*	On Duty
CSGN-533	USS *Richmond*	On Duty
CSGN-534	USS *St. Louis*	On Duty
CSGN-535	USS *New Orleans*	On Duty
CSGN-536	USS *Nashville*	On Duty
CSGN-537	USS *Albuquerque*	On Duty
CSGN-538	USS *Tallahassee*	Fitting Out, Trials
CSGN-539	USS *Springfield*	Under Construction
CSGN-540	USS *Bozeman*	Planned

Ship Name:		Ship Class:	*San Antonio* Class	Status:		Thrust:	5
Captain		Ship Type:	Light Cruiser	Points:		CIC (+/-)	+1

Mass:	104,790 tons	Cargo:	300 tons	Crew / Passengers:	470 officers and men, 16 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3 (+1)	12 Teravolt EPC (4,4,3,2,2,1,0)	Bow
3 (+1)	12 Teravolt EPC (4,4,3,2,2,1,0)	Bow
3 (+1)	12 Teravolt EPC (4,4,3,2,2,1,0)	Stern
2 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
2 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
2 (+1)	8 MgKv Laser (3,3,2,2,1,1,1)	Stern
4 (+1)	Class IV Torpedo	P Bow
4 (+1)	Class IV Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	20mm Mass Driver Array	Bow
4	40mm Mass Driver Array	P Bow
4	40mm Mass Driver Array	S Bow
4	40mm Mass Driver Array	P Quarter
4	40mm Mass Driver Array	S Quarter
8	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
1	Yacht	Port
36	Marines	Troop Bay

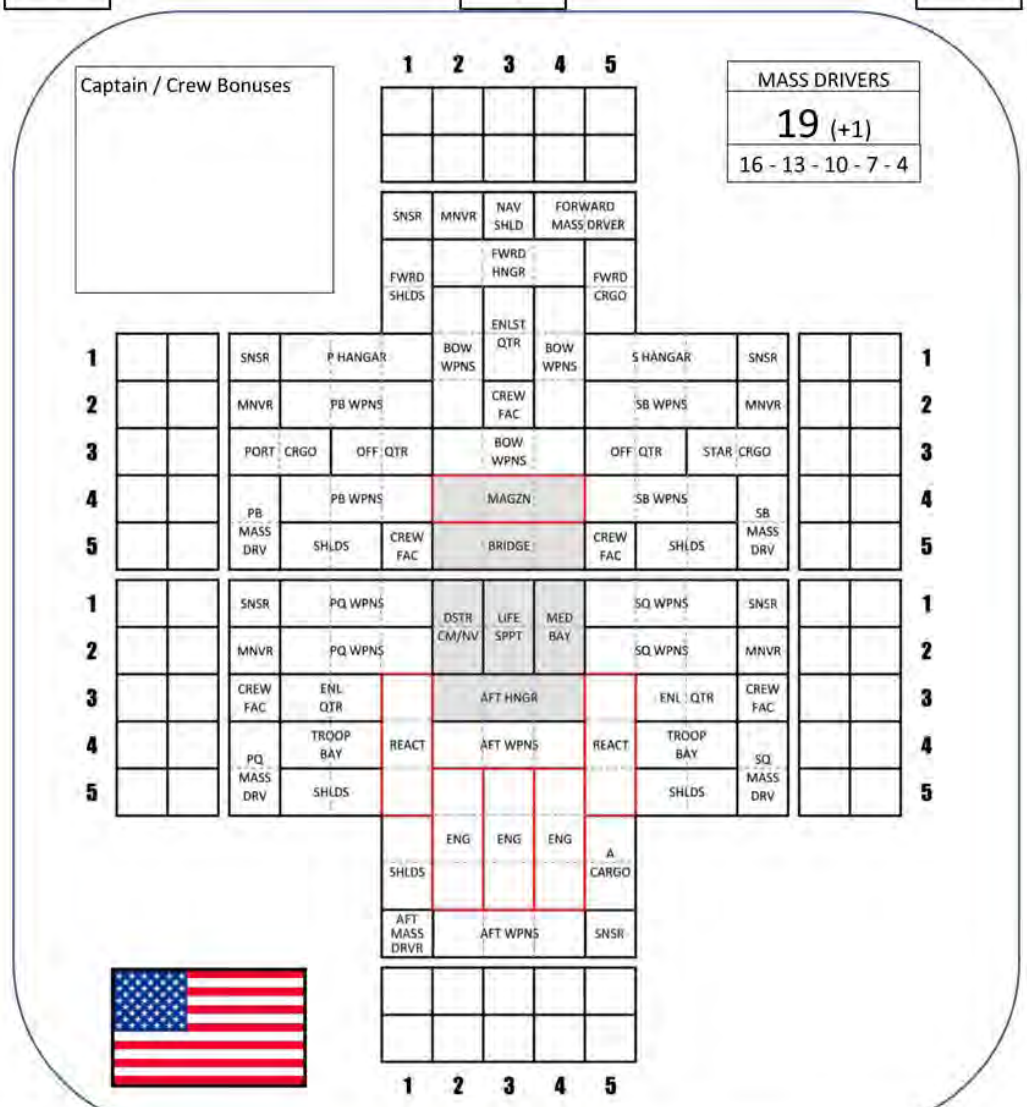
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
19 (+1)
16 - 13 - 10 - 7 - 4



ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Adv +
Base Scenario Cost	91
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	93

ENDEAVOR CLASS

Light Fleet Carrier – United States

SHIP TYPE:	Light Cruiser
MASS:	89,484 tons
POWERPLANT:	Advanced
COMPLEMENT:	923 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

The *Endeavor* class light fleet carrier is another example of classic United States naval doctrine: the forward deployment of expeditionary fleets, task forces, and battlegroups based around the large, fast, and heavily-loaded aerospace carrier. Of course, since *Lexington* class supercarriers are too large and expensive to be deployed everywhere, intermediate classes like the *Endeavor* serve as a bridge between these "war-enders" and smaller carrier classes like the *Buford* light carriers and the *McCampbell* escort carriers.

In parallel with these "light fleet carriers," the *Saipan* class has also been developed for use by the United States Marine Corps. Basically, these are *Endeavor* class carriers whose cargo bays have undergone slight modifications to carry "Harrier" class assault boats, tasked with the assault of planetary colonies and orbital installations.

Like all American ships, the *Endeavors* carry names steeped in national history. The first units of the class are named for the original space shuttles constructed by NASA during the 1970s and 1980s. Even now, five centuries later, service aboard the *Challenger* and *Columbia* is seen as a special honor among officers and men. Many of the other ships are named for famous American aircraft carriers of World War II.

Assignment aboard an *Endeavor* class light fleet carrier is one of the most highly coveted postings in the US Navy. Perhaps it's the sheer predatory beauty of these ships, the modern and spacious crew accommodations, or the fact that the most elite Navy and Marine Corps aerospace strike squadrons are often based aboard *Endeavors* (along with the media attention that comes with that). Whatever the cause, there is a certain mystique with the ships of the *Endeavor* class that somehow captures the imaginations of the military and civilian public alike.

Besides the *Columbia* and *Challenger,* the most famous ship of the class is the USS *Liberty*. During the Andromeda Arc War, the USS *Liberty* was positively gutted by a Japanese torpedo strike, losing over 400 of her officers and men and starting an epic battle of survival, repair, and recovery that lasted the better part of three weeks.

The service records for the *Endeavor* class carriers so far has been exemplary, although it bears noting that these ships are never sent anywhere without substantial escort. Like most American carriers, they are "pure" aerospace platforms, almost helpless in any engagement without their strike group. But that strike group is a fearsome factor in any battle. With a reinforced squadron of Vought F/S-44 "Corsair" fighters-bombers and another of Grumman F/SA-81 "Avenger" torpedo bombers, and two pair of E/S-101 "Hawkeye" scouts, (32 aerospace craft in all), and *Endeavor* class carrier can establish aerospace superiority many Second-Band moons or planets, or even a lightly-held star system.

** In the planetary assault configuration, the *Saipan* class carries 4 fighters and 4 bombers for ground support, plus 12 A/S-19 "Harrier" class assault boats, 196 Marines, 4 tanks, and 4 support vehicles. Cutters, launches, and yachts remain unchanged.

SHIPS IN CLASS:

Commissioned 2502-25??

- New Virginia Orbital Yards, Earth
- Port Kennedy, Olympus Mons, Mars
- Triton Navy Shipyards, Neptune

US Navy, *Endeavor* class light fleet carrier

CSCV-441	USS *Endeavor*	On Duty
CSCV-442	USS *Columbia*	On Duty
CSCV-443	USS *Challenger*	On Duty
CSCV-444	USS *Discovery*	On Duty
CSCV-445	USS *Enterprise*	On Duty
CSCV-446	USS *Atlantis*	On Duty
CSCV-447	USS *Liberty*	Flagship, Task Force Liberty
CSCV-447	USS *Freedom*	On Duty
CSCV-448	USS *Independence*	On Duty
CSCV-449	USS *Intrepid*	On Duty
CSCV-450	USS *Hornet*	On Duty
CSCV-451	USS *Essex*	On Duty
CSCV-450	USS *Wasp*	Under Construction
CSCV-451	USS *Franklin*	Planned

US Marine Corps, *Saipan* class planetary assault ship

LHCA-471	USS *Saipan*	On Duty
LHCA-472	USS *Belleau Wood*	On Duty
LHCA-473	USS *Iwo Jima*	On Duty
LHCA-474	USS *Guadalcanal*	On Duty
LHCA-475	USS *Inchon*	On Duty
LHCA-476	USS *Khe San*	On Duty
LHCA-477	USS *Peleliu*	On Duty

Ship Name:		Ship Class:	*Endeavor* Class	Status:		Thrust:	5
Captain		Ship Type:	Light Fleet Carrier	Points:		CIC (+/-)	+1

Mass:	89,502 tons	Cargo:	600 tons	Crew / Passengers:	923 officers and men, 18 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3 (+1)	Class IV Torpedo	P Bow
3 (+1)	Class IV Torpedo	S Bow
1	Launch	Fwd
1	Yacht	Aft

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	40mm Mass Driver Array	Bow
4	40mm Mass Driver Array	P Bow
4	40mm Mass Driver Array	S Bow
4	40mm Mass Driver Array	P Quarter
4	40mm Mass Driver Array	S Quarter
8	40mm Mass Driver Array	Stern

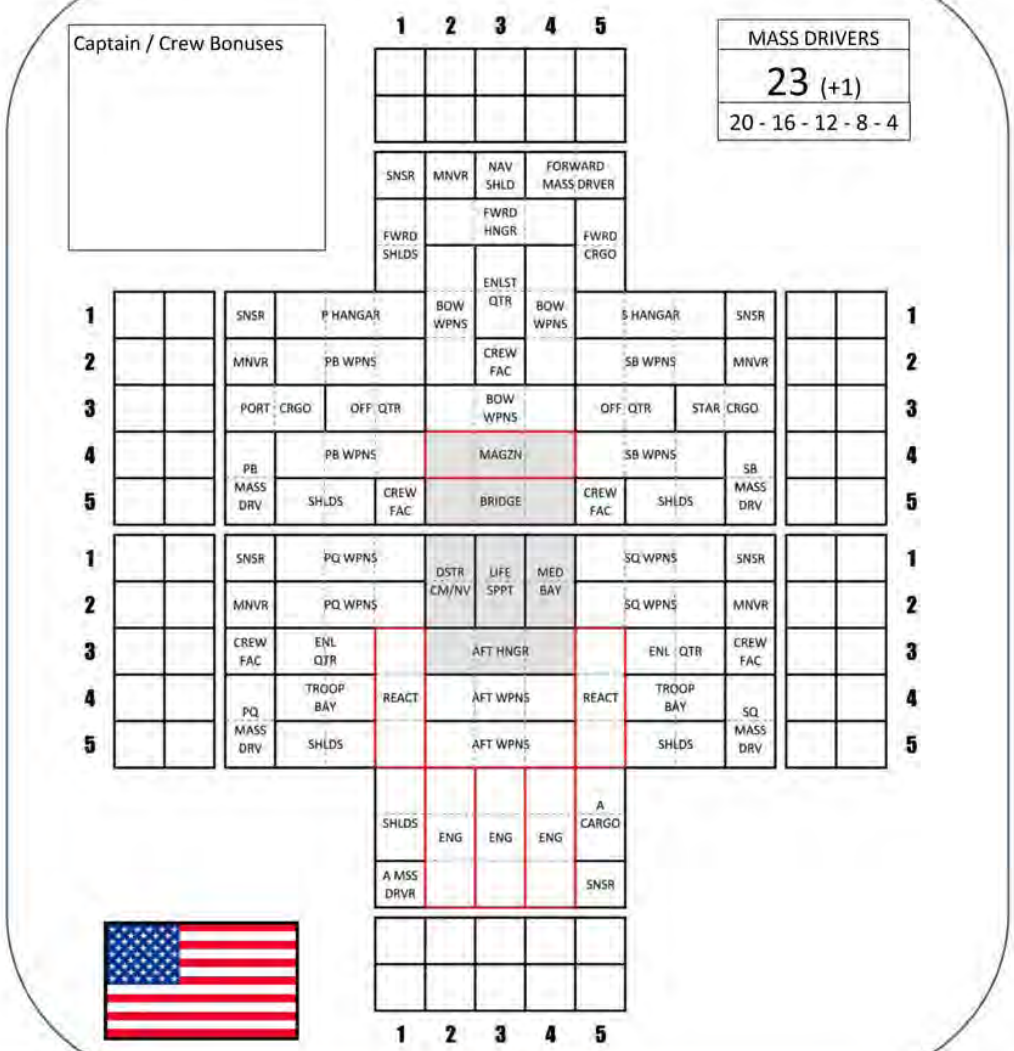
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
4	Scouts	Forward
8	Fighters	Port
8	Fighters	Starboard
4	Bombers	Port
4	Bombers	Starboard
4	Bombers	Aft
36	Marines	Troop Bay
2	Cutters	Port/Star

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses

MASS DRIVERS: 23 (+1) — 20 - 16 - 12 - 8 - 4



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Reduction:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Advanced
Base Scenario Cost	42
Aerospace Group Cost	60
Campaign Modifiers	
FINAL SCENARIO COST	102

LEXINGTON CLASS

Supercarrier – United States

SHIP TYPE:	Battleship
MASS:	353,204 tons
POWERPLANT:	Advanced
COMPLEMENT:	3,078 officers and men
SLD THRUST:	2
DARKSTAR WAVE:	9th

In terms of sheer size, the *Lexington* class supercarriers are currently the largest warships ever deployed into interstellar space. They are symbols as much as warships, statements of national identity, foreign policy, and the final word in projection of American power throughout the stars.

Tipping the scales at over 350,000 tons and just under a full *mile* in length, they are absolutely massive feats of engineering. In the sheer dimensions of their hulls, only the *Jerusalem* class superbattleships are built on a larger frame. *Lexington* class supercarriers also carry some of the largest crew complements, just under 3100 officers and men are required to run not only the carrier, but her massive aerospace strike group as well. As aerospace carriers, the *Lexingtons* are almost unchallenged in Known Space, only the Royal Navy's *Ark Royal* class and Japanese *Akagi* class can even begin to compare or compete.

A *Lexington's* strike group is indeed fearsome - well over a hundred Corsair fighters, Avenger torpedo bombers, and Hawkeye scouts are capable of being launched in three minutes, carrying enough gunnery and ordinance to easily fry half a planet or tear the bottom out of an enemy battle fleet. For propulsion, the *Lexingon* carries an enhanced model of the General Electric "StarCore 7700" reactors and Todd Shipbuilding "Gamma Class" ion drives that were previously mounted in the successful *Colorado* class battleship. Despite the improved powerplant, however, the carrier cannot match a *Colorado's* acceleration curves, primary due to the *Lexington's* immense bulk and the power demanded by her hangar bays.

However, the *Lexington* does mount an upgraded variant of the Hughes / General Dynamics SPQ-910 sensor suite, its processing power enhanced in order to handle not only the ship's defensive armament, but also coordination of its own immense aerospace wing. Mounting such an array of sensors, communications, and targeting arrays is a titanic feat for a ship this large, so much so that the *Lexington's* command and comms network draws almost as much power as that produced by the full reactors of a frigate.

Yet for all its impressive size and undeniable hitting power, there are some observers who maintain that ships like the *Lexington* are in fact a liability. Their cost is staggering, unconfirmed reports suggest that a full 30% of the United States Navy's operating budget is invested in the construction, maintenance, and operation of this single class. Shields and armor are formidable, but no more so than most classes of battleship. Granted, a *Lexington* carries a withering array of mass drivers for defense against fighters, bombers, and torpedoes - essentially attacks launched by similar beasts as herself. But other than that, the carrier relies entirely on a powerful escort group of frigates, destroyers, cruisers, and perhaps even battleships for protection. Without these escort ships, a *Lexington* supercarrier is all but helpless. a fact that only increases the operational expense of deploying these ships.

All the same, when one of these ships arrives in a warzone, with very exceptions ... the war is officially over.

SHIPS IN CLASS:

Commissioned 2505-2520

- New Virginia Orbital Yards, Earth
- Port Kennedy, Olympus Mons, Mars
- Triton Navy Shipyards, Neptune

CVNS-68	USS *Lexington*	On duty
CVNS-69	USS *Saratoga*	On duty
CVNS-70	USS *Yorktown*	On duty
CVNS-71	USS *Bunker Hill*	On duty
CVNS-72	USS *Midway*	On duty
CVNS-73	USS *Coral Sea*	On duty
CVNS-74	USS *Leyte Gulf*	On duty
CVNS-75	USS *Nimitz*	On duty
CVNS-76	USS *Spruance*	On duty
CVNS-77	USS *Halsey*	On duty
CVNS-78	USS *Fletcher*	Undergoing Trials
CVNS-79	USS *Mitscher*	Under construction

Captain / Crew Bonuses

PB SHD 4

MASS DRIVERS
52 (+1)
43 - 35 - 26 - 18 - 9

PB SHD 4

PB SHD 4

FORWARD SHLD | NAVIGATION SHIELD | BOW WEAPONS | FORWARD MASS DRIVERS | SENSORS

SENSORS | FWD CARGO | FWD CARGO | SENSORS

PORT CRGO | PORT HANGAR | BOW WEAPONS | BOW WEAPONS | STARBOARD HANGAR | STAR CRGO

PORT BOW MASS DRIVERS | PORT BOW WEAPONS | OFF QTR | OFF QTR | STARBOARD BOW WEAPONS | STAR BOW MASS DRIVERS

PORT BOW WEAPONS | OFF QTR | MAGAZINE | FORWARD HANGAR | MAGAZINE | OFF QTR | STARBOARD BOW WEAPONS

COMM NAV

MANEUVER THRUSTERS | PORT SHIELDS | ENLISTED QUARTERS | FLAG BRG | FLAG QTRS | ENLISTED QUARTERS | STARBOARD SHIELDS | MANEUVER THRUSTERS

PORT CARGO | BRIDGE | STAR CARGO

TROOP BAY | PORT QUARTER WEAPONS | DARK STAR | LIFE SUPPORT | STARBOARD QUARTER WEAPONS | TROOP BAY

PORT QTR MASS DRIVERS | CREW FACILITIES | MEDICAL | CREW FACILITIES | STAR QTR MASS DRIVERS

TROOP BAY | PORT QUARTER WEAPONS | AFT WEAPONS | AFT WEAPONS | AFT WEAPONS | STARBOARD QUARTER WEAPONS | TROOP BAY

MANEUVER THRUSTERS | PORT QTR SHIELDS | REACTORS | REACTORS | STAR QTR SHIELDS | MANEUVER THRUSTERS

SENSORS | TROOP BAY | TROOP BAY | SENSORS

CREW FACILITIES | ENGINES | ENGINES | CREW FACILITIES

AFT CARGO | AFT CARGO

SENSORS | AFT HANGAR | AFT SHIELDS | AFT HANGAR | AFT MASS DRIVERS

PB SHD 5

PB SHD 5

PB SHD 5

Ship Name:		Ship Class:	*Lexington* Class	Status:	Thrust:	2
Captain		Ship Type:	Supercarrier	Points:	CIC (+/-)	+1

Mass:	353,204 tons	Cargo:	1,600 tons	Crew / Passengers:	3,078 officers and men, 32 passengers	Darkstar Wave:	9th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
8	40mm Mass Driver Array	Bow
8	40mm Mass Driver Array	P Bow
8	40mm Mass Driver Array	S Bow
8	40mm Mass Driver Array	P Quarter
8	40mm Mass Driver Array	S Quarter
8	40mm Mass Driver Array	Stern
4	20mm Mass Driver Array	Bow
4	20mm Mass Driver Array	P Bow
4	20mm Mass Driver Array	S Bow
4	20mm Mass Driver Array	P Quarter
4	20mm Mass Driver Array	S Quarter
4	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
8	Scouts	Forward
2	Cutters	Forward
16	Fighters	Port
16	Fighters	Port
12	Bombers	Port
16	Fighters	Starboard
16	Fighters	Starboard
12	Bombers	Starboard
10	Bombers	Aft
2	Yachts	Aft
72	Marines	Troop Bay

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Power Plant Type	Advanced
Base Scenario Cost	140
Aerospace Group Cost	204
Campaign Modifiers	0
FINAL SCENARIO COST	**344**

AKASHI CLASS

Strike Frigate – Japan

SHIP TYPE: Frigate
MASS: 26,522 tons
POWERPLANT: Standard
COMPLEMENT: 121 officers and men
SLD THRUST: 7
DARKSTAR WAVE: 10th

When it was originally built, the *Akashi* class assault frigate was something of a throwback to an earlier age of Japanese naval tactics. A hyperaggressive design, the small ship mounted virtually all its weapons, ECM protection, and gravitic shielding *up front*, with only an afterthought of defense to its aft quarters.

