WARP SPEED! EXPANDED STARSHIP CREATION

Warp Speed! is the ultimate expansion of the starship rules found in the *Starfinder Roleplaying Game* inspired by the best in sci-fi literature, film, games and comics.

Blast off for the stars with an assortment of new starship weapons, frames, components and gadgets. Build an assortment of new starships, from heavily armed new classes of warship to dedicated hospital ships, or tool around the galaxy in a junk-built Bubble Car or your own personal Sauceriod UFO. Fly hyper-maneuverable light starfighters and Raiders capable of turning on a dime and blasting their enemies from any angle. Set sail aboard luxurious space Liners whose glittering 5-star accommodations include multi-species bars, exclusive bordellos and exotic gambling.

Breed living starships to serve ancient bio-mechanical empires, or soar the spaceways in magi-tech wooden galleons inspired by Jack Kirby's vision of Asgard! Design generation ships intended to cross the galaxy to a new future, or vast cosmic fortresses equipped with the *Worldbreaker* – a particle beam capable of vaporizing entire worlds! Prey on unlucky vessels while equipped with revolutionary *Cloaking Devices* or stun your enemies with mind-bending *Matrix Weapons*.

In addition, optional rules for fuel consumption, life support requirements and FTL communications take the simplistic, space-opera rules that are the *Starfinder Roleplaying Game* default firmly into the realm of hard sci-fi. Cross time and reality with Time Drives capable of jaunting through centuries in the blink of an

STARFINDER COMPATIBLE

Written by Chris A Field

eye, or fire up your Dimension Drive and explore the infinite possibilities of the Multiverse.

A UNIQUE PARTNERSHIP

This product was produced in conjunction with Otherverse Games. Rather than producing this sourcebook independently, Otherverse Games chose to partner with LPJ Designs to take advantage of their print on demand capabilities, superior layouts and the fact they already have credibility under the *Starfinder Compatibility License*, while Otherverse Games has always focused on putting out more adult products under the genetic OGL license. This renewed partnership's a natural one, as Louis Porter Jr. published many of Chris A. Field's first offerings as a role playing game designer, and was instrumental in forging his first alliances in the industry.

NEW STARSHIP FRAMES

These new starship hull designs join those found in the *Starfinder Core Rulebook.* Some represent size-variant designs intended for a specific purpose beyond those basic ships, others have truly unique design schemes.

DRONE

Drones are tiny, autonomous starships capable of independent operation. They can be used as patrol craft, self-directed space mines, recon craft or released as flankers or protectors by a larger starship. Fitted with a miniature Hyperdrive, a Drone frame can serve as a deep space probe.

Drones must be equipped with at least a Mark I Mononode computer system or better.

Size Tiny
Maneuverability perfect (+2 piloting, turn 0)
HP 15 (increment 5) **DT** – **CT** 3
Weapon Mounts forward arc (1 light)
Expansion Bays –
Minimum Crew 0 **Maximum Crew** 0
BP Cost 3

RAIDER

Raiders are a purely military frame class. These nimble little vessels carry a massive assortment of weapons.

Size Tiny
Maneuverability perfect (+2 piloting, turn 0)
HP 35 (increment 5) **DT** – **CT** 7
Weapon Mounts forward arc (3 light, at least one must be a tracking weapon), aft (1 light), turret (1 light)
Expansion Bays -
Minimum Crew 1 **Maximum Crew** 2
BP Cost 12

BUBBLE CAR

Bubble Cars are scratch-built, quirky vehicles built by lone geniuses and/or exceptionally smart crackpots. Built out of junkyard scrap, duct tape and miles of knotted wire, Bubble Cars boast insanely overpowered weapons, which should tell you something about the adventures their pilots get tangled up in.

Size Tiny
Maneuverability average (+1 piloting, turn 2)
HP 35 (increment 5) **DT** – **CT** 7
Weapon Mounts forward (1 heavy, 1 light), turret (1 light)
Expansion Bays 1
Minimum Crew 1 **Maximum Crew** 4
BP Cost 15

SAUCEROID

This flattened disk-shaped vessel resembles the prototypical UFO. It is fragile but agile as a dragon fly. Its weapon selection emphasizes unpredictability and flexibility, with most arms mounted on gimbaled turrets capable of rotating around the vessel's circumference.

Size Large
Maneuverability perfect (piloting +2, turn 0)
HP 90 (increment 15) **DT** – **CT** 18
Weapon Mounts
Forward arc (1 light), port arc (none), starboard arc (none), aft arc (none), turrets (2 heavy, 2 light)
Expansion Bays 4
Minimum Crew 2 **Maximum Crew** 8
BP Cost 22

RETRO-ROCKET

This cylindrical vessel maneuvers on short fins and takes off and lands vertically. These vessels are often decorated with eye-catching colors, gleaming chrome fixtures, and diamond-density portholes. What they lack in firepower, they more than make up for in style.

Size Large
Maneuverability average (+0 piloting, turn 2)
HP 120 (increment 20) **DT –** **CT** 24
Weapon Mounts
forward arc (1 heavy, 2 light), port arc (1 light), starboard arc (1 light), aft arc (2 light)
Expansion Bays 3
Minimum Crew 4 **Maximum Crew** 16
BP Cost 25

EXPEDITOR

This heavily armed hull is an ideal fartrader, especially for merchants who deal in dangerous goods or head away from civilized space in the course of business. This hull makes a capable cut-rate destroyer if pressed into military service.

Size Large
Maneuverability average (+0 piloting, turn 2)
HP 150 (increment 20) **DT –** **CT** 30
Weapon Mounts
forward arc (2 heavy), port arc (1 light), starboard arc (1 light), aft arc (1 light), turret (1 light)
Expansion Bays 4
Minimum Crew 6 **Maximum Crew** 20
BP Cost 30

BARQUE

Barques are elegant vessels with luxurious accommodations that often serve as pleasure craft for the ultra-wealthy. They can be turned to commercial use as luxury transports, flying bordellos, or as exclusive mobile clubs or casinos.

Size Large
Maneuverability average (+0 piloting, turn 2)
HP 120 (increment 20) **DT –** **CT** 24
Weapon Mounts
forward arc (1 heavy, 2 light), port arc (1 light), starboard arc (1 light), aft arc (1 heavy, 2 light)
Expansion Bays 6, at least 2 of which must be assigned as Guest Quarters or Gaming Tables
Minimum Crew 6 **Maximum Crew** 20
BP Cost 35

INSECTOID

Modeling starships after insect anatomy is a popular choice throughout the galaxy, producing tough, well-armed cruisers. Insectoid starships resemble enormous stylized scorpions with weapons modules in the forward mounted 'pincers' and a

pair of turrets rising above the hull in the stinger-like conning tower. The hulls of these vessels are gleaming metal reinforced with glistening chitin.

Size Large
Maneuverability average (piloting +1, turn 2)
HP 120 (increment 20) **DT –** **CT** 24
Weapon Mounts
forward arc (2 heavy), port arc (1 light), starboard arc (1 light), aft (1 heavy, must be a tracking weapon), turret (2 light)
Expansion Bays 4
Minimum Crew 3 **Maximum Crew** 9
BP Cost 35

HOSPITAL SHIP

Dedicated hospital ships are protected from attack by galactic law and tradition. These huge vessels are instantly recognizable in their silvery-white and crimson livery – plus, their transponder beacon is equally distinctive. Hospital ships cannot, by law, engage in combat. They are allowed a few low-grade weapons, mostly to protect against outlaws and pirates or blast apart asteroids in their path.

Size Huge
Maneuverability clumsy (-2 piloting, turn 4)
HP 120 (increment 20) **DT** 5 **CT** 24
Weapon Mounts
forward arc (1 light), turret (1 light)
Expansion Bays 12, at least eight of which must be any combination of Guest Quarters, Cryo-Sleep Chambers or Medical Labs
Minimum Crew 24 **Maximum Crew** 72
BP Cost 50

LINER

Liners are slow but luxurious space-going palaces, that can carry hundreds of passengers in style and comfort. Captains looking to increase their profits can rent out the lower decks for steerage-class passengers who are treated only a little better than cargo.

Size Huge
Maneuverability poor (-1 piloting, turn 3)
HP 160 (increment 20) **DT** 5 **CT** 32
Weapon Mounts
forward arc (1 heavy), aft arc (1 heavy), turret (2 light)
Expansion Bays 12, at least 6 of which must be assigned as Guest Quarters
Minimum Crew 20 **Maximum Crew** 50
BP Cost 60

VAULT SHIP

Vault Ships are blocky, unattractive starships sheathed in multiple layers of ultra-dense armor. These vessels are responsible for transporting the most valuable and/ or dangerous cargos in the galaxy, and they're fitted with armaments to match. Effectively the spacer equivalent of an armored car, their handling is exactly what you'd expect.

Size Huge
Maneuverability clumsy (-2 piloting, turn 4)
HP 200 (increment 50) **DT** 10 **CT** 40
Weapon Mounts
forward arc (1 capital), port arc (2 heavy), starboard arc (2 heavy) aft arc (1 heavy, 1 light) turret (3 light, at least one of which must be a tracking weapon)
Expansion Bays 8, at least 4 of which must be assigned as Cargo Holds, Smugglers Compartments or Brigs
Minimum Crew 10 **Maximum Crew** 40
BP Cost 75

SALVAGER

This massive freighter is dedicated to deep space salvage and reclamation. Some of these ships reclaim and recycle destroyed starships or orbital debris, while others make a living scavenging xeno-archelogy sites for profitable relics.

Size Gargantuan
Maneuverability poor (-1 piloting, turn 3)
HP 240 (increment 30) **DT** 10 **CT** 48
Weapon Mounts
forward arc (1 capital, 2 heavy), port arc (3 heavy), starboard arc (3 heavy), turret (2 light)
Expansion Bays 24, which must include at least 8 contiguous Cargo Holds. Alternatively, a Refinery and Ram Scoop combination can meet this requirement, in which case the vessel is kitted out as a Refining Ship.
Minimum Crew 75 **Maximum Crew** 200
BP Cost 150

GRENADIER

This well-armed military hull is roughly cylindrical, and like the warships of Earth's "Age of Sail" most of its weapons array are fired from port and starboard arcs. These ships come abreast of their prey and unleash devastating broadside barrages.

Size Gargantuan
Maneuverability average (+0 piloting, turn 2)
HP 280 (increment 40) **DT** 10 **CT** 56
Weapon Mounts
forward arc (2 heavy), port arc (1 capital, 3 heavy), starboard arc (1 capital, 3 heavy), aft arc (2 light), turret (4 light)
Expansion Bays 8
Minimum Crew 100 **Maximum Crew** 400
BP Cost 165

GENERATION SHIP

This massive arc is the size of a small planetoid, and it carries a vast breeding population of colonists, engineers and their children to a new home on some distant world.

Size Colossal
Maneuverability clumsy (-2 piloting, turn 4)
HP 400 (increment 50) **DT** 15 **CT** 80
Weapon Mounts
forward arc (2 capital, 2 heavy), port arc (3 heavy), starboard arc (3 heavy), aft arc (2 capital, 2 heavy), turret (4 light)
Expansion Bays 30, at least 15 of which must be assigned as Guest Quarters or Cryo-Sleep Chambers
Minimum Crew 250 **Maximum Crew** 1,000
BP Cost 250

STARSHIP THEMES

Themes are modifications that can be added to some or all of the basic Starship Frames described in the ***Starfinder Roleplaying Game*** and in this sourcebook. Starship themes function much like a creature template would, giving a starship unique advantages and disadvantages, altering the frame's basic statistics and modifying its cost.

Adding the right theme might transform an ordinary 'hard-tech' starship into a living, symbiotic vessel, a magical galleon of Yggdrasil-wood, sailing the dark between the stars, or even stranger things. No ordinary shipyard had anything to do with the construction of these fabulous or terrifying alien crafts!

You may add more than one Theme to a given starship. Modifiers, especially modifiers to Cost, are cumulative. The final combination should make sense, at least in your campaign.

The following Starship Themes are included in this sourcebook.

- ***Bio-Mechanical***
- ***Junker***
- ***Stealth-Rigged***
- ***Yggdrasil Wood***
- ***Undead***

BIO-MECHANICAL STARSHIPS

These starships blend living tissue and mechanical systems, creating a starship that is as much creature as it is machine. Rather than building a starship, specialized organisms that thrive in deep space are grown to perform the functions normally assumed by unliving machines.

Bio-Mechanical Starships might be hideous conglomerations of flesh and steel, amorphous blobs soaring through the mysterious cosmos, elegant and insectoid sculptures of gleaming, pearlescent chitin, or darkly majestic star-tombs whose ribbed passages host innumerable horrors.

HEALING FACTOR (EX)

Bio-Mechanical Starships can heal themselves over time. Bio-Mechanical Starships recover 10% of their base Hit Point total at the beginning of every second Engineering Phase.

Severe system damage repairs itself over time, even without outside assistance. Systems that have been completely destroyed do not regenerate naturally. Wrecked systems become Malfunctioning in 24 hours; Malfunctioning systems become Glitched in 12 hours. Glitched systems are restored to full function in 6 hours.

BIO-ENGINEERING (EX)

It requires a Medicine check to perform any Engineer Actions aboard a Bio-Mechanical starship, rather than an Engineering check.

CREATURE TYPE (EX)

Bio-Mechanical starships are treated as a creature of either the Magical Beast, Aberration or Vermin type as well as a vehicle. This type is chosen when the ship is created, and cannot be changed thereafter. This means a Bio-Mechanical Starship can potentially be poisoned, sneak-attacked, or succumb to a disease, curse or other affliction.

Bio-Mechanical starships are vulnerable to effects targeting a creature of the chosen type. Treat it as a creature with Hit Dice equal to its Hull Points divided by 10, rounding down. Treat the Bio-Mechanical starship as if it had Saving Throw modifiers equal to 10 + its Tier.

SPECIAL

If both the Bio-Mechanical Starship theme and the Yggdrasil Starship theme are chosen, the resulting starship is treated as a creature of the Plant type instead.

REDUCED ARMOR (EX)

Bio-Mechanical starships are a little more fragile than comparable hard-tech starships. Reduce the starship's final AC by -2.

STATISTICAL MODIFICATIONS TO BASE FRAME

HP increase by +20 **DT** increase by +5 **CT** increase by +10
Expansion Bays add one Bay
Minimum Crew reduced by -2 to a minimum of 1
Maximum Crew reduce capacity by 20%, rounding down
Cost multiply base Frame cost by 1.50

JUNKER STARSHIPS

You came here in that thing? You're braver than I thought!

A Junker starship's ownership records have changed hands a few dozen times (at least) since it left drydock. Each owner has added their own modifications, replaced some parts to suit their own particular flying style, added some secret compartments or hidden weapons, and generally made a mess of the starship's innards. Junker starships aren't pretty, they probably aren't even legal to fly in the most regulated quadrants of the galaxy, and they aren't exactly reliable, but they will keep flying if their current owner shows them just a little bit of love.

GREMLINS ONBOARD (EX)

The Junker starship isn't what you'd call reliable. At the beginning of every starship encounter there is a 60% chance that one random ship system is Glitching, as if the vessel had suffered a critical hit. If the Junker starship has one or more ship system that is already Glitching due to actual damage (or a previous application of this quality), do not roll for a random glitch.

This modification can only be added to a Starship of Medium size or larger.

LUCKY SHIP (SU)

Once per day, prior to rolling any Push action during a shipboard combat round, a crew member aboard the Junker starship can gain a +1d6 luck bonus on the check. Alternatively, you can expend this benefit to gain a +2d4 luck bonus on *the Hold It Together* Engineering action.

STATISTICAL MODIFICATIONS TO

BASE FRAME

HP increase by +20 **DT** decrease by -5, if base frame DT is 10 or greater **CT** unchanged
Expansion Bays add 1d4 Bays, at least one of which must be a Smuggler Compartment (at no cost)
Minimum Crew unchanged
Maximum Crew unchanged
Cost multiply base Frame cost by 0.65

STEALTH-RIGGED STARSHIPS

Superior engineering methods and sensor-absorbent materials are married to top-quality ECM systems and stealth-tech to make a starship that is virtually invisible against the blackness of the sky.

REDUCED SIGNATURE (EX)

A Stealth-Rigged Starship is designed to fool most sensors and incorporates superior ECM software and hardware. Add +2 to the starships final TL.

SUPERIOR DEFENSIVE STEALTH (EX)

The Stealth-Rigged Starship is so radar-invisible it is virtually impossible to shoot down with anything more advanced than manually-targeted eyeball weapons.

The Stealth-Rigged Starship benefits from a 25% miss chance when targeted by any Tracking weapon. In the case of Quantum weapons, roll the miss chance individually for each attack.