Clearly, the *Akashi* was meant to "slash" at the enemy in bold strikes, using its superior thrust to speed into enemy formations, inflict maximum damage, and speed back out again. Of course, such attacks are typically best made along the bow or stern of the target, denying the enemy a full retaliatory broadside and maximizing the *Akashi's* chance of survival.

In practice, however, this didn't work. No matter how skillfully the captain placed his ship, the *Akashi's* stern remained vulnerable to weapons like torpedoes and aerospace fighters. Losses were hideous, and a horrified Japanese Naval Review board took the ships off-line to reconfigure their defenses to a more conventional layout. After extensive redesigns and overhaul of existing ships (and redesign of ships still under construction), the class was re-introduced, where it has regained its footing and proven itself a tough, utilitarian, and useful design.

Even now, the *Akashis* are spare, lean, and spartan ships, even by Japanese standards, and there are unconfirmed reports that they are crewed strictly by men with no families. Some Americans enlisted men have been heard to call them "kamikaze karts," while British press has listed them as "banzai boats." Such dismissal, however, is a dangerous underestimation of the *Akashi's* potential. After all, very few ships of their class can match the sheer firepower of their frontal barrage.

In the end, it's up to the crew to make the most of the *Akashi's* strengths, and keep its weaknesses hidden. When used with imaginative aggression, balanced against a keen eye toward their small size and lack of firepower astern, they can prove a sharp tool as part of a larger battlegroup, and in several battles in the Xi Scorpio, 19 Draconis, and Psi Serpentis Wars, have turned the tide of battle in favor of the Japanese.

SHIPS IN CLASS:

Commissioned 2497-2517

- New Kyoto Shipyards, Earth
- Shogun Station, Callisto
- Akagi Prime, Gamma Leporis

FE-12	IJN *Akashi*	On Duty
FE-13	IJN *Wutazashi*	Exploded, defense of Akagi Prime
FE-14	IJN *Narushima*	Exploded, Psi Serpentis
FE-15	IJN *Sakaimura*	Exploded, 19 Draconis
FE-16	IJN *Karajima*	Destroyed, Canis Minoris
FE-17	IJN *Kanoate*	On Duty
FE-18	IJN *Yurakazu*	On Station, Carrier Squadron Kanoya
FE-19	IJN *Tanakasha*	On Station, Carrier Squadron Kanoya
FE-20	IJN *Kikukawa*	On Duty
FE-21	IJN *Kitamura*	On Duty
FE-22	IJN *Takarada*	On Duty
FE-23	IJN *Wutazashi* II	Destroyed, Annabel's Star
FE-24	IJN *Asashio*	On Duty
FE-25	IJN *Ōshio*	On Duty
FE-26	IJN *Michishio*	Exploded, Xi Scorpio
FE-27	IJN *Arashio*	On Duty
FE-28	IJN *Asagumo*	On Duty
FE-29	IJN *Yamagumo*	On Duty
FE-30	IJN *Natsugumo*	On Duty
FE-31	IJN *Minegumo*	On Duty
FE-32	IJN *Arare*	On Duty
FE-33	IJN *Kagerō*	On Duty
FE-34	IJN *Shiranui*	On Duty
FE-35	IJN *Kuroshio*	On Duty
FE-36	IJN *Oyashio*	On Duty
FE-37	IJN *Hayashio*	On Duty
FE-38	IJN *Natsushio*	On Duty
FE-39	IJN *Hatsukaze*	On Duty
FE-40	IJN *Amatsukaze*	On Duty
FE-41	IJN *Tokitsukaze*	On Duty
FE-42	IJN *Urakaze*	On Duty
FE-43	IJN *Isokaze*	On Duty

Ship Name:		Ship Class:	*Akashi* Class	Status:		Thrust:	7
Captain		Ship Type:	Strike Frigate	Points:		CIC (+/-)	+1

Mass:	27,460 tons	Cargo:	100 tons	Crew / Passengers:	121 officers and men, 6 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+1)	30 KG Plasma (5,5,3,2,1,0,0)	Bow
2 (+1)	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
2	Class V Torpedo	P Bow
2	Class V Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	25mm Mass Driver Array	Bow
2	25mm Mass Driver Array	P Bow
2	25mm Mass Driver Array	S Bow
3	25mm Mass Driver Array	P Quarter
3	25mm Mass Driver Array	S Quarter
4	25mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Scout	Forward
10	Marines	Troop Bay
1	Cutter	Aft

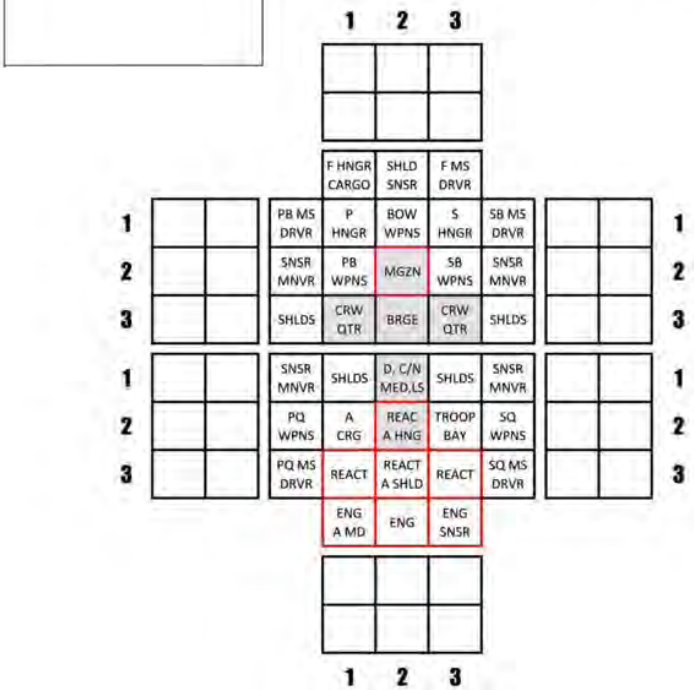
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
10 (+1)
8 - 6 - 5 - 4 - 2



ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	1
Campaign Modifiers	
FINAL SCENARIO COST	21

PQ SHD	AFT SHD	SQ SHD
4	4	4

KAGUMO CLASS

Destroyer – Japan

SHIP TYPE:	Destroyer
MASS:	52,581 tons
POWERPLANT:	Dated
COMPLEMENT:	253 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Kagumo* class destroyer stands as an enduring symbol of the resilience and tenacity of the modern Japanese Navy. During the 2480s, a particularly ferocious war broke out in the Virgo constellation between the Japanese and a coalition of the New Roman Alliance and the Holy Russian Empire. Heavily outgunned in the region, the Japanese fought back desperately with every available ship, all while launching a crash program to build new warships in record time. Although the haste of design and construction resulted in many failed classes, the *Kagumo* stood the test of time and the crucible of combat. Building thirteen of the tough little destroyers in just a decade, the Japanese Navy used them to great effect during the grim days of the Virgo War, finally turning the tide and stemming the Roman-Russian advance until an equitable peace treaty could be arranged.

Today, the remaining *Kagumos* continue to serve, despite their advanced age of nearly thirty years. While newer Japanese destroyers like the *Takashiros* are sleek, fast, and packed with advanced electronic gear, the *Kagumos* are still regarded as much more steadfast, durable, and reliable designs, and remain popular with their die-hard crews.

Old as they may be, the *Kagumo* class has undergone something of a modernization and service life extension refit. Ancient "Hellswarm" rocket pods were finally replaced, initially with the incredible Ki-45 "Toryu" (Dragon Slayer" gravitic torpedo, but the advanced ordinance just couldn't work with the *Kagumo's* guidance and command networks. These were then replaced in turn with reliable "close-burn" plasma projectors. Combined with her array of rail guns, these projectors allow the *Kagumo* to punch far above her weight class, at least at close ranges. Enemy captains who underestimate these "old lady" destroyers and let them get too close quickly learn not to make the same mistake again.

Many ships of this class have become much-publicized "legacy ships" within the Japanese Navy, with newly-recruited sons serving alongside their veteran fathers. One such ship, IJN *Otakawa*, racked up an incredible record alongside other ships a third her age in the Andromeda Arc and Xi Scorpio Wars, before finally being destroyed at the Battle of Nakatsu Gamma.

SHIPS IN CLASS:

Commissioned 2482-2492

- New Kyoto Shipyards, Earth
- Shogun Station, Callisto
- Akagi Prime, Gamma Leporis

DE 49	IJN *Kagumo*	On Duty
DE 50	IJN *Katagiri*	On Duty
DE 51	IJN *Takara*	On Duty
DE 52	IJN *Fushima*	On Duty
DE 53	IJN Marataze	Destroyed, Beta Virgo (Zavijava)
DE 54	IJN *Harata*	On Duty
DE 55	IJN *Zuikaze*	On Duty
DE 56	IJN *Kokuryu*	On Duty
DE 57	IJN *Chinano*	Destroyed, Gamma Virgo (Porrima)
DE 58	IJN *Nagazani*	On Duty
DE 59	IJN *Ichikana*	On Duty
DE 60	IJN *Shirakaze*	On Duty
DE 61	IJN *Otakawa*	Scuttled, Xi Scorpio

Ship Name:		Ship Class:	*Kagumo* Class	Status:		Thrust:	6
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	+0

Mass:	51,327 tons	Cargo:	200 tons	Crew / Passengers:	252 officers and men, 8 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2	5 GW Rail Guns (2,2,1,1,0,0,0)	Bow
2	5 GW Rail Guns (2,2,1,1,0,0,0)	Stern
1	40 KG Plasma (6,6,4,3,2,1,0)	Bow
1	40 KG Plasma (6,6,4,3,2,1,0)	Stern

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	25mm Mass Driver Array	Bow
4	25mm Mass Driver Array	P Bow
4	25mm Mass Driver Array	S Bow
4	30mm Mass Driver Array	P Quarter
4	30mm Mass Driver Array	S Quarter
4	25mm Mass Driver Array	Stern
0		
0		

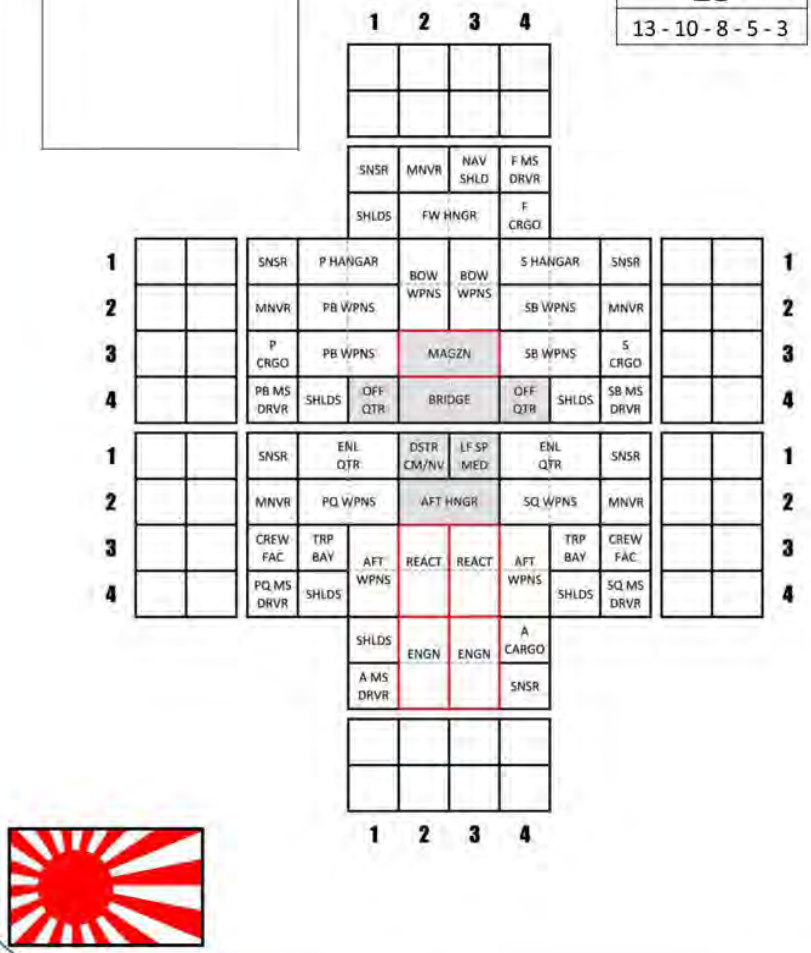
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scout	Port
1	Scout	Starboard
24	Marines	Troop Bay

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses

MASS DRIVERS
15
13 - 10 - 8 - 5 - 3



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Dated
Base Scenario Cost	32
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	34

SHIMADA CLASS

Light Carrier – Japan

SHIP TYPE:	Destroyer
MASS:	42,627 tons
POWERPLANT:	Standard
COMPLEMENT:	446 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Shimada* class light carrier reflects a recent effort by the Japanese Navy to expand the breadth of their aerospace deployment capacity. While supercarriers like the *Lexington*, *Ark Royal*, and *Akagi* classes are naturally far more powerful, they are also prohibitively expensive. Furthermore, they can only dominate one star system at a time, and require huge escort fleets. To extend the reach, versatility, and flexibility of the Japanese Navy's aerospace arm, clearly a smaller, more easily-deployed class was required.

Originally it was hoped that the old *Mikura* class escort carrier could soldier on in this role, but spiraling losses, the advancing age, and severely limited hull sizes of these ships forced the Japanese to go back to the drawing board. The *Shimada* class is the result.

Comparable in size and power output to a fleet destroyer, a *Shimada* class light carrier supports an aerospace strike group equal to the successful American *Buford* class, roughly one full reinforced squadron. Admittedly, the *Shimada* carries only an average targeting and CIC suite, as well as standard armor and shielding for her class, but she's not designed to engage enemy warships. She backs up her defenses with a sizable mass driver array, and to support her strike group she mounts a truly devastating array of six Ki-45 *Toryu* ("Dragon Slayer") gravitic torpedoes. These are among the most fastest, most accurate, and powerful torpedoes in Known Space, a solid hit from just one of these warheads is enough to rip open a destroyer.

The addition of these torpedoes plays an important part in how the *Shimada* deploys and commits her aerospace group. Since any ship finding itself on the wrong end of such a torpedo spread is almost certain to fire all mass drivers against them, this often serves as perfect cover for the *Shimada's* fighter group to make its approach and release its own ordinance load, or a withering strafing pass of small-caliber gunnery.

The *Shimada* is a relatively new class, but one ship, the IJN *Sagae*, has so far proven remarkably successful again Russian, British, and Panasian ships in Duchess Annabel's War. Her aerospace group has become elite, and continues to rack up an impressive record.

SHIPS IN CLASS:

Commissioned 2505-2519

- New Kyoto Shipyards, Earth
- Shogun Station, Callisto
- Akagi Prime, Gamma Leporis

DCE 101	IJN *Shimada*	On Duty
DCE 102	IJN *Machida*	On Duty
DCE 103	IJN *Kodaira*	On Duty
DCE 104	IJN *Miyazaki*	Exploded, Andromeda Arc
DCE 105	IJN *Kiyose*	Exploded, Xi Scorpio War
DCE 106	IJN *Hamura*	On Duty
DCE 107	IJN *Akiruno*	On Duty
DCE 108	IJN *Hashimoto*	On Duty
DCE 109	IJN *Sagae*	On Station, Carrier Squadron Kanoya
DCE 110	IJN *Shingu*	On Duty
DCE 111	IJN *Nagai*	On Duty
DCE 112	IJN *Tendo*	On Duty
DCE 113	IJN *Ryojo*	On Duty
DCE 114	IJN *Shoho*	Undergoing trials

Ship Name:		Ship Class:	*Shimada* Class	Status:		Thrust:	6
Captain		Ship Type:	Light Carrier	Points:		CIC (+/-)	+0

Mass:	43,621 tons	Cargo:	350 tons	Crew / Passengers:	448 officers and men, 12 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	Class V Torpedo	P Bow
2	Class V Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	30mm Mass Driver Array	Bow
4	30mm Mass Driver Array	P Bow
4	30mm Mass Driver Array	S Bow
4	30mm Mass Driver Array	P Quarter
4	30mm Mass Driver Array	S Quarter
5	30mm Mass Driver Array	Stern

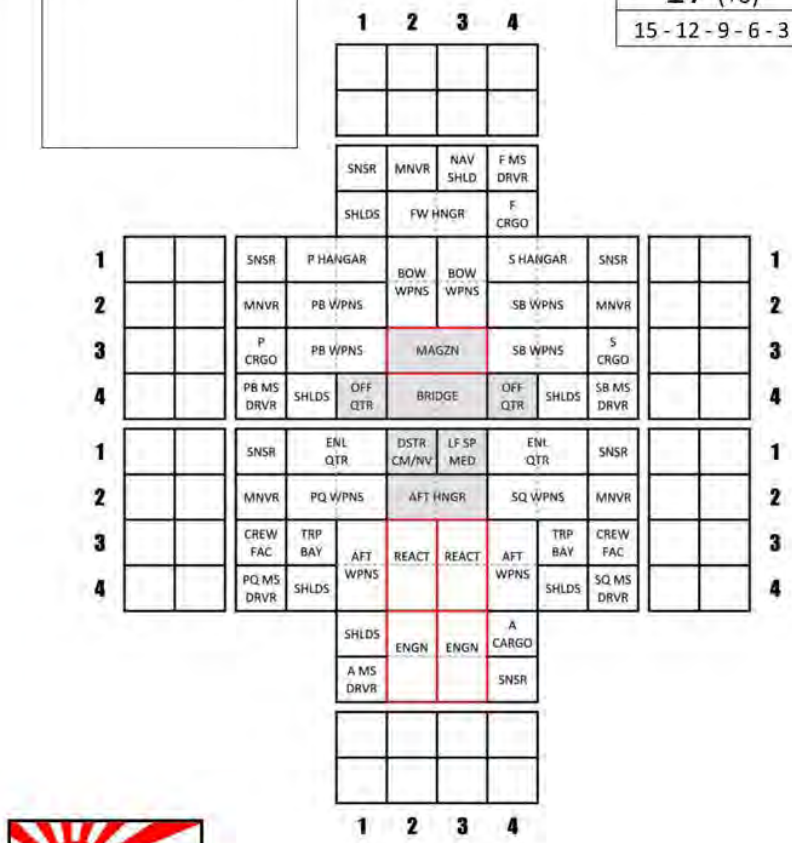
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
2	Fighters	Forward
4	Fighters	Port
2	Bombers	Port
4	Fighters	Starboard
2	Bombers	Starboard
1	Cutter	Aft
24	Marines	Troop Bay

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses

MASS DRIVERS
17 (+0)
15 - 12 - 9 - 6 - 3



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
4	5	4

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	30
Campaign Modifiers	
FINAL SCENARIO COST	**50**

TAIHO CLASS

Light Cruiser – Japan

SHIP TYPE:	Light Cruiser
MASS:	79,515 tons
POWERPLANT:	Advanced
COMPLEMENT:	441 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Taihō* ("Great Phoenix") class light cruiser is one of the most modern warships of its size presently being produced by any navy. The are sleek, fast for a cruiser, and beautiful. Furthermore, they bristle with state of the art ECM emitters, shielding, and some of the most advanced target acquisition sensors in Known Space. Simply put, for an iconic image of what a light cruiser will look like for the next 25 years, one needs look no further than a *Taihō*

Although originally fitted with rail guns, the *Taihō* has since dispensed with such tradition in favor of a lighter, longer-ranged array of 8 MgKv laser emitters, backed up by powerful 60 eHz syglex emitters for carving off a target's armor or damaging the larger components of bigger ships. Even a medium-ranged broadside from a *Taihō* can easily burn through the hide of a comparable-sized ship, shaving down protection with her x-ray guns before punching into reactors, engines, and magazines with heavy lasers and of course the dreaded Ki-45 "Toryu" (Dragon Slayer) torpedoes.