STATISTICAL MODIFICATIONS TO BASE FRAME

HP decrease by 25%, rounding down **DT** unchanged **CT** unchanged
Expansion Bays reduce by one Bay
Minimum Crew unchanged
Maximum Crew reduce by half, rounding down, to a minimum of the minimum crew necessary to operate the vessel
Cost multiply base Frame cost by 2.0

YGGDRASIL WOOD STARSHIPS

These mystical star-craft are hand-assembled from mythic fall-wood collected from the Great Universal Tree, Yggdrasil. These vessels resemble the great galleons and corvettes of the *Age of Sail,* rather than a product of recognizable technology. This fragrant, mystical blond wood resembles ash, save that it is harder and stronger than any ash tree ever felled by mankind. More importantly, when stimulated by the lethal void and radiation of deep space, this wood generates a life-sustaining aura. Crew aboard such a vessel can stand exposed to the depths of space, or even the rainbow chaos of Hyperspace and feel nothing more than a faint chill.

REDUCED SIGNATURE (EX)

A Yggdrasil Wood starship is lower tech by default, and the graceful lines of a star-galleon are stealth-specced by default, with few angular surfaces to give a radar return. Add +1 to the starships final TL.

STAR SAILS (EX)

Yggdrasil Wood starships are hard to steer, with their complex system of occult rigging and star-sails, but are rewarding for those who truly master these crafts. Increase the final vessel's Turn rating by 1 (worsening it) but improve the vessel's modifier to Piloting by +1.

STATISTICAL MODIFICATIONS TO BASE FRAME

HP increase by +20 **DT** increase by +10 **CT** unchanged
Expansion Bays remove one Bay
Minimum Crew increase by +1
Maximum Crew increase by +1 only if base max crew is 1
Cost multiply base Frame cost by 0.80

UNDEAD STARSHIPS

Rather than titanium, aircraft aluminum and carbon nanotubes, Undead Starships are darker creations – things of bone, tanned flesh and the anti-life energies of the void itself. Some Undead starships resemble the mummified, ritually preserved corpse of some great beast, while others are cathedrals of bleached and gilded bone, etched with mystical runes.

THEOLOGICAL ENGINEERING (EX)

It requires a Mysticism (or Knowledge: Religion) check to perform any Engineer Actions aboard an Undead starship, rather than an Engineering check.

SURVIVAL AT THE COST OF THE CREW (EX)

If an Undead starship suffers a critical, roll twice to determine which shipboard system is affected. If either roll indicates Life Support is affected, that is the system affected by the critical.

CREATURE TYPE (EX)

Undead Starships are treated as a creature of the Undead type as well as a vehicle. Treat the starship as an Undead with Hit Dice equal to its Hull Points divided by 10, rounded down. The Undead Starship has conventional Undead immunities, and is treated as if it possessed a WILL Save equal to 10 + its Tier. Other saves are equal to 6 + its Tier.

STATISTICAL MODIFICATIONS TO BASE FRAME

HP unchanged **DT** increase by +10 **CT** increase by +10
Expansion Bays add one Bay
Minimum Crew reduced by -2 to a minimum of 1
Maximum Crew reduce capacity by 20%, rounding down
Cost multiply base Frame cost by 1.25

STARSHIP COMPONENT MODIFICATIONS

Adding these positive or negative qualities affects the cost and functionality of various starship components, such as Power Cores, Sensors or various grades of shield or weapon. You apply these modifications individually to each component, and might mix and match different types of component. For instance, you might have an Armor Defeating *railgun* mounted alongside a standard-issue *railgun*, or have a secondary power core to back-stop your Ship's Heart power core. You may add more than one modification to a system, provided the resulting combination makes sense.

POWER CORE MODIFICATIONS

These modifications can be added to a starship's Power Core.

ATMOS REQUIREMENT

By default, the Starfinder Roleplaying Game ignores the concept of having finite life support resources aboard a starship, and assumes the Power Core can generate a breathable atmosphere mixture indefinitely as long as it is functioning properly. Many advanced Power Core can electro-chemically 'crack' hydrogen molecules, building new oxygen molecules as needed, for instance. Earlier ship models aren't so fortunate, having to carefully store, control and ration every molecule of air their crew breathes.

COST MODIFIER

Reduce the BP Purchase Cost of the base Power Core by 25%, rounding down.

PERIOD

The consumable substances used by Power Cores with either the Atmos Requirement or Fuel Hungry modifications are measured in Periods. A Period is an abstract measure of resources used up by a vessel with the maximum listed crew in a given period of time.

- For Colossal starships, the Period is one week.
- For Gargantuan, Huge, Large or Medium starships, the Period is one month.
- For Small and Tiny starships, the Period is one day.

EFFECTS

Every Period of normal operations, the Atmos Requirement Power Core must access a supply of Atmos (atmospheric gases) to provide life support for the crew. (Larger than maximum crew loads cut Period proportionately, but smaller than average compliments can't stretch Atmos supplies much beyond the stated period.)

This Atmos gas mixture is bulky but fairly easy to store. Eight Periods worth of Atmos can be stored in one Expansion Bay. Atmos stores can easily be replenished on any world with a breathable atmosphere simply by harvesting the necessary gasses from the atmosphere, a process which requires 1d4 hours. A Period's worth of Atmos gas mixture can be purchased in any space-faring society for about 20-50 gp/crew member (sometimes less), with tanks swapped out or refilled in an hour or less.

CONSEQUENCE

If a starship goes a Period without replenishing its Atmos supply, on the next period all crew members are considered *exhausted* from atmosphere depletion. Any condition that would cause the crew to become *exhausted* or *fatigued* cause 1d6 hours of *unconsciousness* instead. At the end of a second Period without replenishment, the crew begins to suffocate.

A starship with an Atmos Hungry Power Core cannot provide a breathable atmosphere while on battery-backup after a Power Core failure.

FUEL HUNGRY

By default, the *Starfinder Roleplaying Game* rules handwave the issue of fueling and resupplying a starship. If you choose this modification, you make fuel economy a concern for your ship and your crew – but you get a break on the initial buy-in cost of your ship's Power Core.

COST MODIFIER

Reduce the BP Purchase Cost of the base Power Core by 50%, rounding down.

EFFECTS

Every Period of normal operations, the Fuel Hungry Power Core requires fuel and exotic volatiles worth the Power Core's PCU output x 100 credits.

These volatiles might consist of high-energy liquid or solid fuel, exotic xeno-minerals, such as the fictional *dylithium crystals* of Star Trek lore, exotic substances like dark matter or anti-matter, or setting specific substances such as Fuelon or Yahn. Whatever form they take, these resources are rare and hard to process, but readily available in most space-faring societies. A reserve Period's worth of fuel for a starship can fit into one Cargo Hold or similar storage unit.

If stranded on an undeveloped or low-tech world without access to normal resources, a Period's worth of fuel can probably be synthesized with a successful DC 20+1d6 Physical Sciences check and access to a science or synthesis lab. This check requires several hours.

CONSEQUENCE

If the Fuel Hungry starship goes a Period without refueling, it's performance degrades, as if the Power Core were Malfunctioning. This condition cannot be removed until the vessel refuels. If the Power Core is not refueled after a second Period, it ceases to function until refueled, effectively shutting down all systems dependent on that Power Core.

SHIP'S HEART

Your starship's core isn't a high-energy reactor system or exotic fuel furnace. Instead, the core of your vessel is a complex bio-mechanical organ that pulses something like radioactive blood through your starship's living veins and arteries.

This modification can be added to any starship equipped with the Bio-Mechanical Starship theme.

COST MODIFIER

Increase the BP Cost of the base Power Core by 25%.

EFFECTS

The Ship's Heart allows the starship to experience something like the adrenaline surges humanoids experience in moments of danger, maximizing performance for a very brief time. Once per day, during the Piloting Phase, the vessel's pilot can initiate a Heart Surge as a free action.

During the Heart Surge, the starship acts as ifs Power Core and Thrusters were undamaged, regardless of their current condition, so long as neither is Wrecked nor destroyed. The vessel's speed increases by +4 squares, and its Turn is improved by 1 (so a vessel that is normally Turn 4 acts as Turn 3).

Additionally, all forward arc and turret weapons gain +2 to hit and inflict an additional 20% worth of damage on a successful hit.

The Heart Surge remains in effect until the beginning of the next Piloting Phase.

At the end of the Heart Surge, the starship's Ship's Heart Power Core begins Glitching as if it has suffered critical damage. If already damaged, the damage worsens by one step. If the Power Core was Wrecked, it is completely destroyed when the Heart's Surge ends.

COMPUTER MODIFICATIONS

These modifications can be added to a starship's Computer.

ANALOG COMPUTERS

The electronics on your ship are extremely crude, and you do most of the necessary calculations for star-travel longhand. Perhaps the ship is a product of an extremely primitive space program, or perhaps the designer just went for ultra-reliable, field-repairable, radiation resistant, idiot proof tech that can really take a pounding over more delicate modern electronics. It happens. In the *Otherverse America* reality, the Stonecutter Mercantile Sphere conquered half the known galaxy with starships whose electronics were cruder than what humanity threw into space during the early days of the Apollo program.

This modification can only be added to the Basic Computers. The starship cannot have Sensors better than Budget Short Range. You cannot install either Anti-Hacking Measures or Computer Countermeasures, nor any other upgrades/systems that depend on a high tech IT infrastructure to function. Analog starships cannot be equipped with any form of Harrier Type Hyperdrive.

COST AND PCU MODIFIERS

Unchanged. This is essentially a 'free' Modification, if you want to fly by abacus and laugh at enemy ships that try electronic warfare against you.

EFFECT

Your starship is completely immune to the effects of EMP weapons. Your Basic Computers cannot be hacked.

SHIP MIND AI

Your starship's computer core houses an advanced artificial intelligence capable of learning, independent operation, and even limited emotional response. Even at the lowest tier of AI, the ship's mind is intuitive and competent, even outside humanoid supervision. At the highest end, your AI is a self-aware sophont in its own right, with as much claim to possession of a soul as any biological lifeform.

COST AND PCU MODIFIERS

Double the BP cost of the base Computer.

Add +10 to the PCU requirement of the base Computer.

EFFECT

Your ship's Computer is a self-aware artificial intelligence and is treated as an NPC (or possibly even a unusual player character) rather than a simple machine.

THE SHIP MIND AS A CHARACTER

The Ship Mind is treated as a Construct with Hit Die equal to the starship's Hull Points divided by 10.

Generate mental ability scores (INT, WIS and CHA) normally for your campaign. Add the Computer's Mark to the Ship Mind's INT score as a racial ability score modifier. (For instance a Mark V Duonode Computer would have a +5 racial modifier to INT). These are the Ship Mind's permanent ability scores. Each time the starship would gain additional Hull Points for a Tier increase, the Ship Mind may add a +2 inherent bonus to any mental ability score of its choosing.

The Ship Mind gains 4 + INT modifier skill ranks per Hit Die, and treats all skills on the Mechanic list as class skills. The Ship Mind is proficient in any languages used by its creator or crew. It gains this amount of skill points each time its Tier increases.

As a Construct, the Ship Mind is immune to mind-affecting abilities, but cannot benefit from morale bonuses. Their personalities seem flat, unaffected and businesslike, rather than fully humanoid and naturalistic.

The Ship Mind is given an alignment when it is first brought on line, typically one similar to its creator or intended pilot. Only truly extreme circumstances, or actual reprogramming, will cause a Ship Mind to question or shift its alignment. If a Ship Mind AI is actually hacked, use the rules for *cyberhacking* found in **Technology Unleashed** (Otherverse Games, 2015).

UN-BRAKED AI

Lower-level AI is perfectly competent, but they lack the spark of true innovation. Higher-grade AI lacks the programmed 'brakes' that keep lesser machine intelligences from evolving into true sentients. They are a bit quirky, and sometimes harder to deal with, but tend to be a lot more capable.

If you apply the Ship Mind AI to a Mark VI or greater Computer system, the resulting Ship Mind is automatically Un-braked AI.

The resulting Un-braked AI now gains 6 + INT modifier skill ranks per Hit Die, and may choose a single Theme, such as Ace, Icon or virtually anything else!

The Un-braked AI becomes vulnerable to mind-affecting abilities but can benefit from morale bonuses, and is considered to have a true soul. A destroyed Un-braked AI can be raised or resurrected, if its soul is free and willing to return. Doing so restores a destroyed starship (its physical body) to operations. In this case the *raise dead, resurrection* spell, or similar magic is dramatically more expensive, requiring the expenditure of BP equal to ¼ of the starship's total build budget at the time of destruction, rather than the spell's typical material component.

Un-braked AI have more well-rounded, fully human-like personalities, and may change alignment over time as easily as any other intelligent being.

SHIP MIND AVATAR (SMA)

All Ship Minds can project a hard-light hologram or occult-tech phantasm as a remote avatar to physically interact with its physical body and the humanoids aboard. This Ship Mind Avatar functions identically to the Holo-Matter Avatar spell found in *Technology Unleashed*, but is a technology based effect rather than purely occult.

While projecting a SMA, the Ship Mind AI Computer provides no benefit to checks during the combat round, effectively working like a Basic Computer System during this time. Effectively, the Ship Mind's attention is divided. While manifesting a holo-matter avatar to climb into the gunner's seat, the Ship Mind simply can't concentrate on providing real time computer assistance to the rest of the ship's crew.

The Ship Mind can project its SMA anywhere within the starship and a very short distance outside (usually 10-20 ft at most), usually to the edge of a loading dock to supervise cargo off-load, perform hull maintenance or similar tasks.

VARIANT SHIP MIND AVATARS

ROBOTIC FRAMES

Rather than a holographic avatar, a Ship Mind might choose to be embodied in a mechanical frame instead. In this case, the Ship Mind Avatar is treated as an actual player character, probably a member of one of the most common robotic races in the setting. Mental ability scores are determined, as above, while the variant SMA's physical attributes are generated normally for the campaign. In a standard *Starfinder Roleplaying Game Campaign,* the resulting embodied consciousness is technically an Android, but if you're using Otherverse Games races, the embodied consciousness might be treated as a Star Droid, Synth, Bulk, Erobot, Full Conversion Cyborg or other mechanoid, like as a POETICA or Battlechanger, instead.

While active in their physical frame, the Ship Mind can adventure with fellow characters, and cannot provide a bonus during starship combat, as their mind is mostly occupied with running their frame. The Ship Mind's Frame is in constant wireless communication with the starship, provided they are on the same plane and planet. If moved farther than this, the AI becomes inactive, and the Frame effectively becomes unconscious. For the Ship Mind's consciousness to return to the starship, it must rest the frame in a specially designed storage cell. Returning its mind to the starship, or re-inhabiting the Frame, is a full round action. While the Ship Mind's consciousness is within the starship's computers, its Frame is inert and unconscious

If the Frame is destroyed, the Ship Mind's consciousness returns to the starship without harm, other than the loss of its Frame. A lost Frame can be rebuilt or replaced, but this is a pricy and difficult process that takes days or weeks of work.

OPTIONAL: STRANGER FRAMES

While the default assumption is that a high-tech computer program is embodied in a robotic body, an occult-tech or purely magical Ship Mind might embody itself in a stranger Frame. A Yggdrasil Wood starship with a mystical Ship Mind might embody itself as a Nyiad. An Undead skull-fire cruiser might embody itself in a zombie-like Frame, or even as a Neverborn character. At the game master's discretion, the Ship Mind might choose virtually any creature as its Frame.

Aside from the specifics of its form and powers, this option functions pretty much as above. If the chosen Frame is especially unbalancing or significantly above the campaign's power level, the game master might assess a Build Point 'tax' on the option, ranging from 2-3 BP for minor power boosts, to 80+ BP in the case of truly abusive combinations like an adult dragon Frame commanding a star-destroyer.

BATTLECHANGER SHIP MINDS

A Battlechanger-centric campaign can use the *Starfinder Roleplaying Game's* starship construction rules rather than the shorter and simpler alt-mode design rules. A character with a starship alt-mode can be modeled nicely by building a starship of a Tier and size agreed by the game master and player. If the player character Battlechanger is effectively the Brainmaster or Enginemaster partner of a larger, non-sentient starship, the relation between vessel and robot partner can be simulated with the Ship Mind Avatar relationship mentioned above. Otherwise, the starship and the Battelchanger are one and the same, with the Battlechanger reassuming its true, robotic from after its passengers and crew have disembarked.

GAME RULES

The SMA is treated as a Medium or Large Construct with the smartlight and usually the technological subtype. It may have other subtypes at the game master's option, reflecting the race of its creator. For instance, an Elven Ship Mind might have the Elf subtype, a Battlechanger SMA the Battlechanger subtype, and so on.

While manifested the SMA has KAC and EAC 10 + its size modifier + its DEX modifier. It has a single Hit Point.

If destroyed, the SMA avatar is destroyed, which does not damage the Ship Mind AI itself in any way. The AI can form a new SMA as a full round action.