These updates to the *Taihō* also saw new thinking in regards to the shielding and mass driver defenses. Original ships of this class suffered heavily from Chinese, Prussian, and American torpedo strikes to their engines and gravity rudders, and so defenses in the aft quarters has been greatly increased. However, a ship naturally can't be invulnerable everywhere, so forward protection is actually somewhat weak.

Lastly, the *Taihō* cruisers were upgraded to the newest "Seiku" (Clear Sky) targeting and fire control system, enough to partially suppress the ECM of even the most heavily-shielded of targets. Yet for all this technology, the *Taihō* remains a relative lightweight in sheer hitting power and resilience when stacked up against the cruisers of other navies. Such advanced equipment also raises questions of supply and maintenance, especially given the rather cramped cargo capacity.

Only time will tell if the new tech crammed into the sleek hulls of the *Taihō* class will stand the rigors of colonial naval combat. Two ship in the class have already been destroyed with heavy loss of life, although the IJN *Sendai* only went down after keeping the Xi Scorpio War alive practically on her own. As the flagship of her task force, IJN *Sendai* fought through a string of titanic battles with superhuman resilience under the command of her skipper, Hiromi Ozawa. At Katami Shima she daved the Xi Scorpio War from disaster on its very first day. At Shiomiyama she was instrumental in exploding *two* Black Dragon heavy cruisers. She played a leading role at the Battle of Tamakura (largest battle ever fought beyond the Second Band of Known Space) and again at the Battle on Mingyun Xing, the gigantic battle that finally broke the back of the Black Dragons in the Xi Scorpio stellar group. That was also the *Sendai's* last battle, but she'd garnered such a degree of prestige and fame that another ship bearing her name is already under construction.

SHIPS IN CLASS:

Commissioned 2505-2519

- New Kyoto Shipyards, Earth
- Shogun Station, Callisto
- Akagi Prime, Gamma Leporis

CE 37	IJN *Taiho*	On Duty
CE 38	IJN *Nagara*	On Duty
CE 39	IJN *Chitose*	Destroyed, Hiryu Six
CE 40	IJN *Oyodo*	On Duty
CE 41	IJN *Sendai*	Destroyed, Xi Scorpio War
CE 42	IJN *Tone*	On Duty
CE 43	IJN *Kitakami*	On Duty
CE 44	IJN *Takase*	On Duty
CE 45	IJN *Shogawa*	On Duty
CE 46	IJN *Kozuryu*	On Duty

Ship Name:		Ship Class:	*Taihō* Class	Status:		Thrust:	6
Captain		Ship Type:	Light Cruiser	Points:		CIC (+/-)	+2

Mass:	80,493 tons	Cargo:	300 tons	Crew / Passengers:	422 officers and men, 15 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2 (+2)	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
2 (+2)	8 MgKv Laser (3,3,2,2,1,1,1)	Stern
1 (+2)	75 eHtz Syglex (6,6,5,4,3,2,1)	Bow
1 (+2)	75 eHtz Syglex (6,6,5,4,3,2,1)	Stern
3 (+2)	Class V Torpedo	P Bow
3 (+2)	Class V Torpedo	S Bow

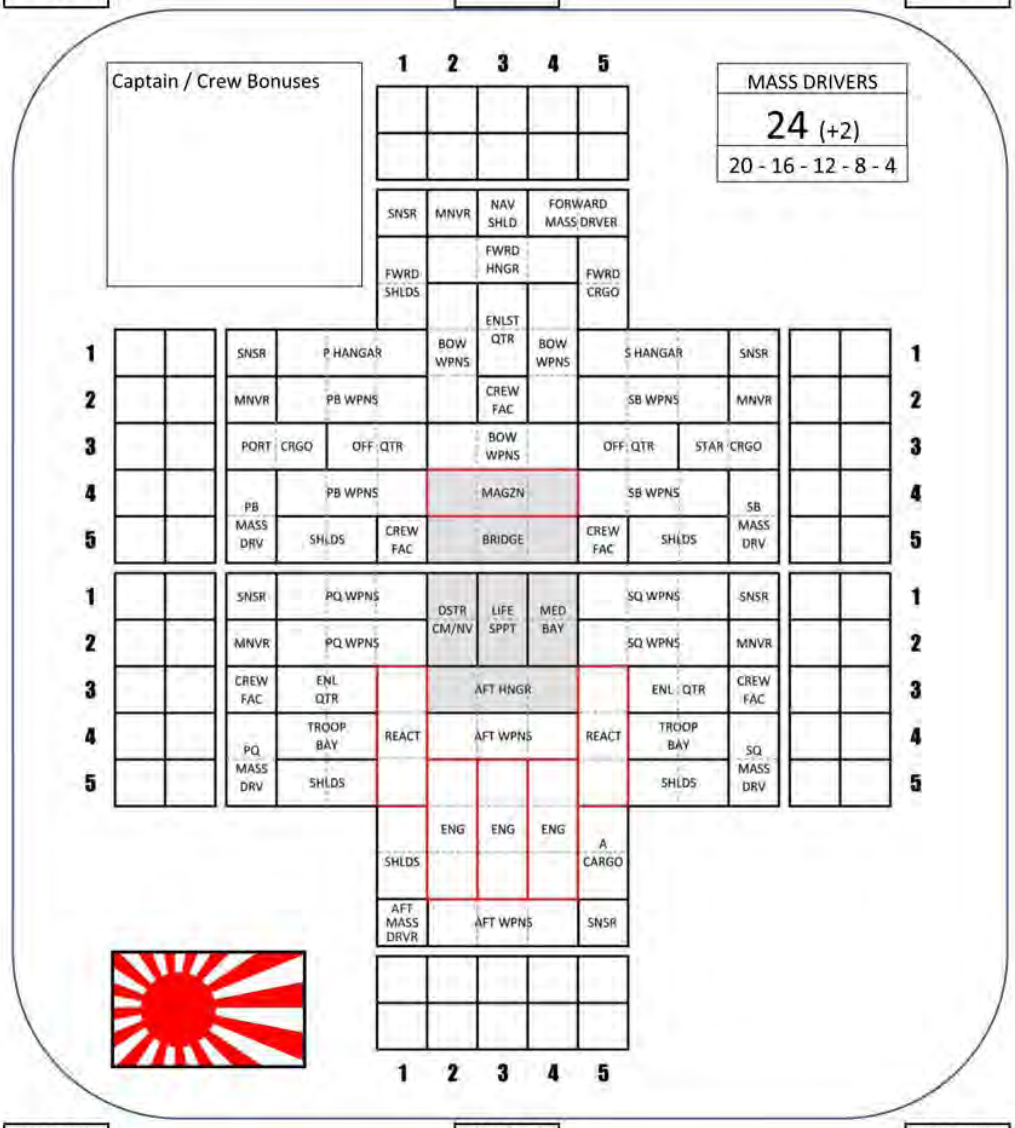
SECONDARY ARMAMENT

NO.	TYPE	MOUNT
5	35mm Mass Driver Array	Bow
6	30mm Mass Driver Array	P Bow
6	30mm Mass Driver Array	S Bow
6	30mm Mass Driver Array	P Quarter
6	30mm Mass Driver Array	S Quarter
6	30mm Mass Driver Array	Stern
0		
0		

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Scout	Port
1	Scout	Starboard
1	Launch	Forward
32	Marines	Troop Bay
1	Yacht	Aft

PB SHD	BOW SHD	SB SHD
4	4	4



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
5	5	5

Power Plant Type	Adv +2
Base Scenario Cost	91
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**93**

YAMATO CLASS

Superbattleship – Japan

SHIP TYPE:	Battleship
MASS:	447,446 tons
POWERPLANT:	Advanced
COMPLEMENT:	1,664 officers and men
SLD THRUST:	2
DARKSTAR WAVE:	9th

The *Yamato* class battleships were conceived by the Japanese Navy to be the end-all solution in any star system considered to be a priority by the Imperial High Command. In the design, construction, and even naming of these immense warships, the naval design board harkened back to the Japanese Navy of the early 20th Century, when they built and deployed the largest sea-going battleships ever constructed. Although these historical *Yamato* class never had a chance to live up to their expectations, in this Second Colonial Age the story is expected to be very different.

The *Yamato* carries nine 18 GW rail guns in three huge triple turrets, each of them weighing as much as a small destroyer. A single bolt from one of these guns can punch a hole clean through that same destroyer at up to 3600 kilometers, while at closer ranges a single bolt can easily penetrate the armor of any known battleship. Secondary armament comes in the form of eighteen 6 GW and 5 GW rail guns, giving the *Yamato* one of the most terrifying rail gun batteries every mounted on a moving object.

At over 440,000 tons, they are some of the largest warships ever built, yet can still manage respectable speed for a ship of this class. This is no small feat when one considers the armor and shielding, especially along the broadsides. Finding a weakness on this ship is not easy, while the *Yamato's* mass driver defenses are designed to ensure that these ships do not suffer the fate of their historical namesakes. One noticeable omission, however, is a complete lack of torpedoes, something of a break from modern Japanese naval design. Of course, it is assumed that a *Yamato* class battleship will be accompanied by numerous escort vessels wherever she goes, *Akashi* class strike frigates, *Takashiro* class destroyers, and *Taiho* class light cruisers can provide plenty of torpedo support where needed, along with an attached aerospace carrier.

Like many battleships, *Yamatos* actually have a tough time getting into combat, they tend to scare away foes before they can bring guns to bear. Two exceptions took place in the recent Psi Serpentis War, where IJN *Tsushima* twice engaged the Panasian *Qin Shuangdi* class battleship PLN *Han*, and both times left her a blazing wreck.

SHIPS IN CLASS:

Commissioned 2508-2519

- New Kyoto Shipyards, Earth
- Shogun Station, Callisto
- Akagi Prime, Gamma Leporis

BH-12	IJN *Yamato*	On Duty
BH-13	IJN *Musashi*	On Duty
BH-14	IJN *Shinano*	On Duty
BH-15	IJN *Tsushima*	On Duty
BH-16	IJN *Bushido*	Under Construction

Captain / Crew Bonuses

PB SHD 5

MASS DRIVERS
60
50 - 40 - 30 - 20 - 10

PB SHD 5

PB SHD 5

PB SHD 5

PB SHD 5

PB SHD 6

	1	2	3	4	5	6	7	8	9	10
1			FORWARD SHLD		NAVIGATION SHIELD	BOW WEAPONS	FORWARD MASS DRIVERS		SENSORS	
2										
3										
4										
5										
6										
7										
8										
9										
10										

	1	2	3	4	5	6	7	8	9	10
1			SENSORS	FWD CARGO					FWD CARGO	SENSORS
2			PORT CRGO	PORT HANGAR	BOW WEAPONS		BOW WEAPONS		STARBOARD HANGAR	STAR CRGO
3						BOW WEAPONS				
4			PORT BOW MASS DRIVERS	PORT BOW WEAPONS	OFF QTR		OFF QTR	STARBOARD BOW WEAPONS		STAR BOW MASS DRIVERS
5										
6			PORT BOW WEAPONS	OFF QTR	MAGAZINE	FORWARD HANGAR	MAGAZINE	OFF QTR	STARBOARD BOW WEAPONS	
7										
8			MANEUVER THRUSTERS	PORT SHIELDS	ENLISTED QUARTERS	COMM NAV	ENLISTED QUARTERS	STARBOARD SHIELDS	MANEUVER THRUSTERS	
9					FLAG BRG		FLAG QTRS			
10			PORT CARGO		BRIDGE				STAR CARGO	

	1	2	3	4	5	6	7	8	9	10
1			TROOP BAY	PORT QUARTER WEAPONS		DARK STAR	LIFE SUPPORT	STARBOARD QUARTER WEAPONS		TROOP BAY
2			PORT QTR MASS DRIVERS							STAR QTR MASS DRIVERS
3				CREW FACILITIES		MEDICAL		CREW FACILITIES		
4			TROOP BAY	PORT QUARTER WEAPONS	AFT WEAPONS		AFT WEAPONS		STARBOARD QUARTER WEAPONS	TROOP BAY
5						AFT WEAPONS				
6			MANEUVER THRUSTERS	PORT QTR SHIELDS	REACTORS		REACTORS	STAR QTR SHIELDS	MANEUVER THRUSTERS	
7										
8			SENSORS	TROOP BAY				TROOP BAY		SENSORS
9				CREW FACILITIES	ENGINES		ENGINES	CREW FACILITIES		
10				AFT CARGO					AFT CARGO	

	1	2	3	4	5	6	7	8	9	10
			SENSORS		AFT SHIELDS				AFT MASS DRIVERS	
				AFT HANGAR			AFT HANGAR			

Ship Name:		Ship Class:	*Yamato* Class	Status:	Thrust:	2
Captain		Ship Type:	Battleship	Points:	CIC (+/-)	+0

Mass:	447,446 tons	Cargo:	1,000 tons	Crew / Passengers:	1,664 officers and men, 24 passengers	Darkstar Wave:	9th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3	18 GW Rail Gun (10,10,9,9,8,7,6)	Bow
3	18 GW Rail Gun (10,10,9,9,8,7,6)	Bow
3	18 GW Rail Gun (10,10,9,9,8,7,6)	Stern
3	6 GW Rail Gun (3,3,2,1,1,0,0)	Bow
3	6 GW Rail Gun (3,3,2,1,1,0,0)	Stern
3	5 GW Rail Gun (2,2,1,1,0,0,0)	P Bow
3	5 GW Rail Gun (2,2,1,1,0,0,0)	S Bow
3	5 GW Rail Gun (2,2,1,1,0,0,0)	P Qtr
3	5 GW Rail Gun (2,2,1,1,0,0,0)	S Qtr

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	45mm Mass Driver Array	Bow
6	45mm Mass Driver Array	P Bow
6	45mm Mass Driver Array	S Bow
6	45mm Mass Driver Array	P Quarter
6	45mm Mass Driver Array	S Quarter
9	45mm Mass Driver Array	Stern
6	25mm Mass Driver Array	Bow
6	25mm Mass Driver Array	P Bow
6	25mm Mass Driver Array	S Bow
6	25mm Mass Driver Array	P Quarter
6	25mm Mass Driver Array	S Quarter
12	25mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
4	Scouts	Forward
1	Cutter	Port
1	Cutter	Starboard
2	Yacht	Aft
84	Marines	Troop Bay

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Power Plant Type	Advanced
Base Scenario Cost	280
Aerospace Group Cost	4
Campaign Modifiers	0
FINAL SCENARIO COST	**284**

K-56 CLASS

Torpedo Corvette – Holy Russian Empire

SHIP TYPE:	Corvette
MASS:	13,554 tons
POWERPLANT:	Advanced
COMPLEMENT:	49 officers and men
SLD THRUST:	8
DARKSTAR WAVE:	11th

The *K-56* class attack corvette is a fairly advanced design for the Holy Russian Empire. It has also been fairly secretive, despite their length of service life and the number of units produced in the class. They were the first design to use the next generation of "Salavnya" class DT-reactors, thus giving the engineers more power output to work with. The class was envisioned as an "attack corvette," basically deployed as a torpedo platform that attacks via surprise and stealth.

Many of the materials used in the *K-56's* construction have been developed to reduce the ship's electromagnetic signature and returns on enemy sensors. It is fast, both in sublight and transrelativistic terms, allowing it to strike fast and escape before sizable countermeasures can be deployed against it. One glaring weakness in the design seems to come from the safety of the reactors. Reactor accidents seem to happen quite frequently abaord *K-56* class attack boats, resulting in radiation sickness and injuries among the crew.

Most of what other navies know about the K-56 comes from the capture of K-79, picked up by he New Roman Alliance after the Battle of Thessalonica during the Olympian War of 2515-17. From this hulk, analysts have learned that the *K-56's* targeting and CIC suite is one of the most advanced in the Russian Navy, able to guide the ship's payloads onto their targets with an average of 25% additional accuracy over previous generations. Interestingly, however, the *K-56* is still equipped with the old P500 "Plamya" (Flame) class torpedo. Some analysts think this maybe the result of entrenched politics or bureaucracy within the naval review boards, others think this is simply the Russian navy trying to use up immense stockpiles of the old weapons left over from the "Dragon's War" with China. Supporters of this theory point ot the fact that the K-56's torpedo mounting brackets are oversized, clearly looking forward to when the old P-500s can be quickly and easily replaced by larger, more advanced torpedoes of the future.

Note the "deck gun," the Russian staple plasma projector. Although immensely heavy for a ship this size, it works well to finish off damaged merchantmen, crippled enemy ships, and installations.

In all, the *K-56* is a solid class, carrying on the old "submariner" tradition of the blue-water Russian navies of previous centuries. They approach in groups, using stealth and speed for additional protection, and then striking fast before vanishing again into the abyss of space.

SHIPS IN CLASS:

Commissioned 2510-25??

- Nova Samalyansk, Earth
- Kuznetsov Orbital Docks, Mars
- Cherenkov Shipyards, Gliese 725B

K-56	On Duty
K-57	On Duty
K-58	On Duty
K-59	Lost in Accident
K-60	On Duty
K-61	Lost in Combat
K-62	On Duty
K-63	On Duty
K-64	On Duty
K-65	On Duty
K-66	On Duty
K-67	On Duty
K-68	On Duty
K-69	On Duty
K-70	Vanished with all hands
K-71	On Duty
K-72	On Duty
K-73	On Duty
K-74	On Duty
K-75	On Duty
K-76	On Duty
K-77	On Duty
K-78	On Duty
K-79	Captured, Olympian Path
K-80	On Duty
K-81	On Duty
K-82	On Duty
K-83	On Duty
K-84	On Duty
K-85	On Duty
K-86	On Duty
K-87	On Duty
K-88	On Duty
K-89	On Duty
K-90	On Duty
K-91	On Duty
K-92	On Duty
K-93	On Duty
K-94	On Duty

Ship Name:		Ship Class:	*K-56* Class	Status:	Thrust:	8
Captain		Ship Type:	Torpedo Corvette	Points:	CIC (+/-)	+1

Mass:	13,554 tons	Cargo:	150 tons	Crew / Passengers:	49 officers and men, 4 passengers	Darkstar Wave:	11th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
6	Class III Torpedo	P Bow
6	Class III Torpedo	S Bow
1	10 KG Plasma (3,3,1,1,0,0,0)	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
4	35mm Mass Driver Array	Bow
4	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
6	Marines	Troop Bay
1	Launch	Forward

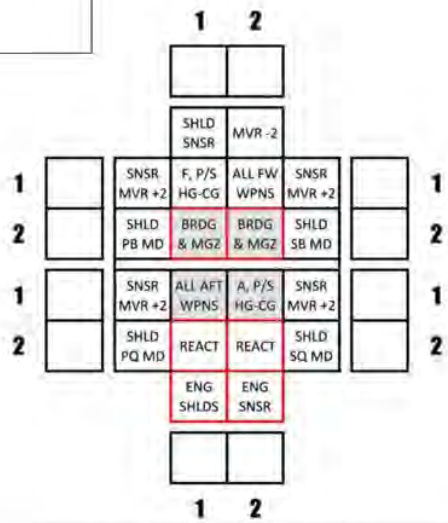
PB SHD	BOW SHD	SB SHD
6	6	6

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Reduction:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
6
3



** Each ENG / REACT hit applies -2 Thrust.
** Each MVR hit applies +2 cost per turn.

ENGINEERING		
TURN	VEL	INIT
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9		
10		

PQ SHD	AFT SHD	SQ SHD
6	6	6

Power Plant Type	Advanced
Base Scenario Cost	12
Aerospace Group Cost	0
Campaign Modifiers	
FINAL SCENARIO COST	12

NOVGOROD CLASS

Torpedo Corvette – Holy Russian Empire

SHIP TYPE:	Frigate
MASS:	30,407 tons
POWERPLANT:	Standard
COMPLEMENT:	120 officers and men
SLD THRUST:	7
DARKSTAR WAVE:	10th

The 2460s and 2470s saw what has probably been the largest interstellar war to date, the apocalyptic "Dragon's War" between the Holy Russian Empire and the Panasian Union. For over twelve years these two waged what was nearly a "total war" across no less than five strategic Command Sectors, destroying hundreds of starships and colonies and nearly bringing down both governments on Earth. Although this apocalyptic war ended almost 50 years ago, the echoes remain with us to this day. One such "echo" is the *Novgorod* class frigate.