The SMA is considered to have a Base Attack Bonus equal to the starship's Tier, and an effective STR score of 10 (+0). It is proficient with simple and martial weapons and with ship-mounted weapons. The SMA has a DEX modifier equal to 10 + the Mark of the Computer, so a Mark V Duonode Computer

would have a DEX 15 in SMA form. The SMA has no CON score.The SMA uses the Ship Mind AI's mental ability scores.

SHIELD MODIFICATIONS

These modifications can be added to a starship's Shields.

SCHRODINGER SHIELDING

Schrodinger-grade Shielding uses quantum superpositioning and uncertainty theory to spoof Quantum weapons. Less technically, they keep you alive even against those weird-science weapons that get two chances to kill you.

COST AND PCU MODIFIERS

Double the BP cost of the base Shields.

Multiply the PCU requirements of the base Shields by 1.25.

EFFECT

Negate the effects of Quantum weapons used against the Starship as long as Schrodinger Shielding is active. If any arc of shielding is reduced to 0 Shield Points, this benefit is lost until all shields regenerate to full strength.

THRUSTER MODIFICATIONS

These modifications can be added to a starship's Thrusters.

HYPER-MOBILITY T-CLASS THRUSTERS

Vectored thrust nozzles and pneumatic maneuvering jets cover every inch of your tiny starfighter, taking full advantage of its low mass. Your starship can manipulate its momentum, redirect thrust and change orientation with impossible dexterity.

This modification is exclusive to any T-Class (Tiny) Thrusters and cannot be added to larger scale Thrusters.

COST AND PCU MODIFIERS

Add +2 BP to the BP cost of the base Thrusters.

Add +5 to the PCU requirements of the base Thrusters.

EFFECT

As long as the Hyper-Mobility T-Class Thrusters are functional, the pilot may use the *Flip and Burn* Stunt without making a pilot check.

FIRE PHOENIX CLASS THRUSTERS

These ultra-high energy occult-tech Thrusters sheathe the starship in a spectacular corona of energy, and for brief periods, can completely translate the vessel and those aboard into a plasma state. The starship becomes a blazing firebird, burning hotter than the core of a main sequence star, capable of burning enemy starships out of the heavens just by passing near.

This modification can only be added to T-Class (Tiny), S-Class (Small) and M-Class (Medium) Thursters and cannot be added to larger scale Thrusters.

COST AND PCU MODIFIERS

Triple the BP cost of the base Thrusters.

Add +20 to the PCU requirements of the base Thrusters.

EFFECT

Whenever a starship with these modified Thrusters equipped successfully performs the *Fly-By* Stunt in starship combat, the enemy starship suffers 2d6 points of damage per size category of the ship.

WEAPON MODIFICATIONS

These modifications can be added to a starship's Weapons.

ARMOR DEFEATING WEAPON

Superior firepower and targeting allows these specialized military-grade weapons to hit targets where the armor is weakest.

COST MODIFIER

Add +3 BP to the BP Cost of the base Weapon.

EFFECT

The Armor Defeating Weapons treat the AC of a target vessel as if were -5 lower.

HEAVY GRADE WEAPON

More firepower's a beautiful thing, as long as it's not being fired at your starship.

COST AND PCU MODIFIER

Add +5 BP to the BP Cost of the base Weapon.

Add +10 to the PCU requirements of the base Weapon.

EFFECT

The modified weapon inflicts 50% more damage than a standard weapon of its type on a successful hit.

SHIELDEATER ENERGY WEAPON

Shieldeater weapons use exotic energy matrixes to destabilize energy shields. A bolt of energy from this weapon 'infects' the ship's forcefield and degrades all areas of the forcefield, rotting it like mold on bread.

Only direct fire energy weapons can gain the Shieldeater Modification.

COST AND PCU MODIFIER

Add +6 BP to the BP Cost of the base Weapon.

Add +8 to the PCU requirements of the base Weapon.

EFFECT

When a Shieldeater Energy Weapon damage a target's shields, all arcs of the shield take equal damage from the attack.

MULTISTAGE WEAPON

Projectiles of this type have several staged boosters that are ejected for increased acceleration as the missile homes in on its target.

Only tracking projectiles can gain the Multistage Modification.

COST MODIFIER

Add +4 BP to the BP Cost of the base Weapon.

EFFECT

After crossing at least 6 hexes in route to the target, the Multistage missile loses two damage dice but gains a +4 bonus on its attack roll. If the Multistage missile crosses at least 12 hexes in route to the target, the Multistage missile loses an additional two damage dice but gains a total +8 bonus on its attack roll. This weapon always at least inflicts one dice worth of damage if it hits.

NEW WEAPONS AND SPECIAL PROPERTIES

The following new special weapon property is in addition to those found in the *Starfinder Core Rulebook*.

PROPERTY: SPHERE

A weapon with this property affects all targets within range. The gunner requires no gunnery check against any target, as they are all affected by the weapon. Roll damage only once for all targets. Critical damage is determined by each target's Critical Threshold. The weapon cannot avoid affecting any allies within its range, nor can it affect any target more than once.

CHAFF LAUNCHER

Small drone missiles explode into a shower of highly radar reflective shards that hang in a tight orbit, deflecting incoming missiles.

You can fire a Chaff Launcher as a free action during the Piloting phase as well as during the Gunnery phase. Select a hex within two hexes of your starship. The Chaff missile detonates in this hex. For one round of starship combat, all Tracking weapons that pass through this hex suffer a -10 penalty on their attack roll to maintain lock on the target vessel's TL. This includes weapons fired by allied starships.

DEATH BLOSSOM AND DEATH SEED

Weapons of this poetically named class consist of a panoply of cannon and energy weapon emitters placed across the hull, as well as a fire-link control system that intergrates liberal amount of gunspray from other ship-mounted weapons as well as a thruster override system. The basic principle behind this class of weapon is to spin the starship in a wild corkscrew while firing every single weapon you have.

DECOY MISSILES

These tiny missiles include a pre-programmed evasion protocol, high powered thrusters and powerful transponder broadcasting a false signal profile resembling that of the launching starship.

Decoy Missiles can be fired as a free action during the Piloting phase as well as during the Gunnery phase. Select a hex within 30 hexes of your starship. The Decoy Missile takes a meandering course to that hex, turning in a random direction every four hexes traveled. The Decoy Missile travels for up to 3 rounds or until destroyed.

Any Tracking weapon that passes within 6 hexes of a Decoy Missile must make an attack roll against its intended target TL +5 to continue on course to target. Failure indicates it tracks to the Decoy Missile instead and is destroyed.

FORCED JAUNT CANNON

Requires Dimension Drive

What's the best way to defeat an enemy you can't reason with, can't outfight, can't outshoot or just can't kill? Dump the bastard in somebody else's universe and make it their problem. The Forced Jaunt Cannon weaponizes the exotic energy matrix produced by the ship's Dimension Drive and fires it at an enemy ship. That starship is sheathed in a sickly glow of transdimensional light and than – POOF! It's exiled from reality.

The Forced Reality Cannon can only affect a starship or other target of the same size category of your vessel or smaller. On a successful hit, the target is dumped into some random alternate dimension or plane. Each FJ Cannon deposits all targets hit over the course of its function onto the same random plane, which the creator has no real control over. Firing this weapon is considered to fire your Dimension Drive as well.

HEAVY MINING EQUIPMENT

An array of long, articulated tendrils, white-dwarf matter tipped drills, anti-matter cutters and borers dangle from the starship. This intimidating array of tools is designed to slice through the outer crust of comets, asteroids and small moons in search of valuable ores and minerals. They're cumbersome and clumsy, but can wreak havok on a nearby starship in a pinch.

GAME RULES

Heavy Mining Equipment is treated as a short range weapon, but it cannot 'fire' beyond maximum range. Heavy Mining Equipment is clumsy, and suffers a -5 penalty on attack rolls when used against a mobile target. Heavy Mining Equipment also functions as Manipulators.

Heavy Mining Equipment functions much as a Ramscoop, in that each hour of mining produces one unit of fuel, as well as consumables that can be refined into valuable trade goods inside a Refinery module. Mining inflicts massive surface damage to the asteroid or moon being mined, and long term mining can wreck environmental havoc on a living world. Small comets, asteroids and micro-planetoids are destroyed – pulverized – by long-term mining.

RELIQUARY OF VENGEANCE

Gargantuan and Colossal starships only

A large portion of the starship's free space is given over to a vast and ornate cathedral housing a particularly infamous holy or demonic relic. The deities this vessel is dedicated to protect the starship, lashing out with divine fury when the vessel is sorely wounded.

GAME RULES

A Reliquary of Vengeance is not directly under the player's control. It is effectively an automatic weapon, that fires as a free action anytime the vessel suffers a Critical Hit. This attack roll is made at the gunner's attack bonus, but cannot be enhanced by Captain actions. There is no limit to the amount of attacks a Reliquary of Vengeance can make in a particular starship combat round. Even if the vessel is disabled or destroyed, the Reliquary of Vengeance still makes one final attack before destruction.

MATRIX WEAPONS

Matrix Weapons are psychic weapons that attack a vessel's crew rather than blowing pieces off its hull. These mental weapons infiltrate the consciousness of the target vessel's crew, dropping them into an intense dreamlike state. In this state, the crew experience a procedurally generated simulated life as an average member of a humanoid race of the designer's choice. An entire lifetime passes for those in the simulation, from birth through childhood and adolescence, climaxing in adulthood and eventual death from age, seeming to span decades though the dreams occur in only seconds of real-time.

GAME RULES

All creatures aboard a target starship must succeed at a WILL Save or succumb to the Matrix Weapon. For a *Sim Life Matrix* the base WILL Save DC is 15 + the vessel's Computer Mark rating. For example, a starship equipped with a Sim Life Matrix and a Mark II computer has a DC 17 Will save. Those who fail their saving throw cannot take actions for the next starship round. Each creature aboard the target vessel makes their own saving throws against the Sim Life Matrix; this is a mind-affecting effect.

Black Mercy Matrix Weapons are more insidious mind weapons. The procedurally generated sim reality is more personal, incorporating elements from the victim's real history. The simulated life is idyllic, and to escape from the simulation, the dreaming victim must neglect, harm, betray or slaughter those they care are about. The WILL Save DC is 20 + the vessel's Computer Mark rating. Whether the victim succeeds or fails at the WILL Save against the *Black Mercy Matrix Weapon* that character cannot benefit from morale bonuses for 24 hours after being exposed to the Black Mercy weapon.

Light Weapons							
Weapon	Type	Range	Speed in Hexes	Damage	PCU Requirement	BPU Cost	Special Properties
Chaff Launcher	Direct Fire	2 hexes	-	None	2	4	Limited Fire (5)
Matrix Weapon, *Sim Life*	Direct Fire	Short	-	None	8	10	Limited Fire (3)
Heavy Weapons							
Weapon	Type	Range	Speed in Hexes	Damage	PCU Requirement	BPU Cost	Special Properties
Death Seed	Direct Fire	Short	-	6d6	40	30	Limited Fire (1), Sphere
Decoy Missile	Tracking	30 hexes	12	None	4	6	Limited Fire (5)
Matrix Weapon, *Black Mercy*	Direct Fire	Short	-	None	14	20	Limited Fire (3)
Reliquary of Vengeance	Direct Fire	Long	-	8d6	12	40	-
Capital Weapons							
Weapon	Type	Range	Speed in Hexes	Damage	PCU Requirement	BPU Cost	Special Properties
Death Blossom	Direct Fire	Short	-	8d8x10	50	60	Limited Fire (1), Sphere
Forced Jaunt Cannon	Direct Fire	Medium	-	See Text	50	80	Quantum, Limited Fire (1)
Heavy Mining Equipment	Direct Fire	Short	-	2d6x10	24	32	Ripper
Worldcracker Particle Beam	Direct Fire	Long	-	2d6 million (approximately)	475	666	Line, Limited Fire (1)

WORLDCRACKER PARTICLE BEAM

Need a super weapon capable of vaporizing an Earth-sized planet in a single blast to make your moon-sized cosmic dreadnaught fully armed and operational? Give in to your hate and fire the Worldcracker.

Worldcracker Particle Beams are extremely deliberate weapons to aim and fire, but since they are designed to fire at planet-scale objects, fine accuracy isn't really needed. Worldcracker Particle Beams suffer a -10 penalty on their attack roll when firing at moving targets smaller than moon-sized, which includes many Colossal starships and stations of less spectacular mass.

HYPERSPACE VERSUS THE DRIFT

In mechanical terms, the Drift dimension, described in the *Starfinder Roleplaying Game* functions identically to Hyperspace as found in the *Heavy Future Campaign Setting*, or the Instant Transference (ITF) Corridor of the *Otherverse America Campaign Setting*. Travel times are measured in terms of relative, rather than absolute distance, and the rating of an engine can fractionate or multiply travel time. More details on how Hyperspace and the ITF Corridors differ from Drift space will be forthcoming in dedicated sourcebooks for campaign settings where those dimensions really matter.

For the purposes of this sourcebook, the term Hyperdrive Rating is used rather than Drift Rating. I'm avoiding using the term Drift in my campaign settings, as it implies some things about the cosmology that don't quite fit my campaigns. Probably more importantly, using the term "Drift" for warp-speed travel is unintentionally hilarious if you've watched *Pacific Rim*, or if you've been following James Roberts work on *Transformers* for IDW Comics.

Hyperdrive	Hyperdrive Rating	Minimum PCU	BP Cost	Maximum Starship Size
Bulk Hauler Slowdrive	0.25	100	20 x starship size	No maximum
Courier Class Racerdrive	3	90	25 x starship size	Small
Drive Musculature, Stardolphin Grade	1	60	2 x starship size	Large
Drive Musculature, Starflier Grade	2	85	4 x starship size	Huge
Drive Musculature, Harrier Type	0.75	30	2 x starship size	Small
Drive Musculature, Starwhale Grade	0.50	90	18 x starship size	No maximum
Harrier Type Drive, Foxtrot Class	2	100	20 x starship size	Huge
Harrier Type Drive, Sierra Class	1	250	25 x starship size	Gargantuan

NEW HYPERDRIVES

The following new engines are designed to propel especially large or massive crafts into Hyperspace. As with the engines already in existence, these drives have a cost in Build Points based upon the starship's size category.

Some drives have a fractional Hyperrdive Rating (such as 0.5 or lower). These exceptionally slow (but cheap and power-efficient!) Hyperdrives with a fractional rating divide, rather than multiply, travel time through Hyperspace. For instance, a 0.5 Hyperdrive would take 4 days to make a journey through Hyperspace that would take a standard 1 Hyperdrive two days to traverse.

Harrier Type Hyperdrives can enter or exit Hyperspace at will, without the requirement that the starship must remain stationary without conventional thrusters for at least one minute before the jump. These military grade Hyperdrives are exclusive to small, maneuverable fighters and patrol crafts. *Foxtrot Class* Harrier Type Drives are highly prized by smugglers and terrorists, not to mention legitimate military forces that prefer fast, swift assaults. *Sierra Class* drives are prohibitively expensive and are usually only placed on royal spaceships, headquarters ships and other capital starships ferrying galactic VIPs.

GAME RULES

A starship equipped with a Harrier Type Drive can enter Hyperspace without a long stationary period as a Stunt during the Piloting Phase. Doing so requires a Piloting check, with a DC equal to 20 + the starship's Tier. Failure indicates the jump is not made and the Hyperdrive becomes non-functional for 2d6 minutes.

Drive Musculature can only be installed in Bio-Mechanical starships. These drive engines use strange-matter impregnated organic systems to travel through Hyperspace. They can be eerily majestic, soaring on vast, animalistic wings, or rushing through the Void propelled by a miles long flagellum. Harrier Type Drive Musculature is incredibly fast and high-energy, beating at the void like a dragonfly's or humming bird's wings, flapping faster than the eye can follow.

NEW STARSHIP COMPONENTS

All these new systems can be added to a starship without using up an Expansion Bay, but some components are limited to starships of a particular size.

BULLET DRIVE

The Bullet Drive is a regenerating, one-shot acceleration device often used for launch assistance. Creative and desperate captains have also used their Bullet Drives for everything from desperate escapes, to suicidal ramming maneuvers or for that extra burst of high-G speed that can change a dogfight's outcome.

A Bullet Drive can be activated at the beginning of any Piloting phase. Once activated, it provides the listed boost to speed (a Bullet Drive T-8 gives an 8 hex boost, for instance). The starship moves its full speed plus the additional hexes provided by the Bullet Drive on this Piloting Phase. However, the vessel must move its full movement, crashing through any obstacles or hazard present, and cannot turn or take other Piloting actions. In addition the starship must move straight forward or straight up (as measured from the starship's dorsal surface), and cannot move diagonally.

Once fired a Bullet Drive must recharge for 24 hours before it can be used again. Multiple Bullet Drives cannot be fired simultaneously.