Although the results were hardly clean-cut, the Holy Russian Empire more or less "won" the Dragon's War, leaving their navy with two basic problems. They had far too few serviceable warships left, and far too many newly-won star systems to administer, patrol, and defend. A crash program was thus kicked off from 2481, to build as many frigates as cheaply and as quickly as they could.

Almost by accident, the St. Petersburg Naval Review Board actually wound up with a superlative little frigate in the *Novgorod* class. One theory among naval analysts holds that the Russians more or less copied what they found worked so well in the hordes or smaller Chinese warships they'd just fought in the Dragon's War, forgoing light rail guns in favor of large plasma projectors. While drawing more power, these weapons are much lighter than rail guns, allowing for an easier fit in a frigate's small hull. The idea seems to have stuck, naval analysts of other nations can't help but notice the stark similarities between the *Novgorod* and the Panasian *Zhao Ha* class missile frigate.

Originally dubbed the FK-101 Class (the Russians didn't even believe these frigates would rate full names), the *Novgorods* quickly proved that they were tough, scrappy little ships, especially at close range where those plasma projectors really pack a burn. Of course, having guns this size in a frigate means the *Novgorod* can only carry so many of them, but the 30-kg phased relay pump jet puts more than enough ionization into an enemy hull for the 6 MgKv lasers to slice through afterwards and hopefully burn into vital components. Of course the *Novgorod* also carries a full spread of the P-500 "Plamya" (Flame) gravitic torpedo (probably the biggest advantage the *Novgorod* has over the *Zhao Ha*), standard armament for almost all Russian warships.

Although they're now beginning to show their age, surviving units of the *Novgorod* class look as if they'll remain in service for some time.

SHIPS IN CLASS:

Commissioned 2481-2492

- Nova Samalyansk, Earth
- Kuznetsov Orbital Docks, Mars
- Cherenkov Shipyards, Gliese 725B

551	CPK *Novgorod*	On Duty
552	CPK *Murmansk*	On Duty
553	CPK *Arkhangelsk*	On Duty
554	CPK *Saratov*	On Duty
555	CPK *Vyazma*	Exploded, Psi Serpentis
556	CPK *Smolensk*	On Duty
557	CPK *Kaluga*	On Duty
558	CPK *Voronezh*	On Duty
559	CPK *Bryansk*	On Duty
560	CPK *Rostov*	On Duty
561	CPK *Vladivastok*	On Duty
562	CPK *Orel*	On Duty
563	CPK *Ryazansk*	Destroyed, Psi Serpentis
564	CPK *Samaraskaya*	On Dutys
565	CPK *Astrakan*	On Duty
566	CPK *Kamyshin*	Retired at Earth, 2513
567	CPK *Rzhev*	On Duty
568	CPK *Novorrosysk*	Destroyed, Psi Serpentis
569	CPK *Krasnoyarsk*	On Duty
570	CPK *Yaroslavl*	On Duty
571	CPK *Pskov*	On Duty
572	CPK *Rybinsk*	On Duty
573	CPK *Balashov*	On Duty
574	CPK *Mikhailyovka*	On Duty
575	CPK *Chelyabinsk*	On Duty
576	CPK *Mozhaisk*	On Duty
577	CPK *Volkhov*	On Duty
578	CPK *Balashyka*	On Duty
579	CPK *Demyansk*	On Duty

Ship Name:		Ship Class:	*Novgorod* Class	Status:		Thrust:	7
Captain		Ship Type:	Frigate	Points:		CIC (+/-)	+0

Mass:	30,649 tons	Cargo:	100 tons	Crew / Passengers:	131 officers and men, 8 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	30 KG Plasma (5,5,3,2,1,0,0)	Bow
2	30 KG Plasma (5,5,3,2,1,0,0)	Stern
1	6 MgKv Laser (2,2,2,1,1,1,0)	Bow
1	6 MgKv Laser (2,2,2,1,1,1,0)	Stern
2	Class III Torpedo	P Bow
2	Class III Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	25mm Mass Driver Array	Bow
2	25mm Mass Driver Array	P Bow
2	25mm Mass Driver Array	S Bow
2	25mm Mass Driver Array	P Quarter
2	25mm Mass Driver Array	S Quarter
2	25mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Scout	Forward
16	Marines	Troop Bay
1	Cutter	Aft

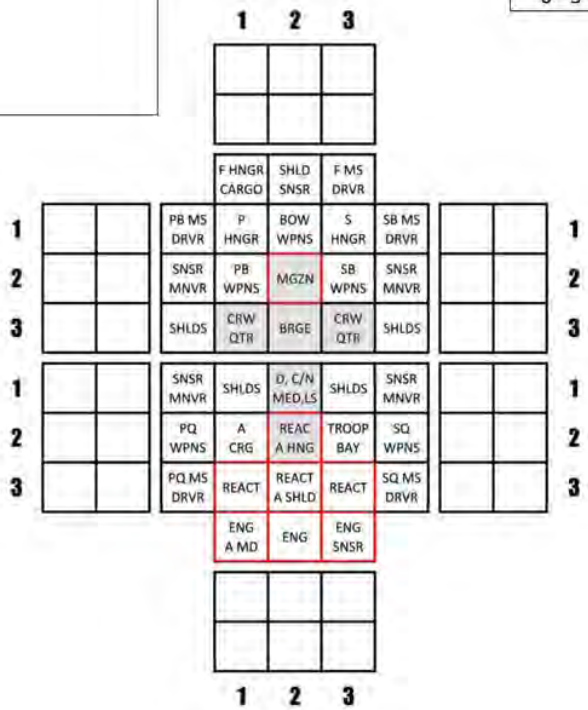
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
7
6 - 5 - 4 - 3 - 2



ENGINEERING		
TURN	VEL	INIT
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9		
10		

PQ SHD	AFT SHD	SQ SHD
4	4	4

Power Plant Type	Standard
Base Scenario Cost	20
Aerospace Group Cost	1
Campaign Modifiers	
FINAL SCENARIO COST	

SOVNYA CLASS

Destroyer – Holy Russian Empire

SHIP TYPE:	Destroyer
MASS:	54,129 tons
POWERPLANT:	Standard
COMPLEMENT:	256 officers and men
SLD THRUST:	6
DARKSTAR WAVE:	10th

The *Sovnya* class fleet destroyer is a solid all-around design for the Holy Russian Empire, in widespread use throughout the Core, Second Band, and even the Third Band outreaches of Known Space. Named for medieval and ceremonial weapons of Russian history, they are well-balanced designs, remarkable nowhere, but sturdy and capable everywhere. As such, they are being produced in great numbers at Russian shipyards with no end to the production run in sight.

The one unusual feature of the *Sovnya* design, however, is the rather large caliber of the weapons carried in its batteries. The 7 GW "Tunguska 05" model rail guns and 40 kilogram "Molnyir" (Lightning) model plasma projectors resemble weapons found on light or even heavy cruisers. Of course this means that the *Sovnya* can only carry a handful of such weapons, but the firepower and reach of these weapons tends to offset the disadvantage.

Note that the *Sovnya* also mounts no less than ten tubes for their P-500 “Plamya” (Flame) type gravitic torpedoes, certainly an older type but capable of posing a serious threat nonetheless. Such a feature shows that the Russians are not trying to “reinvent the wheel” when it comes to this destroyer design, the primary weapon for a classic destroyer has always been a torpedo, and the designers of *Sovnya* saw no need to tamper with a winning formula. Torpedoes like this only become more deadly when massed in large numbers against enemy mass driver defenses, and when two or three *Sovnyas* form up an attack wedge and start slinging out torpedo spreads ...

Standard tactics for *Sovnya* skippers is thus to engage enemies at a distance unusual for ships of their class, where other destroyers and frigates might not be able to reach them. This allows the *Sovnya* to genuinely escort and support larger warships in a given task force, staying out at the engagement ranges with which those larger ships are comfortable. Escort ships of other navies, meanwhile, have to either risk closing with the enemy and "abandoning" their flagships, or resign themselves to "pinging" enemy warships with undersize weapons beyond their effective range. Another standard practice is to "wolfpack" several *Sovnyas* together, using the number of ships (and torpedoes) to offset the small number of weapons each ship mounts. Given the number of *Sovnyas* built so far, this tactic is becoming ever-more easy to implement.

SHIPS IN CLASS:

Commissioned 2502-2520

- Nova Samalyansk, Earth
- Kuznetsov Orbital Docks, Mars
- Cherenkov Shipyards, Gliese 725B

313	*Sovnya* (a curved, bladed polearm)	On Duty
314	*Syekyra* ("Poleaxe")	On Station, B’group Lazarev
315	*Shashka* (Cossack saber)	Destroyed, Psi Serpentis
316	*Krasni Myetch* ("Red Sword")	On Duty
317	*Svetoy Lyezvy* ("Holy Blade")	On Duty
318	*Stryela* ("Arrow")	On Duty
319	*Topor* ("Axe")	On Duty
320	*Pyeka* ("Lance")	On Duty
321	*Loshadzlyuk* ("Horse Bow")	On Duty
322	*Chorny Molot* ("Black Hammer")	On Duty
323	*Pernach* ("Mace")	On Duty
324	*Ugroza* ("Menace")	Scuttled, Psi Serpentis
325	*Kortik* (A Russian naval dagger)	On Duty
326	*Klandenyets* (mythic Russian sword)	On Duty
327	*Kopya* ("Javelin")	On Duty
328	*Kyunzhal* ("Dagger")	On Duty
329	*Pushka* ("Cannon")	On Duty
330	*Rusalka* (Mythical Creature)	On Station, B’group Lazarev
331	*Kravavtopor* ("Bloody Axe")	On Duty
332	*Motygu* ("Cutlass")	On Duty
333	*Kolisnytsa* ("Chariot")	On Duty
334	*Byelokogotz* ("White Claw")	On Duty
335	*Shelezhny* Kulak ("Iron Fist")	On Duty
336	*Vonyamolot* ("Warhammer")	On Duty
337	*Hyshnyk* ("Predator")	On Duty
338	???	Fitting Out
339	???	Under Construction
340	???	Planned

Ship Name:		Ship Class:	*Sovnya* Class	Status:		Thrust:	6
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	+0

Mass:	54,129 tons	Cargo:	150 tons	Crew / Passengers:	256 officers and men, 10 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	7 GW Rail Gun (4,4,3,2,1,1,0)	Bow
2	7 GW Rail Gun (4,4,3,2,1,1,0)	Stern
1	40 KG Plasma (6,6,4,3,2,1,0)	Bow
1	40 KG Plasma (6,6,4,3,2,1,0)	Stern
5	Class III Torpedo	P Bow
5	Class III Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	35mm Mass Driver Array	Bow
3	35mm Mass Driver Array	P Bow
3	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Quarter
4	35mm Mass Driver Array	S Quarter
3	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
12	Marines	Troop Bay
12	Marines	Troop Bay
1	Cutter	Aft

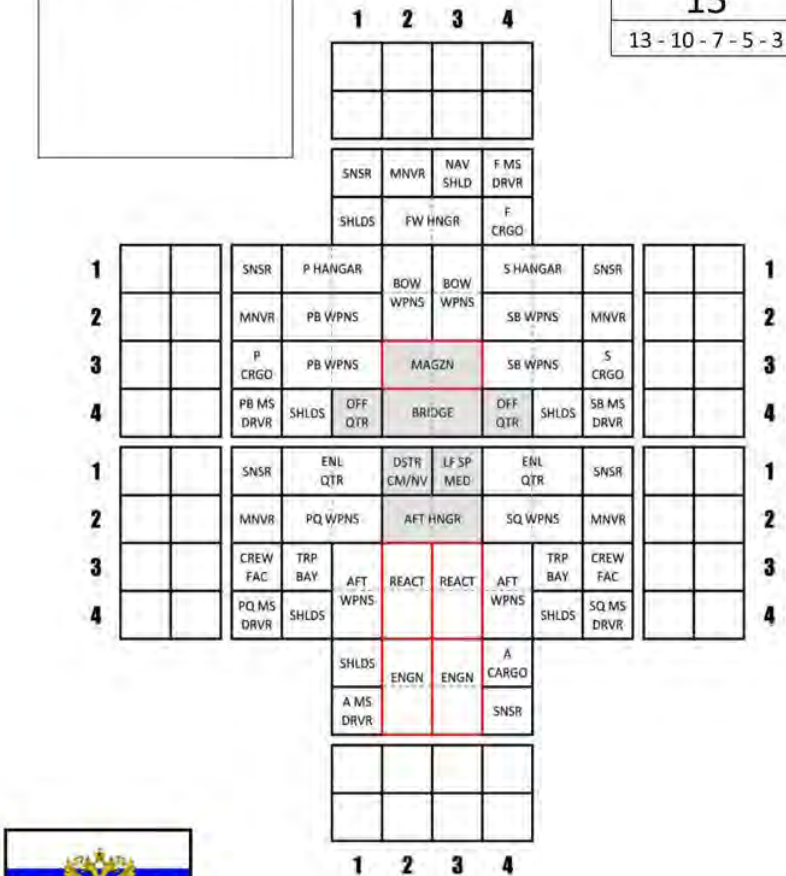
PB SHD	BOW SHD	SB SHD
4	4	4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
15
13 - 10 - 7 - 5 - 3



ENGINEERING		
TURN	VEL	INIT
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Power Plant Type	Standard
Base Scenario Cost	40
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	42

PQ SHD	AFT SHD	SQ SHD
4	4	4

KUTUSOV CLASS

Light Cruiser – Holy Russian Empire

SHIP TYPE:	Light Cruiser
MASS:	109,220 tons
POWERPLANT:	Standard
COMPLEMENT:	458 officers and men
SLD THRUST:	5
DARKSTAR WAVE:	10th

Named for famous field marshals and admirals of Russian and Soviet history, the *Kutusov* class light cruiser represents a new step forward in the Holy Russian Navy - an attempt to break with old gun-heavy designs like the *Slava*, *Sovnya*, and *Peter the Great*.

Instead the *Kutusov* mounts entirely particle-based weaponry. Among these armaments is a formidable array of new RSA "Molniya" 550 (Lightning) model electron particle cannons, easily capable of stripping a destroyer bare of armor with a single volley at up to a thousand kilometers if fired from a full broadside. But even these mounts are only meant to support the Kutuzov's true weaponry, four immense Tunguska Arms 790A 40-kilogram thorium plasma projectors, mounted in two double turrets.

Combined with the EPCs, these plasma projectors give the *Kutuzov* a truly hellish punch, especially at close range. Any captains who come up against one of these warships is advised to try and keep the engagement ranges as long as possible. Once the range closes to within 500 kilometers, a *Kutusov* is capable of burning away sheets of armor with terrifying speed, as Prussian and Japanese ships found to their cost in the Psi Serpentis War, British in the Olympian Path War, and Americans during the Xi Scoprio War (fighting *Kutusov* class light cruisers in service of the Khitan-Tunguska Free State).

For all its strength, however, the *Kutuzov* of course has weaknesses as well. Shielding and speed are only adequate, and the Bozhorshkin Electronics sensor and targeting suite is hardly top of the line. The torpedo array is also a little dated, although with eight tubes in a forward spread, the *Kutuzov* is almost guaranteed to hit with at least one of them.

In all, the *Kutuzov* is a robust, pragmatic, and well-balanced design. In its weaker aspects it is unspectacular without being poor, but its firepower makes it a frightening contender for its class, particularly at close range. Eighteen units of the class have been built so far, with a slightly modernized variant reportedly on the drawing boards. They have seen combat in at least three Strategic Command Sectors, where they have earned the respect of friend and foe alike.

The most famous ship of this class so far is probably CPK (Holy Russian Ship) *Lazarev*, flagship of the Lazarev Battlegroup under command of Captain Pyotr Feydorovich Myshaga. Earning something of a brutal reputation in the Psi Serpentis War, Myshaga made few friends on both sides of the conflict as the Russian actually changed sides. Having turned in a stellar combat record in the Olympian Path War and especially the Black Dragon War (where the a degree of brutality was actually as asset against Khitan-Tunguska rebels), things have taken a turn for the worse in the Duchess Annabel's War, where Myshaga and the *Lazarev* battlegroup just can't find their balance against Japanese carrier strike groups prowling in the region.

SHIPS IN CLASS:

Commissioned 2501-2520

- Nova Samalyansk, Earth
- Kuznetsov Orbital Docks, Mars
- Cherenkov Shipyards, Gliese 725B

261	CRK *Kutuzov*	On Duty
262	CRK *Suvorov*	Lost, Duchess Annabel's War
263	CRK *Golovin*	On Duty
264	CRK *Sheremetev*	On Duty
265	CRK *Menshikov*	On Duty
266	CRK *Potempkin*	On Duty
267	CRK *Chernyshyov*	On Duty
268	CRK *Chichagov*	Lost, Black Dragon War
269	CRK *Istomin*	On Duty
270	CRK *Lazarev*	Flagship, Battlegroup Lazarev
271	CRK *Makharov*	On Duty
272	CRK *Nakhimov*	On Duty
273	CRK *Ushakov*	On Duty
274	CRK *Senyavin*	On Duty
275	CRK *Zmajevic*	On Duty
276	CRK *Spiridov*	On Duty
277	CRK *Chernavin*	On Duty
278	CRK *Gorshkov*	Under Construction

Ship Name:		Ship Class:	*Kutuzov* Class	Status:		Thrust:	5
Captain		Ship Type:	Light Cruiser	Points:		CIC (+/-)	+0

Mass:	109,896 tons	Cargo:	300 tons	Crew / Passengers:	455 officers and men, 12 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
2	40 KG Plasma (6,6,4,3,2,1,0)	Bow
2	40 KG Plasma (6,6,4,3,2,1,0)	Stern
2	12 Teravolt EPC (4,4,3,2,2,1,0)	Bow
2	12 Teravolt EPC (4,4,3,2,2,1,0)	Bow
2	12 Teravolt EPC (4,4,3,2,2,1,0)	Stern
2	12 Teravolt EPC (4,4,3,2,2,1,0)	Stern
3	Class III Torpedo	P Bow
3	Class III Torpedo	S Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
6	20mm Mass Driver Array	Bow
6	20mm Mass Driver Array	P Bow
6	20mm Mass Driver Array	S Bow
6	20mm Mass Driver Array	P Quarter
6	20mm Mass Driver Array	S Quarter
8	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
2	Scouts	Forward
1	Yacht	Port
1	Launch	Starboard
32	Marines	Troop Bay

PB SHD	BOW SHD	SB SHD
4	4	4

Captain / Crew Bonuses:

MASS DRIVERS
19
16 - 13- 10 - 7 - 4

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
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PQ SHD	AFT SHD	SQ SHD
4	5	4

Power Plant Type	Standard
Base Scenario Cost	70
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	72

SLAVA CLASS

Heavy Cruiser – Holy Russian Empire

SHIP TYPE:	Heavy Cruiser
MASS:	168,072 tons
POWERPLANT:	Standard
COMPLEMENT:	749 officers and men
SLD THRUST:	4
DARKSTAR WAVE:	10th

The *Slava* ("Glory") class heavy cruiser sailing for the Holy Russian Empire is an older design, but one that has held up amazingly well over the decades. Like most Russian designs, it is inelegant, straightforward, and simple, yet remarkably pragmatic and durable. These are prized traits in a trade where a single crack in a pressure hull can cause explosive decompression.

The *Slava* class makes no pretense as to its purpose, victory through brute force, primarily with the nine 10 GW rail guns in three triple turrets. These are arranged in a "Pacific Configuration" - with two turrets forward, allowing the bulk of the ship's firepower to be applied forward even before she brings a broadside to bear. It's an aggressive design choice, and *Slava* captains tend to make the most of it by pummeling a smaller enemy ship to pieces in their initial approach in order to gain an advantage in the opening minutes of an engagement.