CLOAKING DEVICE

A ship-wide energy field bathes the vessel in exotic radiation that completely masks its radiation and ELINT signatures while shifting it far outside the visual spectrum. The starship

Cloaking Device	Shields Raised?	Invisible After Attack?	Activations Per Day	Maximum Cloaked Duration
Cloaking Device, Grade I (Kite)	No	No	1x/day	5 minutes
Cloaking Device, Grade II (Shrike)	No	No	1x/day	9 minutes
Cloaking Device, Grade III (Swift)	No	No	1x/day	13 minutes
Cloaking Device, Grade IV (Falcon)	Yes	No	2x/day	17 minutes
Cloaking Device, Grade V (Eagle)	Yes	Yes	3x/day	20 minutes

seems to shimmer against the stars for a second before vanishing completely!

While a Cloaking Device is active, the starship is completely invisible, and benefits from both *invisibility* and *machine invisibility*. Tracking attacks made against an invisible starship suffer a -20 penalty as do Perception checks and Computer Use checks to detect the vessel.

Each Cloaking Device can only be activated a specific number of times per day indicated by its grade, and each period of invisibility can be sustained for a number of minutes also determined by the grade. When a vessel equipped with a Grade I through Grade IV Cloaking Device attacks, it automatically becomes visible. A vessel equipped with a Grade V Cloaking Device may remain invisible after attacking. The vessel can deactivate its cloak at any time.

Grade I through Grade III Cloaking Devices require the ship's shields to be deactivated prior to becoming invisible, and automatically deactivates if the shields are raised. Grade IV and Grade V Cloaking Devices can function normally while the vessel's shields are active.

DIMENSION DRIVE
Gargantuan and Colossal starships only

Similar to a Time Drive, this massive device wraps the starship in a shimmering corona of energy that shunts the vessel into an alternate plane of being.

A Dimension Drive allows travel to an alternate dimension of the pilot's choice. It requires a successful Mysticism check to travel to alternate planes, such as the Astral Plane, an Elemental Plane or other known dimensions. It requires a successful Physical Sciences check to travel to alternate dimensions similar to mainline reality, cross dimensional barriers to other campaign universe, enter 'structural' dimensions such as Hyperspace that underpine physical reality, or travel within the Multiverse. There can be crossover between the skills, allowing different paths to the same dimension. Check DCs are set based on the relative danger and complexity of plotting the path and vary from DC 20 (to

known, fairly safe dimensions like the Astral Plane) to DC 45 or greater for truly obscure or risky destinations.

If the check is successful, the vessel jaunts to the chosen destination, appearing somewhere on that plane. If specific destinations within a plane were targeted, the vessel arrives in orbit around that destination. Failure wastes 6d6 hours of failed calculations and computer glitches as a failed course is programmed. The ship does not jaunt on a failure.

Dimension Drives require 1d6+3 days to recharge between dimensional jumps.

ERGONOMIC DESIGN
The starship is extremely well designed, with intuitive control surfaces and a layout that just…works. Even newcomers to the ship can easily find their way and perform their duties like veterans thanks to an elegant layout. Members of the crew can use Push actions as if they were one level higher than their actual level.

INTERGALACTIC ENTERTAINMENT STREAMING
Requires Grade III or IV FTL Transceiver or Ansible

Imagine a streaming entertainment service like Earth's *Netflix* or *Hulu* networks, save that it presents content from every intelligent culture in the galaxy. Some of the programming is transmitted on sensory wavelengths outside human perception, and some of it is likely incomprehensible to humanity, but this device is a great way to keep a crew entertained during long voyages.

MANIPULATORS
The starship is fitted with dexterous robotic arms, tendrils or low-intensity gravitic tractor beams (or a combination of the above) allowing the crew to manipulate objects in space from the comfort of their control panel.

Manipulators function identically to a weapon with the Tractor Beam quality, save they never inflict direct damage and are designed to manipulate cargo, explore or repair spaceborne

objects such as asteroids or satellites, and perform similar utility tasks. Manipulators have an effective range of 2 hexes. Performing skills via Manipulators (such as using the ship's robotic arm to repair an adjacent satellite) is possible, but difficult, imposing at least a -5 penalty on the check, or more at the game master's discretion.

MANIPULATORS, LOADING BEAM

Loading Beam Manipulators take the form of a gravitic tractor beam of cold silver light. While manipulating an object no larger than two size categories smaller than the starship, the Loading Beam Manipulator can be pulsed to teleport that object into the starship. The object must be within 1 hex of the

starship to be teleported in this manner. The teleported object appears in a location aboard ship chosen by the operator. Usually this is a cargo hold, but other destinations are possible. For instance, a badly wounded creature can be teleported directly to a medlab, while a dangerous creature could be teleported directly into a brig. Creatures unwilling to be teleported can resist the effect with a WILL Save (DC 15 + the starship's tier).

MULTIPROCESSOR NODE

Requires Ship Mind AI Computer System

A Multiprocesser Node helps a Ship Mind to multi-task more effectively. A Ship Mind equipped with this subsystem can manifest its Ship Mind Avatar while still functioning as a shipboard computer system, albeit at a reduced level. The Computer System functions as if it had one fewer Node while the SMA is manifested. For example, a trinode Computer System that is manifesting a SMA would be treated as a duonode system while the SMA is active.

NANITE REPAIR SYSTEM

A Nanite Repair System is the ultimate evolution of damage control technology. When a ship's system fails, or the vessel takes significant damage, legions of microscopic robots rush to repair the damage. The starship gains the ability to heal its mechanical systems as if they were living matter.

A Nanite Repair System automatically repairs an amount of Hull Point damage determined by the Nanite Repair System's grade at the beginning of each Engineering Phase. Higher grade Nanite Repair Systems can repair Malfunctioning and Glitched ship systems. The time required to repair a damaged systems is listed on the chart below. Only a grade V Nanite Repair system can restore Hull Points to a ship at negative HP, but not one that has been destroyed completely.

Nanite Repair System	HP Recovered/ Eng. Phase	Restore from Glitched	Restore from Malfunctioning
Grade I	1 HP/Eng. Phase	-	-
Grade II	3 HP/Eng. Phase	-	-
Grade III	5 HP/Eng. Phase	24 hours	-
Grade IV	10 HP/Eng. Phase	12 hours	24 hours
Grade V	20 HP/Eng. Phase	6 hours	12 hours

PANACHE

"Panache" is a short-hand term for that bit of unique ship-board culture that makes a particular starship stand out from the pack. Panache isn't a system or module installed into the vessel; instead it's a collection of memories, legends, traditions and ceremonies unique to one ship and one crew. The nominal 2 BP cost represents time and effort invested in developing this unique cultural touchstone.

GAME RULES

A starship can have one Panache, gaining the option for an additional Panache at 10th, 15th and 20th Tier. No starship may ever have access to more than 4 Panache. Each specific Panache provides a benefit (usually a conditional benefit) to the starship.

- *Absolutely Infuriating Captain* – If the captain succeeds at the Taunt action against at least 2 different vessels during starship combat, the captain gains a +5 morale bonus on checks to Taunt during the next starship combat encounter.
- *Better Part of Valor* – If you successfully escape from a starship encounter, the vessel gains a +1 morale bonus on gunnery rolls made from the aft arc; your aft shields (if any) are increased by +10 during the next starship combat encounter.
- *Bird of Prey* – If you destroy a starship in a combat encounter where you used your Cloaking Device, your vessel gains a +2 hex increase to its speed in your next starship combat encounter.
- *Chaff Happy* – If the starship is missed at least twice by a Tracking weapon that passes through Chaff during a starship combat encounter, your Chaff is not treated as a limited fire weapon during the next starship combat encounter.