Once the range closes, however, it's the *Slava's* "secondary" armament of 30 kilogram plasma projectors that give this ship an additional deadly punch. As with the *Kutusov* class light cruiser, any captain who tries to engage a *Slava* class cruiser would do well to try to keep her at a distance. The older P-500 "Plamya" model torpedo tubes are, again, a sign of the *Slava's* age. But there a lot of them, and can hit hard against long-range targets if the enemy's electronics aren't too formidable because the *Slava's* CIC and sensor suites are also a little long in the tooth.

One of the design's best features, however, is its rubust "Sakharov-09" model dark energy drive, able to reach Tenth-Wave distortion. This was an amazing design when the ships were first being commissioned, and in the years since has maintained a proven track record of reliability. In most far-flung star systems of the Second Band, often too far for a *Catherine the Great* or *Peter the Great* class battleship to reach, a pair or trio of *Slava* heavy cruisers is usually the go-to solution for Russian admirals short on subtlety, or patience.

Another area in which *Slavas* have seen an unlikely amount of action is in the Black Dragon War and Xi Scorpio War, both of which involve the breakaway rebels of the Khitan-Tunguska Free State. A collection of former Russian and Panasian colonies, a major shipyard building the *Slava* class fell into rebel hands and intelligence reports agree at least six of them are now in rebel service. Two others were destroyed, one by the IJN *Sendai* at the Battle of Tamakura, and one by the USS *Oriskany* in the gas giant clouds of Nazarovo (Xi Scorpio A/B binary star system).

Those under the Russian flag, however, are named for Russian victories during the Great Northern War and Crimean War. The *Slava* class heavy cruiser, therefore, stands as a link to Russia's naval past, and an enduring promise for its future.

SHIPS IN CLASS:

Commissioned 2490-2502

- Nova Samalyansk, Earth
- Kuznetsov Orbital Docks, Mars
- Cherenkov Shipyards, Gliese 725B

212	*Slava* ("*Glory*")	On Duty
213	*Asov*	On Duty
214	*Volga*	On Duty
215	*Navarino*	On Duty
216	*Sevastopol*	On Duty
217	*Petropavlosk*	Missing in Taurus Sector?
218	*Chesma*	On Duty
219	*Kaliakra*	On Duty
220	*Narva*	Destroyed, Psi Serpentis
221	*Poltava*	Defected, recovered
222	*Probozhensky*	On Duty
223	*Semenovsky*	On Duty

Ship Name:		Ship Class:	*Slava* Class	Status:		Thrust:	4
Captain		Ship Type:	Heavy Cruiser	Points:		CIC (+/-)	+0

Mass:	168,072 tons	Cargo:	600 tons	Crew / Passengers:	749 officers and men, 26 passengers	Darkstar Wave:	10th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
3	10 GW Rail Guns (5,5,4,4,3,2,1)	Bow
3	10 GW Rail Guns (5,5,4,4,3,2,1)	Bow
3	10 GW Rail Guns (5,5,4,4,3,2,1)	Stern
2	30 KG Plasma (5,5,3,2,1,0,0)	Bow
2	30 KG Plasma (5,5,3,2,1,0,0)	Stern
6	Class III Torpedo	P Bow
6	Class III Torpedo	S Bow
2	Class III Torpedo	P Qtr

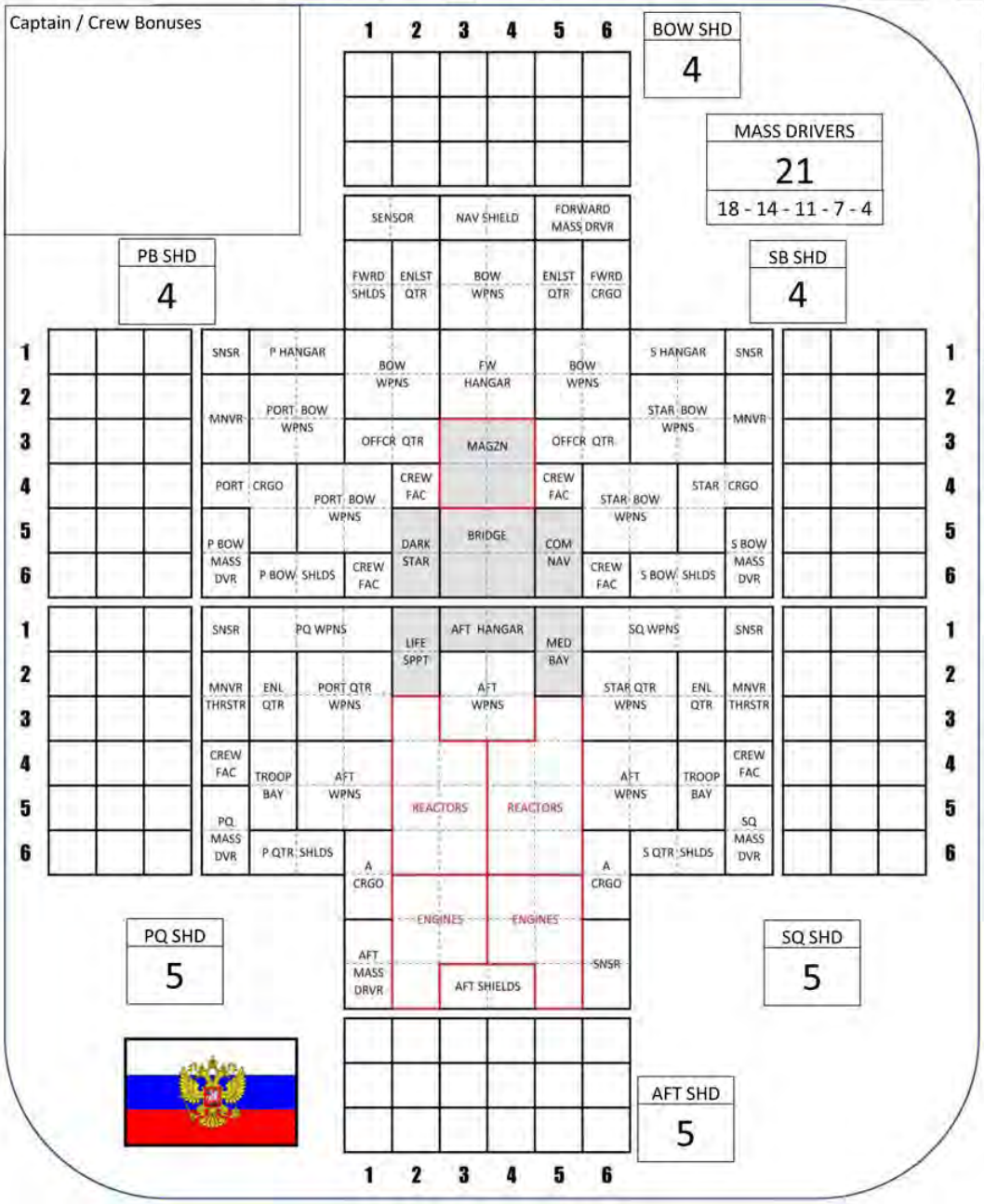
SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	Class III Torpedo	S Qtr
6	35mm Mass Driver Array	Bow
4	35mm Mass Driver Array	P Bpw
4	35mm Mass Driver Array	S Bow
4	35mm Mass Driver Array	P Qtr
4	35mm Mass Driver Array	S Qtr
6	35mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Forward
1	Scouts	Port
1	Scouts	Starboard
1	Yacht	Aft
72	Marines	Troop Bay

Captain / Crew Bonuses



STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers:	
Thrust Modifers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
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6		
7		
8		
9		
10		

Power Plant Type	Advanced
Base Scenario Cost	100
Aerospace Group Cost	2
Campaign Modifiers	
FINAL SCENARIO COST	**102**

ROGUE CLASS

Armed Sloop – Corporate Consortium

SHIP TYPE:	Gunboat
MASS:	5,565 tons
POWERPLANT:	Advanced
COMPLEMENT:	19 officers and men
SLD THRUST:	10
DARKSTAR WAVE:	12th

Technically part of no official navy, the *Rogue* class armed sloops are far and away some of the most technologically advanced warships ever built. Granted, they are very small, thin-skinned, and mounted with weapons to make the captains of destroyers, cruisers, and battleships snicker with contempt. But the electronics and engineering packed into their tiny frames can make this class a game changer nevertheless, especially in small, fast skirmish actions in more remote areas of a given star system.

Consider the sensors, command, and targeting suite, among the most advanced models in Known Space, at least fifteen years ahead those deployed by other more conventional navies. The *Rogue* class also has ECM and gravitic shielding to rival that most battleships, although the armor of course remains very weak. Another ominous feature is the "Sparta XII" torpedo array. Especially when slaved to the "ZenCloud" command and control system, these torpedoes become even more deadly than the "Toryu" (Dragon Slayers) of the Japanese Navy. Civilian or automated drone ships have no chance of evading or outrunning these torpedoes, and military vessels had better hope their mass drivers can defeat any warhead launched by these raiders.

Perhaps most impressive of all, of course, is the twelfth-wave Darkstar drive, able to push a *Rogue* class gunboat from Earth to the nearest star in just 37 hours. This is the absolute apex in current Darkstar capability, gravimetric shearing and exponential power requirements allow mankind to travel no faster. Clearly, the *Rogue* is built for espionage, recon, surveillance, and blockade running, but packs just enough firepower to shoot its way clear of trouble if the situation demands. This is particularly true when the *Rogue* is in private, unregistered (pirate) hands.

Note that despite its small size, the *Rogue* can still carry 50 tons of cargo and a pair of corporate executives in comparative comfort. In fact, when important trade shows, conventions, or mergers require travel to dangerous star systems, a *Rogue* class is often requested over *Twilight* class corvettes or *Baroness* class frigates, particularly if secrecy or especially speed is a factor. Time is money, and these people are trying to run a business, after all.

SHIPS IN CLASS (reported, many with private owners):

Commissioned 2511-25??

- Cignis Shipyards, Europa
- Spectrum Shipyards, Earth orbit
- Outer Sydney, 44 Böotis

PCX-711	CMS *Rogue*	On Duty
PCX-712	CMS *Star Runner*	On Duty
PCX-713	CMS *Vindicator*	On Duty
PCX-714	*Razor*	Sold, stolen, suspected pirate
PCX-715	*Blackjack*	Sold, "private owner"
PCX-716	CMS *Midnight*	On Duty
PCX-717	CMS *Star Cloud*	On Duty
PCX-718	CMS *Rogue II*	On Duty
PCX-719	*Ace of Spades*	Stolen, suspected pirate
PCX-720	CMS *Geneveve*	On Duty
PCX-721	CMS *Pompano*	On Duty
PCX-722	CMS *Tigershark*	On Duty
PCX-723	*Buccaneer*	Stolen, Impounded
PCX-724	CMS *Peregrine*	On Duty
PCX-725	CMS *Marlin*	On Duty
PCX-726	*Kayla's Hope*	Sold, "private owner"
PCX-727	CMS *Santa Clara*	On Duty
PCX-728	CMS *Panther*	On Duty
PCX-729	*Havana Cured*	Sold, "private owner"
PCX-730	*Razor II*	Sold, stolen, suspected pirate
PCX-731	CMS *Giant*	On Duty
PCX-732	CMS *Dolphin*	On Duty
PCX-733	CMS *Quasar*	On Duty
PCX-734	CMS *Dominica*	On Duty
PCX-735	*Vane*	Stolen, suspected pirate
PCX-736	CMS *Rebecca's Fortune*	On Duty
PCX-737	*Razor III*	Sold, "private owner"
PCX-738	CMS *Black Rose*	On Duty
PCX-739	*Stiletto*	Sold, "private owner"
PCX-740	CMS *Tarpon*	On Duty
PCX-741	CMS *Quarter Close*	On Duty
PCX-742	CMS *Sailfish*	On Duty
PCX-743	*Teach*	Sold, stolen, suspected pirate
PCX-744	*Star Blade*	Sold, "private owner"
PCX-745	*Golden Thighs*	Stolen, suspected pirate
PCX-746	CMS *Omnicron*	On Duty
PCX-747	*Southern Comfort*	Sold, suspected pirate
PCX-748	CMS *Blackstar*	On Duty

Ship Name:		Ship Class:	*Rogue* Class	Status:	Thrust:	10
Captain		Ship Type:	Gunboat	Points:	CIC (+/-)	+3

Mass:	5,049 tons	Cargo:	50 tons	Crew / Passengers:	22 officers and men, 4 passengers	Darkstar Wave:	12th

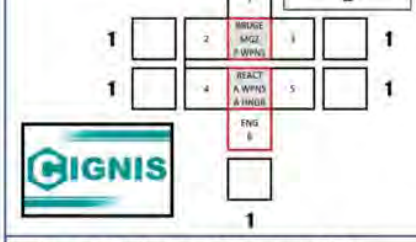
Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

PB SHD	BOW SHD	SB SHD
6	7	6

Captain / Crew Bonuses

MASS DR. 2 (+3) 1



1) BW Wpns, FW Sh, -1 Snsr, F Ms Drv, FW Hg & Crg
2) PB Wpns, PB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, P Hg & Cg
3) SB Wpns, SB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, S Hg & Cg
4) PQ Wpns, PQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
5) SQ Wpns, SQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
6) Thr -4, Aft Sh, -1 Snsr, Aft Crg, A Ms Drv, +2 Mnvr

PQ SHD	AFT SHD	SQ SHD
6	7	6

MAIN ARMAMENT

NO.	TYPE	MOUNT
1 (+3)	6 MgKv Laser (2, 2, 2, 1, 1, 1, 0)	Bow
1 (+3)	4 MgKv Laser (1, 1, 1, 1, 0, 0, 0)	Stern
1 (+3)	Class V Torpedo	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	20mm Mass Driver Array	Bow
3	20mm Mass Driver Array	Stern
4	Marines	Troop Bay

MARINES / SMALL CRAFT

NO.	TYPE	HANGAR
0		
0		
0		
0		

Power Plant Type	Adv
Base Scenario Cost	7
Aerospace Group Cost	0
Campaign Modifiers	
FINAL COST	**9**

ENGINEERING			ENGINEERING		
TURN	VEL	INIT	TURN	VEL	INIT
1			6		
2			7		
3			8		
4			9		
5			10		

DMG'D SYSTEMS

Extra Mnvr Cost:
Sensor Dmg:
Core Boxes: %
Init Penalties:
Thrust Reduction:
Crit Boxes: %

Ship Name:		Ship Class:	*Rogue* Class	Status:	Thrust:	10
Captain		Ship Type:	Gunboat	Points:	CIC (+/-)	+3

Mass:	5,049 tons	Cargo:	50 tons	Crew / Passengers:	22 officers and men, 4 passengers	Darkstar Wave:	12th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

PB SHD	BOW SHD	SB SHD
6	7	6

Captain / Crew Bonuses

MASS DR. 2 (+3) 1

1) BW Wpns, FW Sh, -1 Snsr, F Ms Drv, FW Hg & Crg
2) PB Wpns, PB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, P Hg & Cg
3) SB Wpns, SB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, S Hg & Cg
4) PQ Wpns, PQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
5) SQ Wpns, SQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
6) Thr -4, Aft Sh, -1 Snsr, Aft Crg, A Ms Drv, +2 Mnvr

PQ SHD	AFT SHD	SQ SHD
6	7	6

MAIN ARMAMENT

NO.	TYPE	MOUNT
1 (+3)	6 MgKv Laser (2, 2, 2, 1, 1, 1, 0)	Bow
1 (+3)	4 MgKv Laser (1, 1, 1, 1, 0, 0, 0)	Stern
1 (+3)	Class V Torpedo	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
2	20mm Mass Driver Array	Bow
3	20mm Mass Driver Array	Stern
4	Marines	Troop Bay

MARINES / SMALL CRAFT

NO.	TYPE	HANGAR
0		
0		
0		
0		

Power Plant Type	Adv
Base Scenario Cost	7
Aerospace Group Cost	0
Campaign Modifiers	
FINAL COST	**9**

ENGINEERING			ENGINEERING		
TURN	VEL	INIT	TURN	VEL	INIT
1			6		
2			7		
3			8		
4			9		
5			10		

DMG'D SYSTEMS

Extra Mnvr Cost:
Sensor Dmg:
Core Boxes: %
Init Penalties:
Thrust Reduction:
Crit Boxes: %

TWILIGHT CLASS

Venture Cutter - Corporate Consortium

SHIP TYPE:	Corvette
MASS:	12,666 tons
POWERPLANT:	Advanced
COMPLEMENT:	44 officers and men
SLD THRUST:	9
DARKSTAR WAVE:	11th

The *Twilight* class corvettes are officially classified by the as "venture cutters," meant to cruise Consortium trade empire and shipping lanes, keeping watch against threats to company property, employees, partners, and even customers. In reality, of course, these are attack corvettes, equipped not only to spot such threats but to move in as a rapid-reaction force. This question of classification remains a touchy subject, however, since the company takes great pains to project an image of non-belligerence.

Whatever the case, once on the scene, *Twilight* class corvettes are expected to counter the problem or at least contain it until heavier ships can be brought in - either from corporate headquarters or whatever "official" navy happens to be allied with the company at the moment. As such, they are equipped with superlative Darkstar drives capable of generating eleventh-magnitude waves, and have very high sublight speed as well. Shielding and ECM are also excellent, vital for such small ships that can carry so little armor. Although not quite as fast as the *Rogue* class (which are designated as "armed sloops"), a *Twilight* class cutter carries significantly more firepower in the form of a small battery of EPCs in addition for 4-megakelvin lasers.

This makes the *Twilight* class an excellent precision weapon for engaging small ships, as demonstrated by their first action in 2507. Here, the *Sanchez*, *Beauchamp*, and *Becker* were called in to save a Silox-35 convoy under attack by Russian K-56 class corvettes and a *Novgorod* class frigate in the Taurus constellation. The EPCs and small lasers were enough to damage, cripple, or drive off the Russian corvettes, while a combined barrage of Sparta XII class torpedoes (guided by the quantum-generation "ZenCloud" CIC and fire control suite) crippled the frigate at a range exceeding 3,000 kilometers.

Since then, *Twilight* class corvettes have also performed well against raiders like Prussian Type XII "U-boats" Arab League *Ashur* class corvettes, and even two Chinese *Zhao-Ha* class frigates who tried to capture a batch of delegates headed to a Cignis trade show. Against larger opponents, however, the *Twilight* corvettes suffer, as heavy losses during the IK Pegasi and the Olympian Path Wars show.

As is often the case with ship like this, it's only a matter of time before units are stolen, sold, or built "off the books" by third-party contractors ... and eventually wind up on the wrong side of the law. The Cignis Corporation keeps unassailable legal records of all ships they own, and earnestly deny involvement with any such ships put to more shady use. Ironically, *Twilight* class cutters have actually fought each other, where corporate ships fight to defend important shipments from would-be hijackers and smugglers.

SHIPS IN CLASS (reported, many with private owners):
Commissioned 2508-25??

- Cignis Shipyards, Europa
- Spectrum Shipyards, Earth orbit
- Outer Sydney, 44 Böotis

CRX 461	CMS *Twilight*	On Duty
CRX 462	CMS *Calypso*	Scuttled, Olympian Path
CRX 463	CMS *Becker*	On Duty
CRX 464	*Enchantress*	Sold, "private owner"
CRX 465	CMS *Rhapsody*	On Duty
CRX 466	CMS *Sanchez*	On Duty
CRX 467	CMS *Buenavista*	Destroyed, Olympian Path
CRX 468	CMS *Beauchamp*	Destroyed, Olympian Path
CRX 469	CMS *Rojas*	On Duty
CRX 470	CMS *Killian*	On Duty
CRX 471	CMS *Europa*	Destroyed, Olympian Path
CRX 472	CMS *Deneb*	On Duty
CRX 473	CMS *Crichter*	Destroyed, Olympian Path
CRX 474	CMS *Greerson*	Scuttled, Olympian Path
CRX 475	CMS *Blue Rigel*	On Duty
CRX 476	*Devil's Darlin'*	Sold, "private owner"
CRX 477	CMS *Callisto*	On Duty
CRX 478	*Fast Company*	Sold, suspected pirate
CRX 479	*Outlaw*	Sold, "private owner"
CRX 480	CMS *Bermuda*	On Duty
CRX 481	CMS *Safeguard*	On Duty
CRX 482	*Lucky Strike*	Stolen, missing
CRX 483	CMS *Miller*	On Duty
CRX 484	CMS *Lee*	On Duty
CRX 485	CMS *Zemakoya*	On Duty
CRX 486	*Bounced Check*	Sold, suspected pirate
CRX 487	CMS *Kristensen*	On Duty
CRX 488	*Tiger Lily*	Sold, "private owner"
CRX 489	CMS *Ermine*	On Duty
CRX 490	*Bedroom Eyes*	Stolen, suspected pirate

Ship Name:		Ship Class:	*Twilight* Class	Status:	Thrust:	9
Captain		Ship Type:	Corvette / Blockade Runner	Points:	CIC (+/-)	+3

Mass:	12,705 tons	Cargo:	100 tons	Crew / Passengers:	48 officers and men, 8 passengers	Darkstar Wave:	11th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
1 (+3)	6 Teravolt EPC (2,2,2,1,0,0,0)	Bow
1 (+3)	6 Teravolt EPC (2,2,2,1,0,0,0)	Stern
1 (+3)	4 MgKv Laser (2,2,1,1,1,0,0)	Bow
1 (+3)	4 MgKv Laser (2,2,1,1,1,0,0)	Stern
2 (+3)	Class V Torpedo	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	25mm Mass Driver Array	Bow
4	20mm Mass Driver Array	Stern

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Launch	Forward
8	Marines	Troop Bay

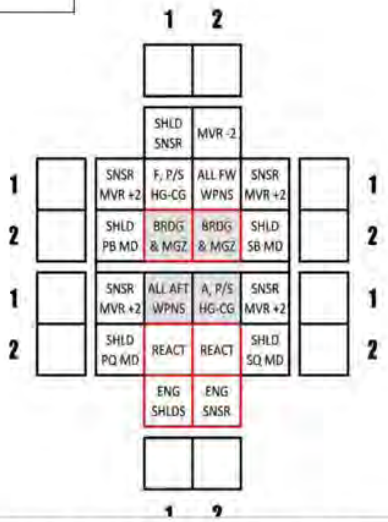
PB SHD	BOW SHD	SB SHD
5	4	5

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS
4 (+3)
2



** Each ENG / REACT hit applies -2 Thrust.
** Each MVR hit applies +2 cost per turn.

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
5	5	5

Power Plant Type	Advanced
Base Scenario Cost	12
Aerospace Group Cost	0
Campaign Modifiers	
FINAL SCENARIO COST	12

BARONESS CLASS

Security Frigate – Corporate Consortium

SHIP TYPE:	Frigate
MASS:	23,496 tons
POWERPLANT:	Advanced
COMPLEMENT:	118 officers and men
SLD THRUST:	7
DARKSTAR WAVE:	10th

The *Baroness* class "security frigate" is something of a departure from designs typically deployed by the Corporate Consortium's "Escalation Response Bureau." While blockade runners like the *Rogue* and *Twilight* class rely on sublight and transrelativistic speeds for much of their protection and hitting power, the *Baroness* class is a strike frigate, built to a distinctly harder edge, and probably the closest the Consortium will ever come to admitting is a true "warship."

As such, they are intended for action where the Cignis Corporation identifies an "irreconcilable impediment impacting otherwise mutually beneficial revenue flow and developmental synergy." Put simply, while Cignis would always prefer to avoid a fight (combat is a risky and expensive proposition to any business), the *Baroness* class is built for when such options simply aren't there.

Accordingly, they possess a more advanced ECM suite than some other Cignis ships, tougher shielding, and a powerful energy-based weapons suite built around "Tachyon" class EPCs and the patented "StarSabre" Cignis laser emitter. Everything is slaved to the same "ZenCloud" CIC and fire control suite found on other Cignis ships, making the *Baroness* capable of shooting straight through most ECM and shielding at all but the most distant of ranges. Still, these are really only the "softening up" weapons, the killing blow is usually delivered via another dreaded Cignis staple: The "Sparta XII" gravitic torpedo.

All this firepower, protection, and electronics adds up to significant strain on the powerplant, however, and an *Baroness* class has only average speed for a ship of its class. As such, they are typically used to guard important colonies and installations, as well as escort duty for *Alliance* class destroyers, *Executive* class light cruisers, or the Cignis flagship CMS *Cignis* (the only starship of her class - more of a mobile corporate headquarters than a warship).

Note the accommodations for eight passengers and twelve "security consultants," elite private military contractors to provide protection for high-end company executives, partners, or customers. When high-profile company personnel have to travel through "uncertain space," a *Baroness* class frigate is usually requested.

One last duty sometimes assigned to an *Baroness* class is the formation of what's called "case escalation response groups," temporary "remediation" forces deployed when and where business is well and truly threatened in a high-priority sector. Usually only a senior vice-president can authorize the creation of one of these groups, but they've become increasingly common in the heightening uncertainty of recent years. *Baroness* class ships have been assigned to this duty so often they're sometimes jokingly referred to as the *Escalation* class, but to members of the Cignis corporation, "escalation" is a very heavy word.

SHIPS IN CLASS (reported, many with private owners):

Commissioned 2506-25??

- Cignis Shipyards, Europa
- Spectrum Shipyards, Earth orbit
- Outer Sydney, 44 Böotis

SFG 361	CMS *Baroness*	On Duty
SFG 362	CMS *Empowerment*	On Duty
SFG 363	CMS *Sanders*	On Duty
SFG 364	CMS *Paradigm*	On Duty
SFG 365	CMS *Artemis*	On Duty
SFG 366	CMS *Vision*	On Duty
SFG 367	*Gabrielle's Luck*	Sold, "private owner"
SFG 368	CMS *Tamura*	On Duty
SFG 369	*Connor's Payback*	Sold, "private owner"
SFG 370	CMS *Jamison*	On Duty
SFG 371	CMS *Rodriguez*	On Duty
SFG 372	CMS *Synergy*	On Duty
SFG 373	*Casual Friday*	Sold, "private owner"
SFG 374	CMS *Spectrum*	On Duty
SFG 375	CMS *Quasar*	On Duty
SFG 376	*Goldstrike*	Sold, "private owner"
N/A	*Sapphire*	Built Illegally, suspected pirate

Ship Name:		Ship Class:	*Baroness* Class	Status:		Thrust:	8
Captain		Ship Type:	Frigate	Points:		CIC (+/-)	+0

Mass:	22,996 tons	Cargo:	100 tons	Crew / Passengers:	116 officers and men, 12 passengers	Darkstar Wave:	11th

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT
1 (+3)	6 Teravolt EPC (2,2,2,1,0,0,0)	Bow
1 (+3)	6 Teravolt EPC (2,2,2,1,0,0,0)	Stern
1 (+3)	8 MgKv Laser (3,3,2,2,1,1,1)	Bow
1 (+3)	8 MgKv Laser (3,3,2,2,1,1,1)	Stern
3 (+3)	Class V Torpedo	Bow

SECONDARY ARMAMENT

NO.	TYPE	MOUNT
3	30mm Mass Driver Array	Bow
2	30mm Mass Driver Array	P Bow
2	30mm Mass Driver Array	S Bow
2	30mm Mass Driver Array	P Quarter
2	30mm Mass Driver Array	S Quarter
3	30mm Mass Driver Array	Stern

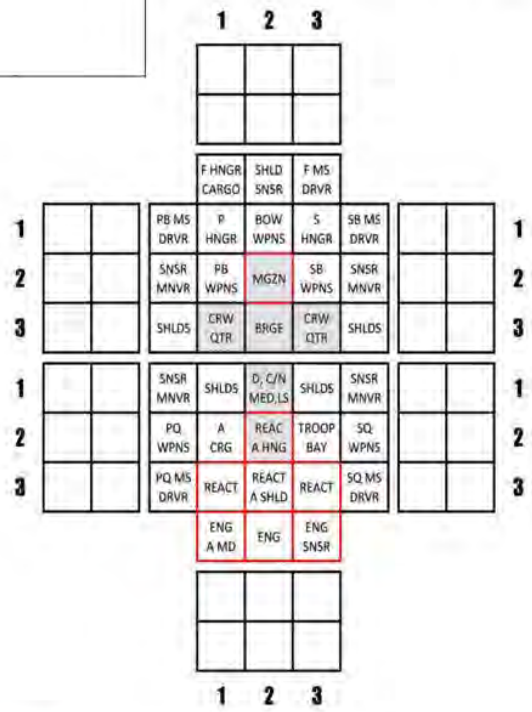
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR
1	Cutter	Aft
6	Marines	Troop Bay
6	Marines	Troop Bay
1	Scout	Forward

PB SHD	BOW SHD	SB SHD
5	5	5

Captain / Crew Bonuses

MASS DRIVERS
9 (+3)
7 - 6 - 4 - 3 - 2



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD
5	5	5

Power Plant Type	Advanced
Base Scenario Cost	24
Aerospace Group Cost	1
Campaign Modifiers	
FINAL SCENARIO COST	25

BLANK SHEETS & CHARTS

Print & Play

Enclosed below are a series of warships record sheets and charts players can print, copy, and use to play *Darkstar*.

First, we have blank **Warship Record Sheets**, covering the seven warship types found in *Darkstar*.

- Gunboat
- Corvette
- Frigate
- Destroyer
- Light Cruiser
- Heavy Cruiser
- Battleship

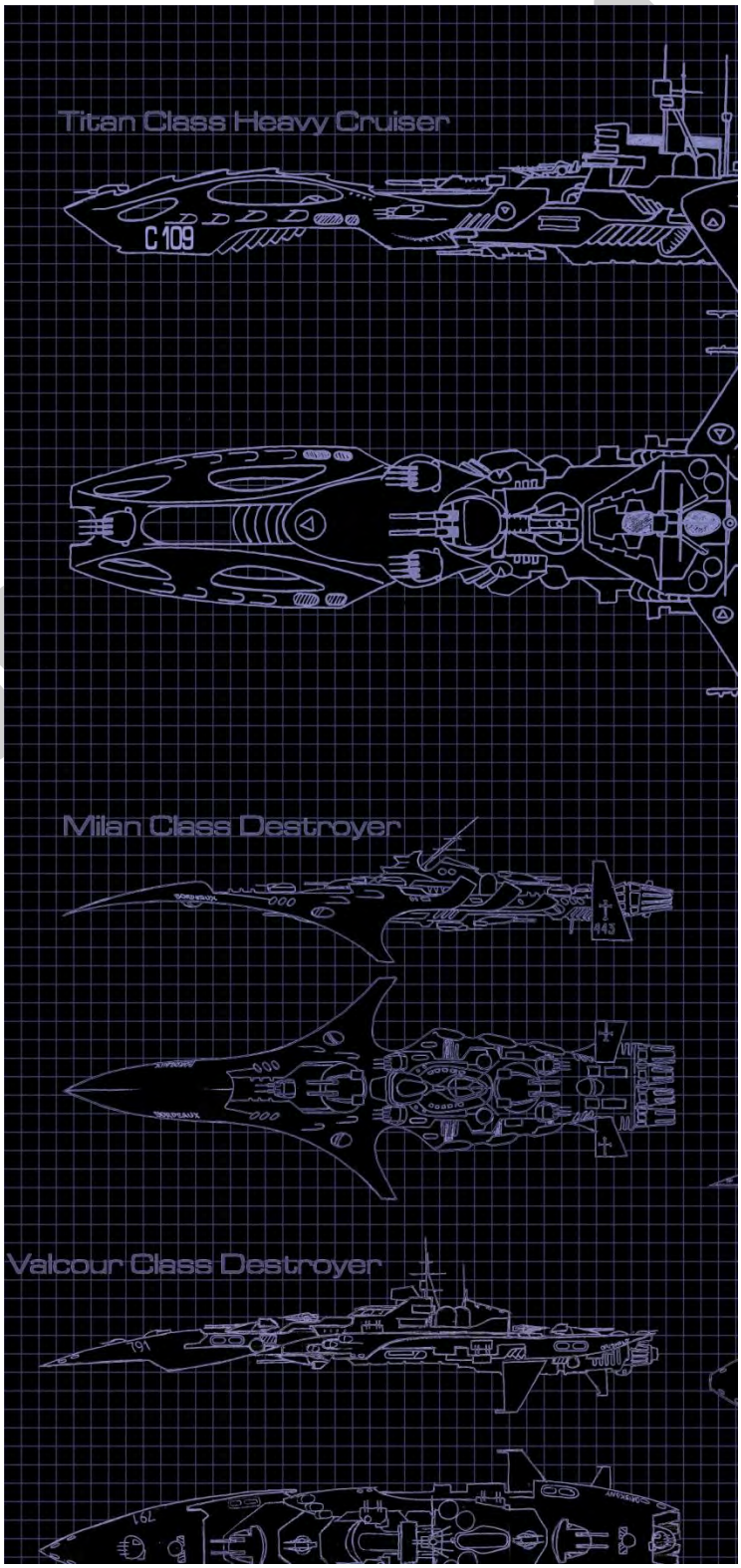
These are left totally blank and generic, allowing players to use them with whatever starship classes they choose, either in this reference or further classes that may be published in future supplements or even designed by the players themselves.

A copy of the **Quick Reference Sheet** is also included. It is highly recommended that a copy of this be printed out and copied for each player. At least 80% of a *Darkstar* game can be run off this sheet, once players have a basic understanding of the rules.

Almost as useful is the print-friendly copy of the **Turn Sequence** also include din this section. Again, I strongly recommend that a few copies of this sheet be printed out for easy reference during play. Note the Turn Sequence is numbered for easy reference with the rules in Section Four of this reference.

Future references may include the rules and record sheets for both orbital and ground installations. These differ a great deal from warship sheets as they have no front, back, or sides, but are more or less "radial" in design with equal components on all six facings. They also carry far more armor than their warship counterparts (they never have to move anywhere, outside of station keeping thrusters to keep a stable orbit), and of course, far larger weapons.

Future references may also include more warship designs, both for the factions already presented and additional factions already described in the *Darkstar* universe. Lastly, the spreadsheets that drive the math behind warship design are still being used to create still more classes, players interested can contact me (jamesjohnsonwriter@gmail.com) about the idea of creating a custom ship.



Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Gunboat	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

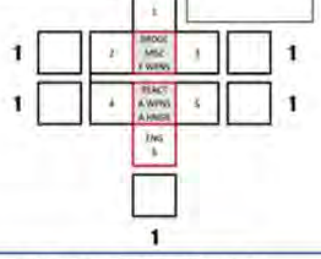
Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn					
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

PB SHD	BOW SHD	SB SHD

Captain / Crew Bonuses

MASS DR.



1) BW Wpns, FW Sh, -1 Snsr, F Ms Drv, FW Hg & Crg
2) PB Wpns, PB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, P Hg & Cg
3) SB Wpns, SB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, S Hg & Cg
4) PQ Wpns, PQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
5) SQ Wpns, SQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
6) Thr -4, Aft Sh, -1 Snsr, Aft Crg, A Ms Drv, +2 Mnvr

PQ SHD	AFT SHD	SQ SHD

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	HANGAR

MARINES / SMALL CRAFT

NO.		HANGAR
0		
0		
0		
0		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL COST	

ENGINEERING			ENGINEERING		
TURN	VEL	INIT	TURN	VEL	INIT
1			6		
2			7		
3			8		
4			9		
5			10		

DMG'D SYSTEMS

Extra Mnvr Cost:
Sensor Dmg:
Core Boxes: %
Init Penalties:
Thrust Reduction:
Crit Boxes: %

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Gunboat	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

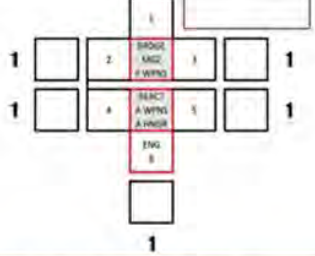
Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn					
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

PB SHD	BOW SHD	SB SHD

Captain / Crew Bonuses

MASS DR.



1) BW Wpns, FW Sh, -1 Snsr, F Ms Drv, FW Hg & Crg
2) PB Wpns, PB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, P Hg & Cg
3) SB Wpns, SB Sh, -1 Snsr, F Ms Drv, +2 Mnvr, S Hg & Cg
4) PQ Wpns, PQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
5) SQ Wpns, SQ Sh, -1 Snsr, A Ms Drv, +2 Mnvr, Cr Q, Tr By
6) Thr -4, Aft Sh, -1 Snsr, Aft Crg, A Ms Drv, +2 Mnvr

PQ SHD	AFT SHD	SQ SHD

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	HANGAR

MARINES / SMALL CRAFT

NO.		HANGAR
0		
0		
0		
0		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL COST	

ENGINEERING			ENGINEERING		
TURN	VEL	INIT	TURN	VEL	INIT
1			6		
2			7		
3			8		
4			9		
5			10		

DMG'D SYSTEMS

Extra Mnvr Cost:
Sensor Dmg:
Core Boxes: %
Init Penalties:
Thrust Reduction:
Crit Boxes: %

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Corvette	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	MOUNT

SMALL CRAFT / MARINES

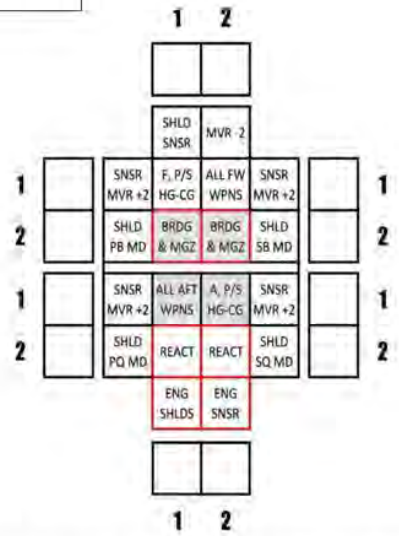
NO.	TYPE	HANGAR

PB SHD	BOW SHD	SB SHD

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Captain / Crew Bonuses

MASS DRIVERS



** Each ENG / REACT hit applies -2 Thrust.
** Each MVR hit applies +2 cost per turn.

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	

PQ SHD	AFT SHD	SQ SHD

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Frigate	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	MOUNT

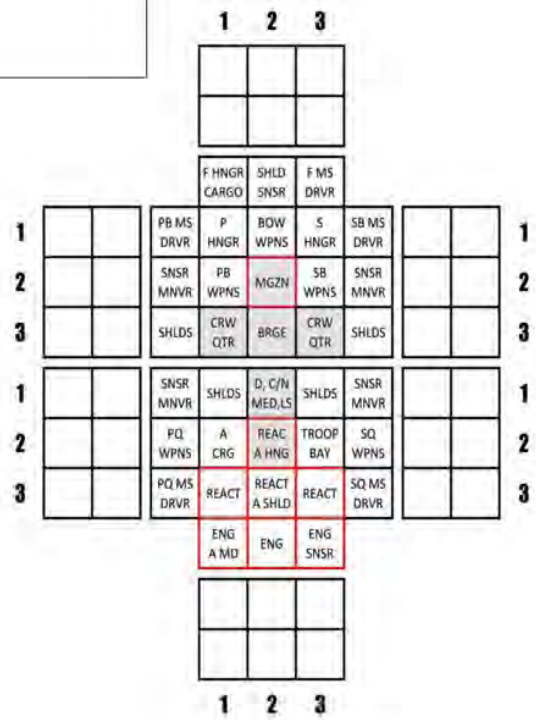
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR

PB SHD	BOW SHD	SB SHD

Captain / Crew Bonuses

MASS DRIVERS



PQ SHD	AFT SHD	SQ SHD

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Destroyer	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	MOUNT

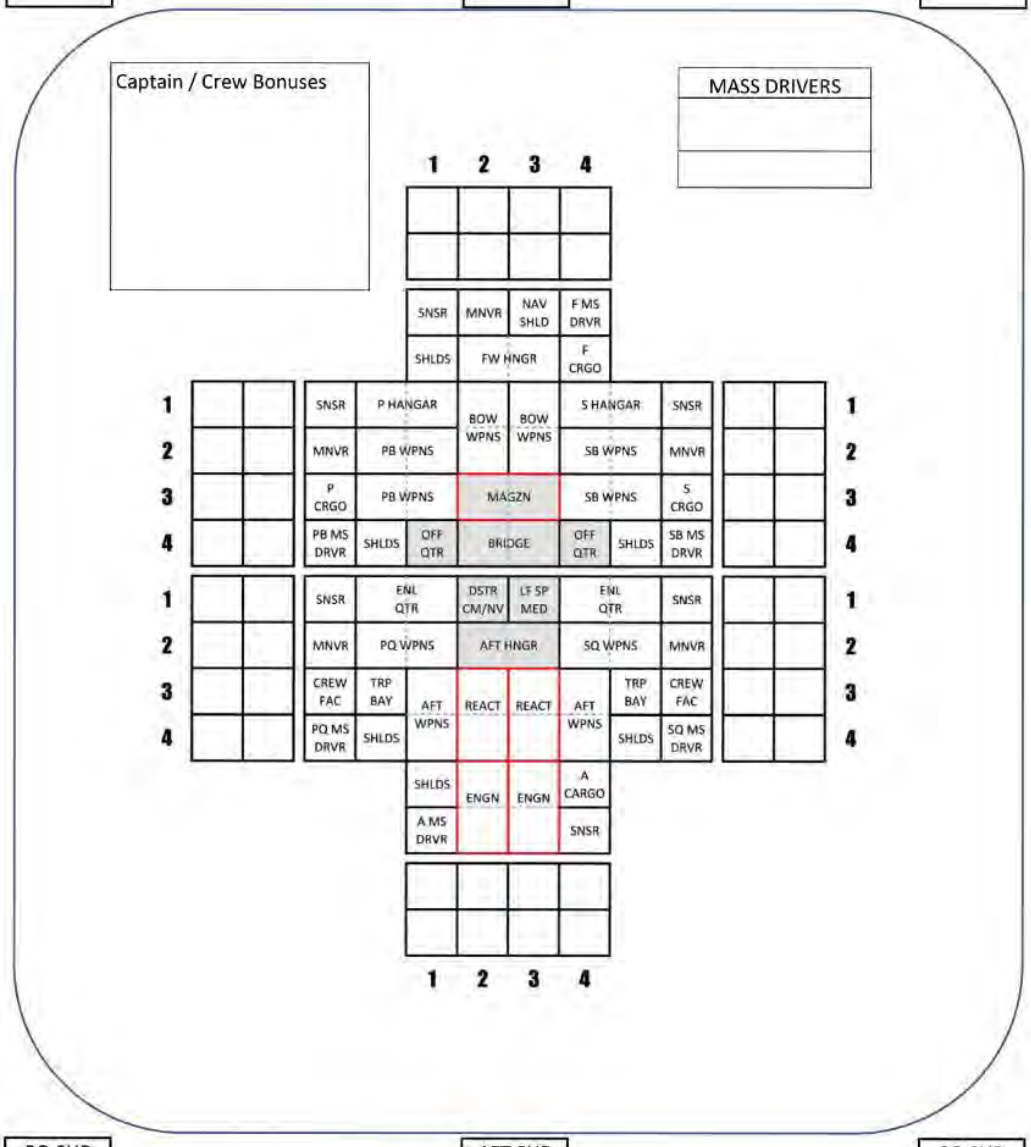
SMALL CRAFT / MARINES

NO.	TYPE	HANGAR

PB SHD	BOW SHD	SB SHD

Captain / Crew Bonuses

MASS DRIVERS



STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Initiative Modifiers	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	

PQ SHD	AFT SHD	SQ SHD

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Light Cruiser	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

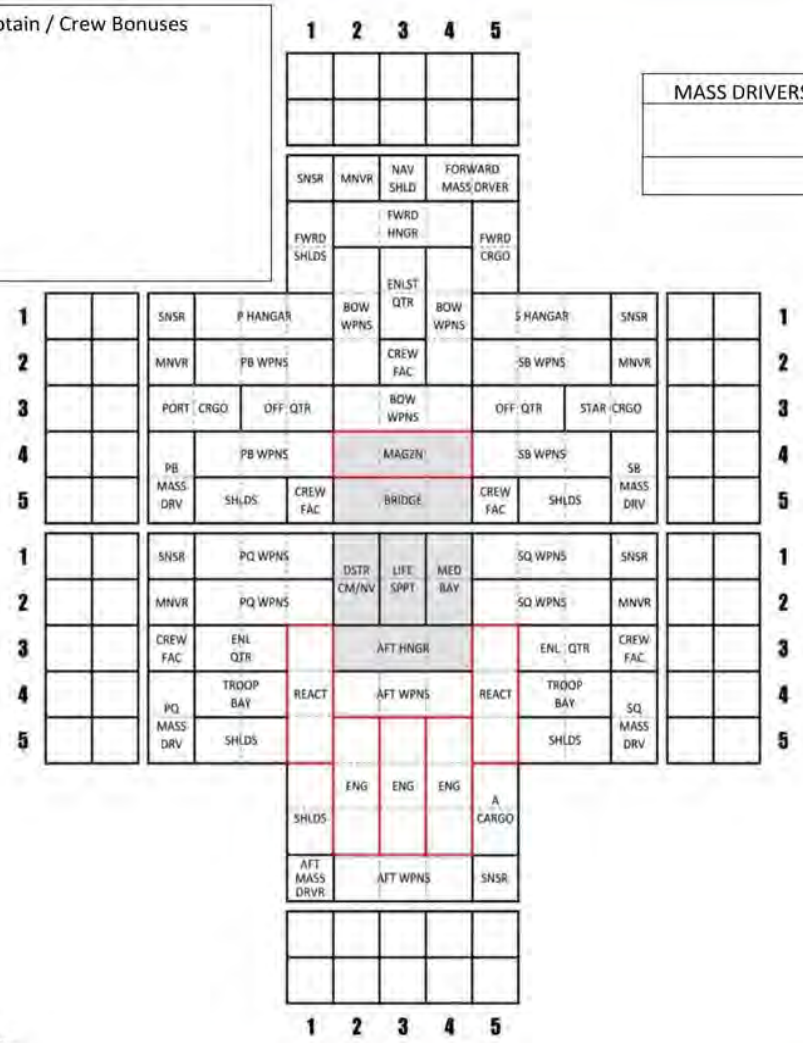
NO.	TYPE	MOUNT

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR

PB SHD	BOW SHD	SB SHD

Captain / Crew Bonuses



MASS DRIVERS

STATUS (DMG'D SYSTEMS)

Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING

TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PQ SHD	AFT SHD	SQ SHD

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Heavy Cruiser	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

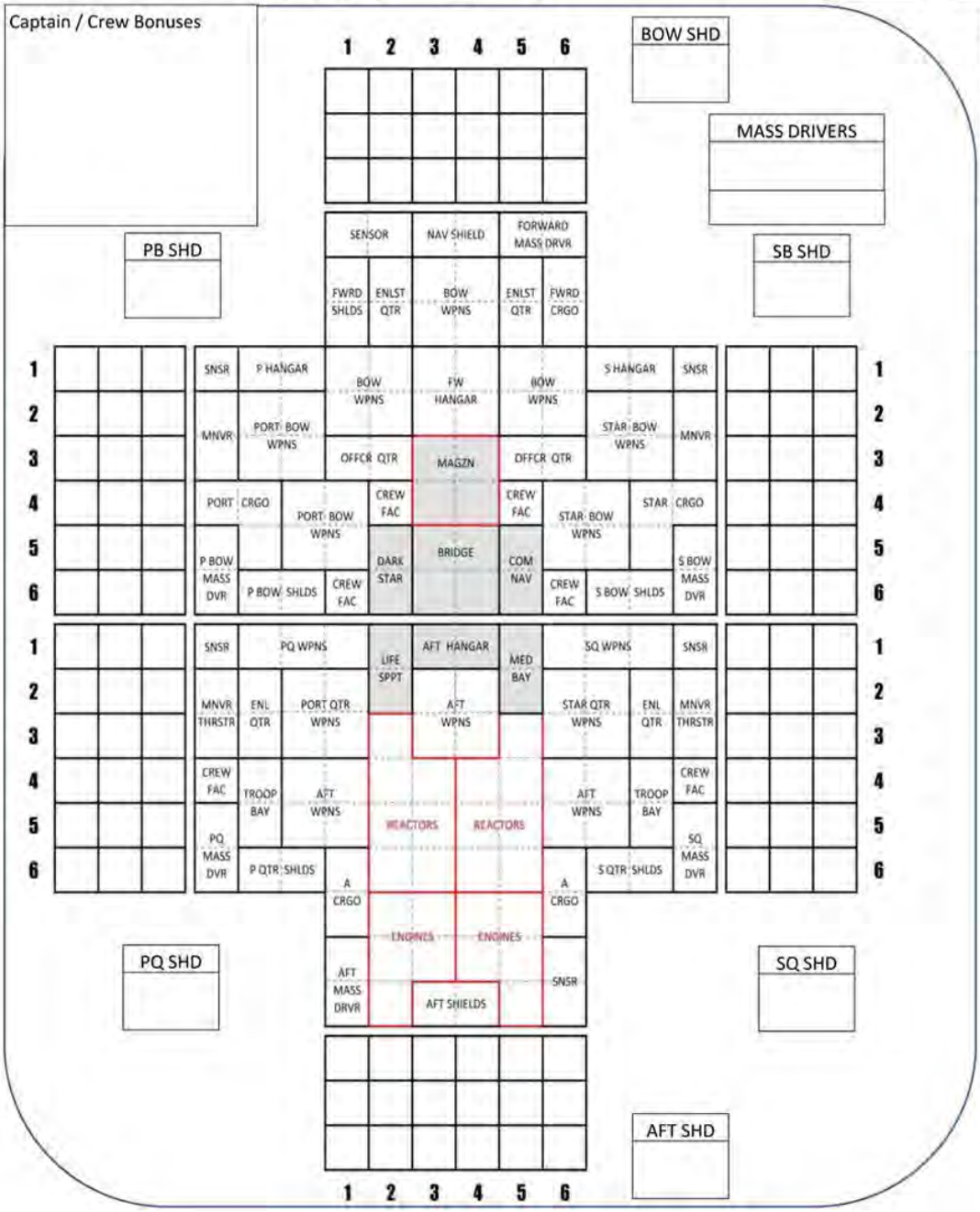
SECONDARY ARMAMENT

NO.	TYPE	MOUNT

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR

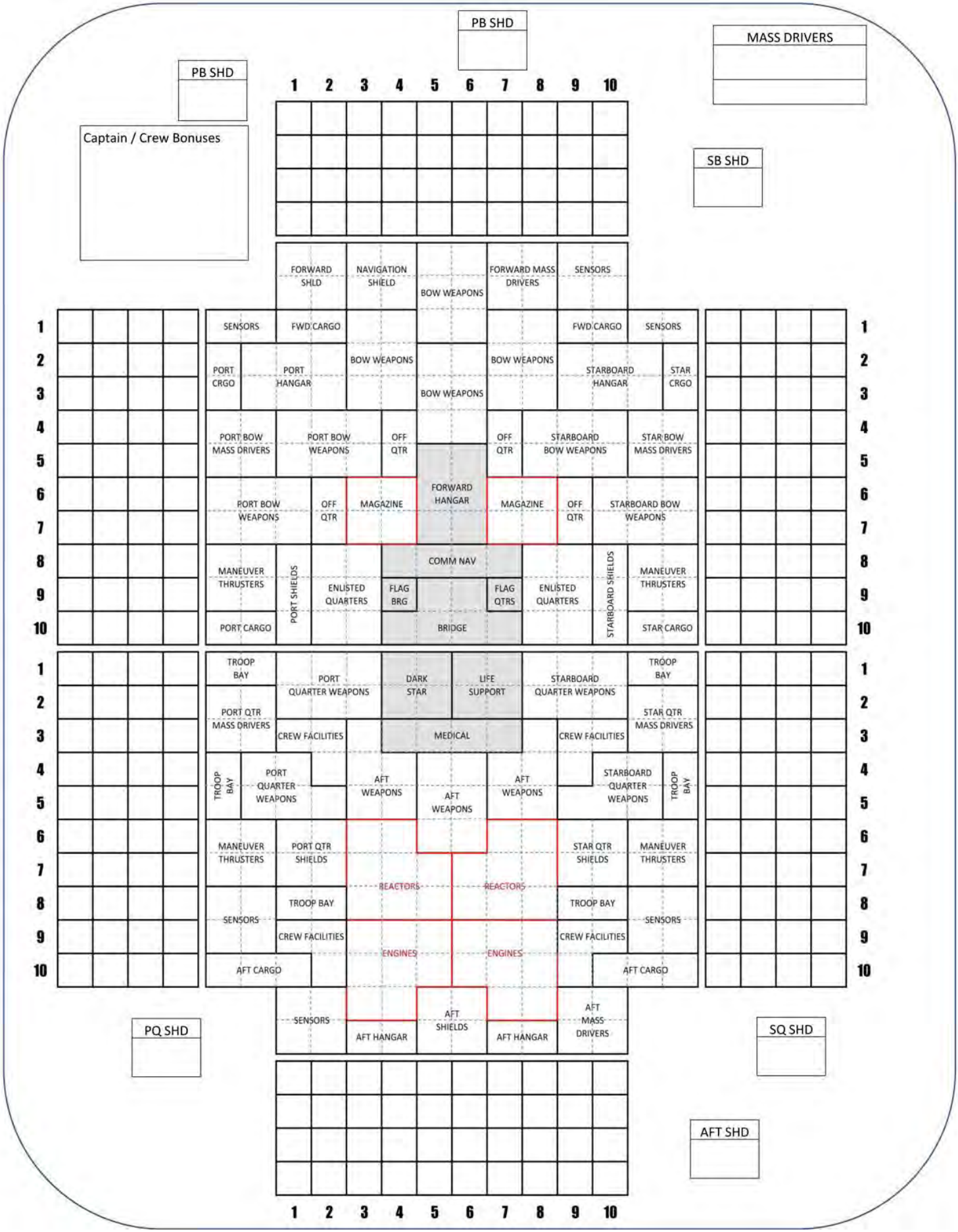
Captain / Crew Bonuses



STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Penalties:	
Thrust Modifiers:	
Critical Boxes Hit:	%

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Power Plant Type	
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	


PB SHD
MASS DRIVERS
PB SHD
Captain / Crew Bonuses
SB SHD
1 2 3 4 5 6 7 8 9 10
FORWARD SHLD
NAVIGATION SHIELD
BOW WEAPONS
FORWARD MASS DRIVERS
SENSORS
SENSORS
FWD CARGO
FWD CARGO
SENSORS
PORT CRGO
PORT HANGAR
BOW WEAPONS
BOW WEAPONS
BOW WEAPONS
STARBOARD HANGAR
STAR CRGO
PORT BOW MASS DRIVERS
PORT BOW WEAPONS
OFF QTR
OFF QTR
STARBOARD BOW WEAPONS
STAR BOW MASS DRIVERS
PORT BOW WEAPONS
OFF QTR
MAGAZINE
FORWARD HANGAR
MAGAZINE
OFF QTR
STARBOARD BOW WEAPONS
MANEUVER THRUSTERS
PORT SHIELDS
ENLISTED QUARTERS
COMM NAV
FLAG BRG
FLAG QTRS
ENLISTED QUARTERS
STARBOARD SHIELDS
MANEUVER THRUSTERS
PORT CARGO
BRIDGE
STAR CARGO
TROOP BAY
PORT QUARTER WEAPONS
DARK STAR
LIFE SUPPORT
STARBOARD QUARTER WEAPONS
TROOP BAY
PORT QTR MASS DRIVERS
STAR QTR MASS DRIVERS
CREW FACILITIES
MEDICAL
CREW FACILITIES
TROOP BAY
PORT QUARTER WEAPONS
AFT WEAPONS
AFT WEAPONS
AFT WEAPONS
STARBOARD QUARTER WEAPONS
TROOP BAY
MANEUVER THRUSTERS
PORT QTR SHIELDS
REACTORS
REACTORS
STAR QTR SHIELDS
MANEUVER THRUSTERS
SENSORS
TROOP BAY
TROOP BAY
SENSORS
CREW FACILITIES
ENGINES
ENGINES
CREW FACILITIES
AFT CARGO
AFT CARGO
SENSORS
AFT HANGAR
AFT SHIELDS
AFT HANGAR
AFT MASS DRIVERS
PQ SHD
SQ SHD
AFT SHD
1 2 3 4 5 6 7 8 9 10

Ship Name:		Ship Class:		Status:		Thrust:	
Captain		Ship Type:	Battleship	Points:		CIC (+/-)	

Mass:		Cargo:		Crew / Passengers:		Darkstar Wave:	

Range Table	Range	0-1	2-3	4-6	7-10	11-15	16-20	21+
	Base To-Hit	11	10	9	8	7	6	5

Cost to Turn						
Vel 0 = 0	Vel 3 = 1	Vel 6 = 2	Vel 9 = 3	Vel 12 = 4	Vel 15 = 5
Vel 1 = 0	Vel 4 = 1	Vel 7 = 2	Vel 10 = 3	Vel 13 = 4	Vel 16 = 5
Vel 2 = 0	Vel 5 = 1	Vel 8 = 2	Vel 11 = 3	Vel 14 = 4	Vel 17 = 5

MAIN ARMAMENT

NO.	TYPE	MOUNT

SECONDARY ARMAMENT

NO.	TYPE	MOUNT

SMALL CRAFT / MARINES

NO.	TYPE	HANGAR

ENGINEERING		
TURN	VEL	INIT
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATUS (DMG'D SYSTEMS)	
Extra Maneuver Cost:	
Sensor Dmg:	
Core Boxes Hit:	
Init Modifiers:	
Thrust Modifiers:	
Critical Boxes Hit:	%

Power Plant Type	Standard
Base Scenario Cost	
Aerospace Group Cost	
Campaign Modifiers	
FINAL SCENARIO COST	

DARKSTAR — COLONIAL NAVAL COMBAT IN THE 26TH CENTURY

DARKSTAR QUICK REFERENCE SHEET

Thrust Table	
Velocity	Cost to Turn
0	0
1	0
2	0
3	1
4	1
5	1
6	2
7	2
8	2
9	3
10	3
11	3
12	4
13	4
14	4
15	5
16	5
17	5
18	6
19	6
20	6
21	7
22	7
23	7
24	8
25	8
26	8
27	9
28	9

Range Combat Table (apply vs. shlds for d10 chance. If net ≤ 0, shot hits on "1", then 5+ on d6.)

Range in Hexes	0-1	2-3	4-6	7-10	11-15	16-20	21+
d10 Base to Hit	11	10	9	8	7	6	5

MASS DRIVER TABLE

MDF	-2	-1	0	1	2	3	4	5	6	7	8	9
1-3	0	0	0	0	0	0	1	1	2	3	4	5
4-6	0	0	0	0	0	1	1	2	3	4	5	6
7-9	0	0	0	0	1	1	2	3	4	5	6	7
10-12	0	0	0	1	1	2	3	4	5	6	7	8
13-15	0	0	1	1	2	3	4	5	6	7	8	9
16-18	0	1	1	2	3	4	5	6	7	8	9	10
19-21	1	1	2	3	4	5	6	7	8	9	10	11
22-24	1	2	3	4	5	6	7	8	9	10	11	12
25-27	2	3	4	5	6	7	8	9	10	11	12	13
28-30	3	4	5	6	7	8	9	10	11	12	13	14
31-33	4	5	6	7	8	9	10	11	12	13	14	15
34-36	5	6	7	8	9	10	11	12	13	14	15	16
37-39	6	7	8	9	10	11	12	13	14	15	16	17
40-42	7	8	9	10	11	12	13	14	15	16	17	18
43-45	8	9	10	11	12	13	14	15	16	17	18	19
46-48	9	10	11	12	13	14	15	16	17	18	19	20

Torpedo / Missile Table

Type	BTH	Speed
Class V	9	20
Class IV	8	18
Class III	7	17
Class II	6	15
Class I	5	12
Aero mssle	7	7 (range)
Aero torp	9	8 (range)

Mass Driver To-Hit Mods

Impact Hex 0-1 hexes away	+0
Impact Hex 2-3 hexes away	-1
Impact Hex 4-6 hexes away	-2
CIC Bonuses, EW Bonuses	+1,2
Enemy EW Bonuses	-2
Enemy Fighters and Scouts	-1

Warship Elimination Table

Class	Targ to Disable (# - crit bx hit) enemy meets this roll on d6 to disable ship	Explosion % per crit box < 0 disable	Core Damage Factor (% per box)	Ship Explosion Damage (two adj facings, rows or boxes) 0	1	2	3	4	Warship Recovery Table (disabled after battle)** Win-Draw	Lose
Battleship	19+	10%	5%	2r	2r	1r,3b	1r	3b	9	8
Heavy Cruiser	14+	20%	10%	2r	1r,3b	1r	3b	1b	8	7
Light Cruiser	10+	25%	15%	1r,3b	1r	3b	1b	--	7	6
Destroyer	7+	30%	20%	1r	3b	1b	--	--	6	5
Frigate	6+	35%	30%	3b	1b	for box damage, roll for where it starts, apply aft or outboard. Any "extra" spills off, does not stack.			5	4
Corvette	5+	50%	45%	1b	--				4	3
Gunboat	4+	N/A	60%	--	--				3	2

** Ships that fail this roll are lost. Roll 1d10 to see how. 1-4 = scuttled. 5-7 = destroyed by enemy. 8-9 = captured. 10 = vanished into space, never seen again (crew may have escaped beforehand).

Aerospace losses from explosions: each "r"= 50% loss, each "b" = 10% loss.

Aerospace Craft Table

Aero Class	Gunnery (To Hit/Dmg vs. d6) at range 0-1	2-3	4-6	Payload	Speed (Hexes)	Intercept vs. torp BTH	Evade Intcp - Evd = d10
Fighter	8 (-shld)/4+	7 (-shld)/5+	6 (-shld)/6+	1 AM	12	9	5
Bomber	7 (-shld)/5+	6 (-shld)/6+	n/a	2 ATs or 5 AMs	10	4	3
Scout	6 (-shld)/6+	n/a	n/a	none	15	6	10
Assault Boat	10 (-shld)/4+	9 (-shld)/5+	8 (-shld)/6+	24 marines or 2 AFVs / Sppt Vehicles	10	7	5

Hit Location Damage Effects

Engines	Each COMPLETE engine lost, -1 Thrust. Counts as CRITICAL HIT	Bridge/CIC	1st hit, -1 to init. All boxes hit, ship disabled.
Reactors	Each COMPLETE reactor lost, -1 Thrust. Counts as CRITICAL HIT	Maneuver	Each full component hit = +1 thrust cost / turn.
Magazine	Do NOT fill in all boxes. Counts as CRITICAL HIT.	Sensors	Each full component hit = -1 all base to hits.
Weapons	Each COMPLETE weapon area filled in = wpns mount elim in that mount location (target ship's choice). If no wpns there, no effect. If ALL wpns hit in mount location, ALL wpns in that mount location lost.	Mass Drver	Each full Mass Driver hit = one MD value scratched out.
		Hngr/Crgo	If all filled in, lose all cargo / craft in location.
Criticals	During Resolution Phase, subtract crit boxes hit from **Target to Disable**, roll on or above this on d6 knock out the ship. If the adj number is ≤ zero (roll impossible), the ship is auto disabled, and roll Explosion Chance % Dice.	Miscell.	Enlisted, Officer & Flag Qtrs, Flag Bridge, Darkstar Drive, Medical, Com/Nav, Nav Shield, Crew Facilities. No Effect in game play. Troop Bay = Marines (board / landings)

DARKSTAR TURN SEQUENCE

4.1 - Initiative Phase

A. All players roll d6 + Ship Thrust, record scores for current round

4.2 and 4.3 - Movement Phase

A. Starting with worst roll, move ships (after neutral bodies and disabled ships)
   1. Note starting velocity
   2. Apply thrust to change velocity
   3. Move ship, paying thrust for facing changes as ship is moved
   4. At the end of movement, apply remaining thrust to affect next turn's velocity
   5. Make capital ship docking attempts (must have matched facing / velocity)

B. Aerospace Movement
   1. Each side (not nation) rolls 1d10 for aerospace initiative
   2. Aerospace craft launches (place in adjacent hex to appropriate hangar)
   3. Move Warship Torpedoes (aerospace initiative loser first)
   4. Move Assault Boats (aerospace initiative loser first)
   5. Move Bombers (aerospace initiative loser first)
   6. Move Fighters (aerospace initiative loser first)
   7. Move Scouts (aerospace initiative loser first)

4.4 thru 4.8 - Combat Phase

4.4 - Aerospace Combat
   1. Resolve anti-aerospace mass driver fire
   2. Resolve aerospace attacks (all simultaneous)
      a. Dogfights against other aerospace craft
      b. Aerospace Missile / Torpedo launches (launch and move to full range, impact same round)
      c. Gunnery / Strafing attacks against capital ships.
   3. Resolving aerospace docking attempts
   4. Torpedo and Missile Impacts
      a. Identify torpedoes target hex (including aerospace missiles / torpedoes)
      b. Resolve mass driver / aerospace defensive fire vs. missiles
      c. Resolve missile hits vs. shields

4.5, 4.6, 4.7 - Warship Combat
   1. Determine hits
   2. Resolve damage

4.8 - Launch Warship Torpedoes (place in ship's hex)
   1. Resolve Boarding Actions / Shipboard Combat

4.9 - Resolution Phase

A. Ship Explosions
   1. Check all ships for potential explosions
   2. Apply all explosion damage. Some new explosions may be set off.

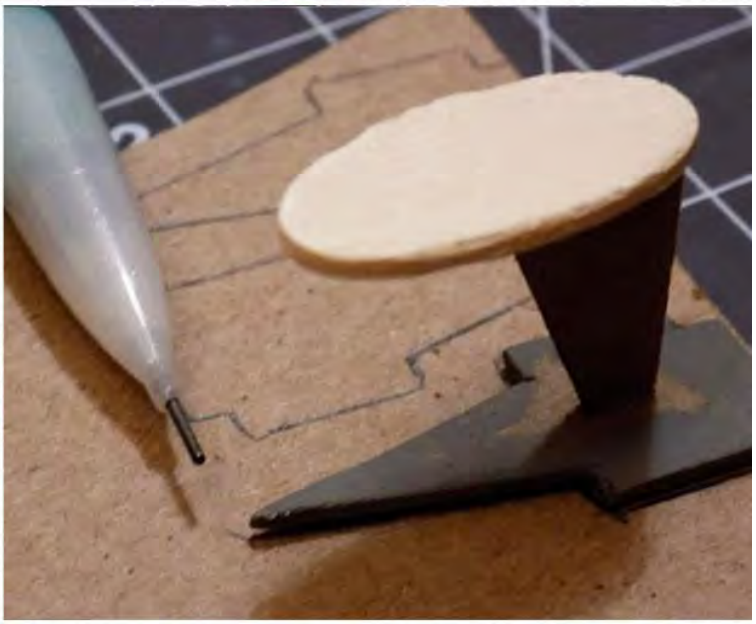
B. Ships Disabled
   1. Check to see if CIC is filled in
   2. Ship Crippled Number: (Engines boxes + Reactors boxes + Magazine boxes) = d10 roll

C. Ships Breaking Off
   1. Was at least one box marked off in core area *this* round?
   2. Count all boxes in the core area, multiply by ship class factor
   3. Roll percentile dice to see if ship is forced to break off starting with upcoming movement phase

D. Resolve / Record Effects of Damaged Components

DARKSTAR WARSHIP PIECES

For players who are interested, here are a few ideas on how to create your own *Darkstar* playing pieces for warships, aerospace craft, and torpedoes, using items and materials as simple as cardboard off the back of a notepad and some household glue.




ART ALTERNATIVES
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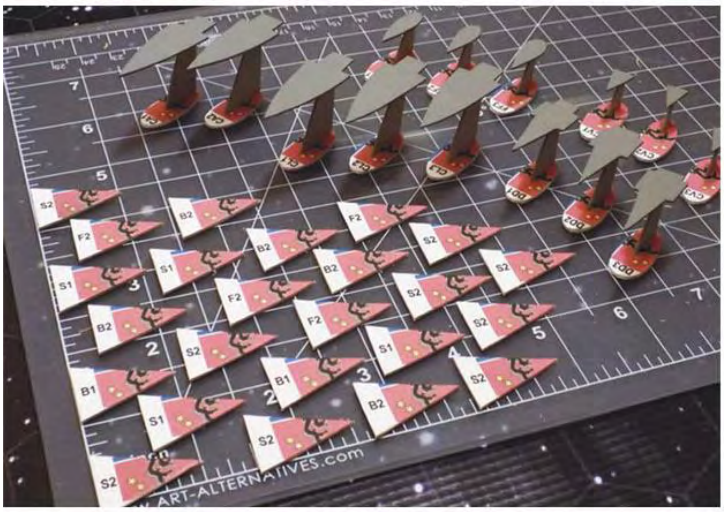
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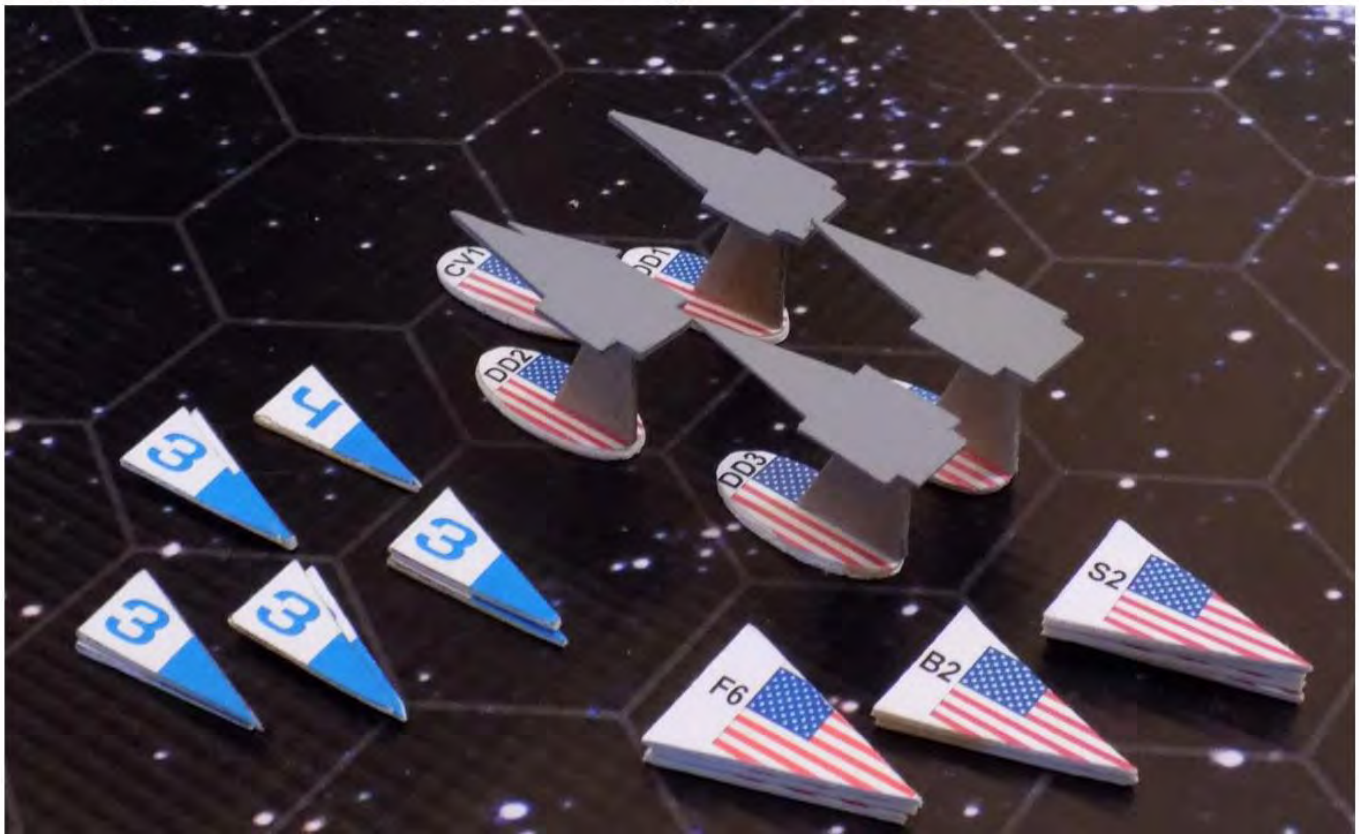
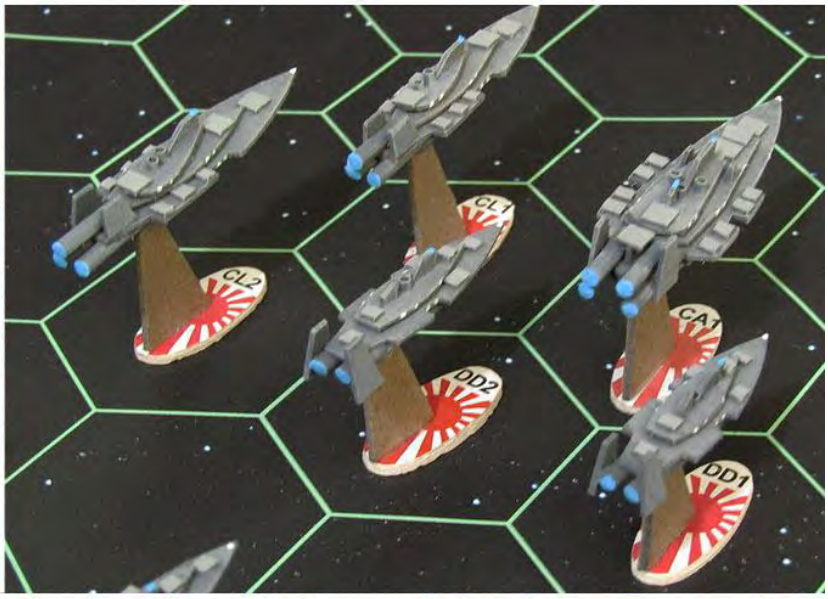
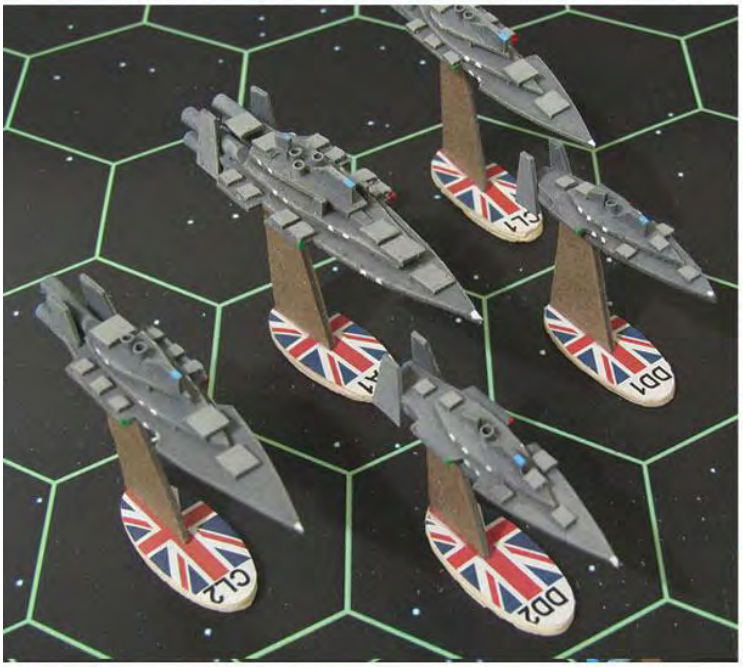
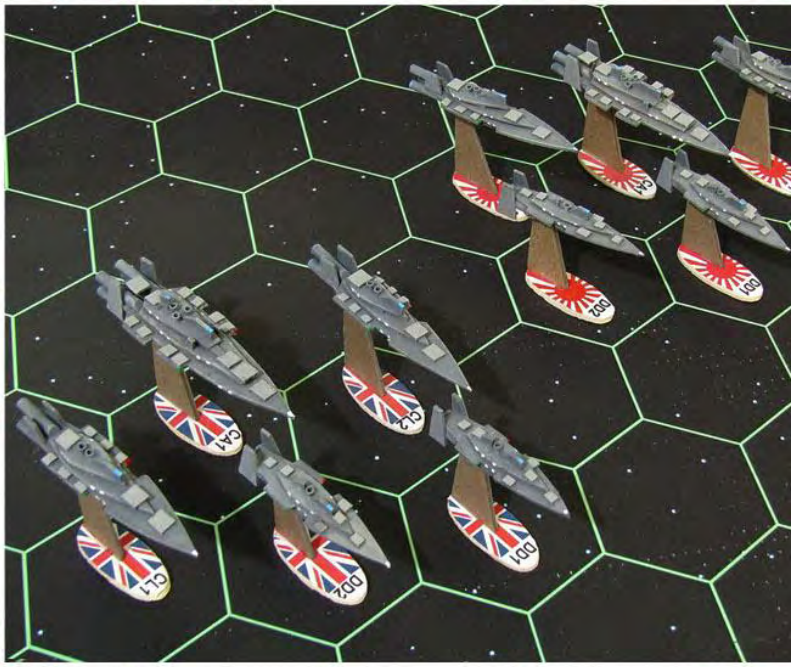
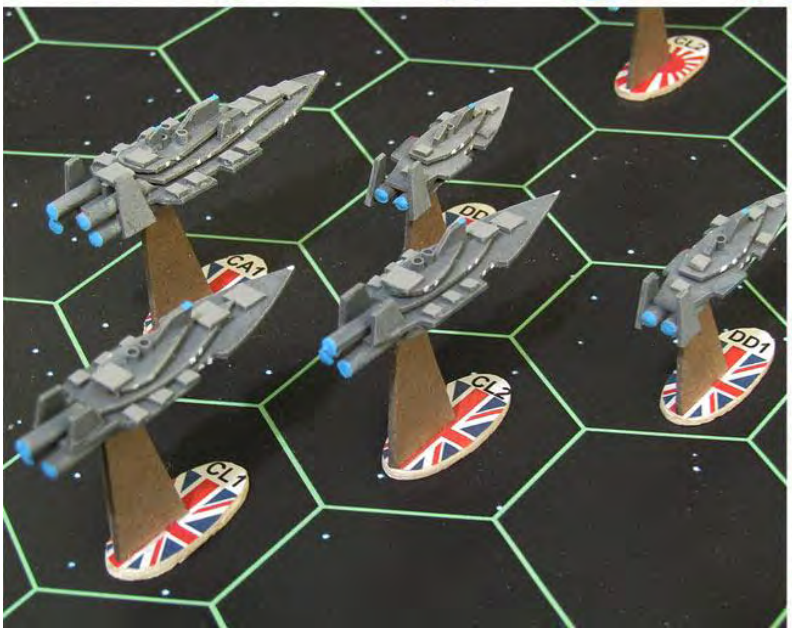

CV1
DD1
DD2
DD3
S2
B2
F6


CL2
CL1
CA1
DD2
DD1


CL1
DD1
CL2
DD2




CA1
DD1
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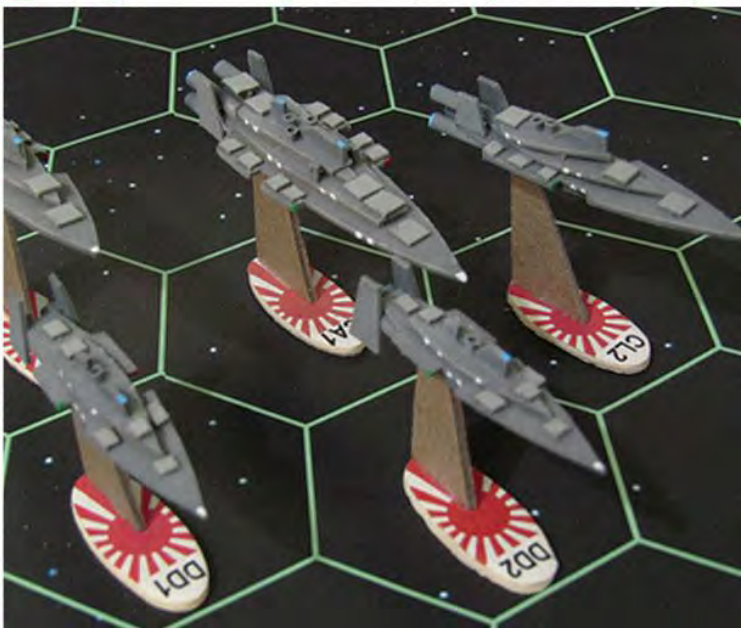
CL1


CA1
CL2
DD1
DD2