- **Clean Sweep** – If the starship successfully hits every target it aims at during starship combat, it gains a +1 morale bonus on gunnery checks in its next starship combat encounter.
- **Crossing the Line** – If your starship enters the Vast (or otherwise leaves explored and civilized space), the starship gains a +2 morale bonus on all Piloting stunts in the next starship combat encounter.
- **Damn the Torpedoes** – If you only use forward arc and turret mounted weapons in starship combat, you gain a +1 morale bonus on gunnery rolls in the forward arc, and a +1 hex speed increase in your next starship combat encounter.
- **Hard Partiers**– If most of the crew wastes at least 1d6x100 gp in drunken debauchery and hedonism on a R&R stopover, they gain a +1 luck bonus to AC and TL in their next starship combat encounter.
- **Hot Shot Pilot** – If you successfully perform at least 3 Piloting stunts during a starship combat encounter, you gain a +2 morale bonus on Piloting checks in your next starship combat encounter.
- **Keep It Flying!** – If you successfully perform at least 3 Engineering actions during a starship combat encounter, you gain a +2 morale bonus on Engineering checks in your next starship combat encounter.
- **Money Pit** – Your ship is constantly leaking funds. If you sacrifice 1d6+1 BP to no meaningful effect when upgrading your ship, you gain 1 Starship Resolve point to be used in your next starship combat encounter.
- **Nice Shooting, Kid** – If you destroy at least 1 starship with a killshot from a turret mounted weapon during a starship combat encounter, you gain a +1 morale bonus on attacks from all turret mounted weapons during the next starship combat encounter.
- **Shields Up!** – If any one quadrant of your ship's shields are reduced to 0 during a starship combat encounter, when the ship's engineer uses the Divert action to increase power to shields, shields gain an additional number of shield points equal to 10% rather than 5% of the Power Core's PCU during the next starship combat encounter.
- **Slippery Bastards** – If your starship is missed by Tracking weapons at least 5 times during a starship combat encounter, its turn radius is improved by 1 (Turn 3 becomes Turn 2, for instance) during the next starship combat encounter.
- **Tyrannical Captain** – If the captain succeeds at a Demand action at least 5 times during a starship combat encounter, the Captain automatically succeeds at Demand actions during the next starship combat encounter.
- **Win When It Counts** – If the starship fails at least 5 Piloting action checks during a starship combat encounter, they gain a +4 morale bonus on Piloting checks during the next starship combat encounter.

PHASE MODULATOR
Requires Grade IV or Grade V Cloaking Device

Your cloaking device doesn't just render the ship visually invisible, it shifts your starship a few fractions of a second out of phase with local time. While cloaked, your ship is intangible and can pass through solid matter. The starship cannot pass through intense energy discharges, such as forcefields, other shielded or cloaked vessels, solar flares or suns, nor similar high energy hazards. While cloaked, the starship takes no damage from purely physical sources and only half damage from energy weapons. \

RO/RO CARGO DOORS
Dedicated cargo haulers usually have *roll on/ roll off* capacity, that allows bulkheads (or even the entire prow or stern of the vessel) to slide open to quickly load or offload cargo. A starship with this component can open cavernous doors into and out of their cargo holds and move goods in a fraction of the time of a vessel without this capacity. Only starships of Large size or greater can have this component.

SUPERIOR COMMAND AND CONTROL
Requires Carrier Frame, Solar Transceiver communications

The vessel is equipped with state of the art radar and telemetry systems that give allied fighter wings a major tactical advantage. All allied Small and Tiny craft gain a +1 competence bonus on gunnery checks as well as a +2 competence bonus to their TL when within 30 hexes of the starship. This bonus ceases if the starship is disabled, destroyed or stops transmitting.

TIME DRIVES
Time travel is extremely dangerous, both to the traveler and to the time-space continuum as a whole. It's also prohibitively expensive and requires a high-grade Power Core dedicated solely to the enormous power needs of a time jaunt. Typically, only prototype capitol ships of post-scarcity stellar empires are equipped with even the most rudimentary stardrives, as the costs and development time could bankrupt lesser civilizations.

THE BASIC RULES OF TIME TRAVEL

Time travel and the availability of Time Drives are almost entirely handled by game master fiat. Allowing time travel in a campaign unleashes a host of messy sci-fi issues, including causality loops and the worst kind of predestination paradoxes. Every time the characters travel time, they are effectively forcing the game master to design an entirely new campaign world only tangentially related to the prior campaign. Time travel allows clever players to circumvent virtually every problem in the campaign – to erase dangerous opponents in their infancy, to venture into the future to steal its secrets and superior technology, or rewrite history itself to suit their ends.

Use with caution.

That said, if the campaign can handle epic-scale sci-fi and you enjoy the mind-bending possibilities of cross-time adventuring, here are a few basic rules.

MEETING YOURSELF, TEMPORAL DUPLICATION AND OTHER PARADOXES

By default, a Time Drive allows its passengers to completely break reality in all sorts of fun ways. Here's some things you can probably do with a Time Drive, unless the game master explicitly stops you.

Effective tactical time travel pretty much gives you omniscience and time to learn every skill in the cosmos. Ever see *Groundhog Day*? Imagine that in a military sci-fi context.

Once you've got time travel, resources aren't a question. All of a sudden you can duplicate anything – the gods themselves, the campaign defining McGuffin, even your Time Drive, campaign-breaking, god-killing artifacts – with one-time jaunt. Need some spare cash? Trade in a temporal duplicate of your starship – after all, you've got infinite backup copies. Or just invent and market revolutionary technologies, if Scotty can 'invent' transparent aluminum in *Star Trek IV*, so can your PCs.

You can jaunt back 24-48 hours, meet your recent past selves and team up. Jump backwards again and there's even more of you, all equipped with identical starships, holding identical beliefs and near identical life stories (at least until your future self jumped back to meet you.) All of a sudden, one group of PCs in a starship capable of limited time travel are the admirals of an entire Armada of Past Selves. Got a genuine mad genius on your crew? Take a cue from *Rick Sanchez* and create a multiverse spanning government of all your alternate versions. (Temporal Duplicates are always considered NPCs who can change in grow in new directions in their new time

lines, while the crew that actually travelled through time remains the Player Characters.)

Go back in time and kick the ass of your worst nemesis. Your nemesis barely beats you? No problem, you retreat to lick your wounds and rearm for 6 months or so, then you jaunt back about 30 seconds after you left, and resume the battle against your now exhausted enemy. Repeat as necessary. There is not a creature in the campaign, including CR 30 abomination like *The Nemesis* (Horrors of the Known Galaxy), *Izanagi* (The Black Bestiary) nor lesser power-house threats like *Elizabeth Vose* (Secret Soldiers) who can stand up to a multi-pronged cross-time blitzkrieg.

Kill Hitler. Then jump back again and kill Hitler again, just because it's ridiculously satisfying. Then decide to establish a cross-time hunting tour business that goes back and kills Hitler repeatedly, across an infinity of alternate pasts, for fun and profit.

TIME DRIVE GRADES

A variety of different Time Drives exist, graded by the temporal distance they allow a traveler to cross. A **Dayspan Drive** allows a vessel to cross a few standard days, perhaps a few weeks of time. **Yearspan Drives** allow travel through years or decades. Conversely, a **Centuryspan Drive** allows the same vessel to cross hundreds or thousands of years of time. Finally, the top-tier **Aeonspan Drive** allows a traveler to hop across geologic time, crossing hundreds of thousands, perhaps even millions of years in a single jaunt. There is some overlap, of course. Both a *Dayspan* and a *Yearspan Drive* could project an equipped starship a month or so into the past. The difference is how much stress the trip puts on the drive.

A Flash Back Drive (detailed later) can be fitted to any sized starship. However, all other Time Drives must be fitted on a Gargantuan or larger vessel, due to the sheer bulk of the temporal reactor, field generators and other ultra-tech equipment necessary to breach time itself.

RECHARGE TIMES

It requires at least a day, sometimes several days, for a Time Drive to recharge after a jaunt. During this time it cannot be used. The minimum recharge period of any Time Drive is 24 hours. If a Time Drive is used to make a jump near the minimum potential of the Drive, use the minimum recharge period. For example, travelling back a day or less via a Dayspan Drive is considered a minimal use. However, the recharge period is doubled by each rough equal unit near its maximum. For a Dayspan Drive, this would mean that every month or two travelled through time would knock the Drive

Component	PCU Req.	BP Cost
Bullet Drive T-8	5	3
Bullet Drive T-10	10	4
Bullet Drive T-12	15	5
Cloaking Device, Grade I (Kite)	30	40
Cloaking Device, Grade II (Shrike)	40	55
Cloaking Device, Grade III (Swift)	60	70
Cloaking Device, Grade IV (Falcon)	80	90
Cloaking Device, Grade V (Eagle)	110	120
Dimension Drive	200	325 or more
Ergonomic Design	0	5x ship size
Intergalactic Entertainment Streaming	6	5
Manipulators	2	6
Manipulators, Loading Beam	14	20
Multiprocessor Node	15	10
Nanite Repair System, Grade I	5	15
Nanite Repair System, Grade II	10	30
Nanite Repair System, Grade III	20	45
Nanite Repair System, Grade IV	40	60
Nanite Repair System, Grade V	65	80
Panache (any)	0	2
Phase Modulator	125	200
RO/RO Cargo Doors	2	2
Superior Command and Control	15	30
Time Drive, Flash Back (Grade 0)	110	250 or more
Time Drive, Dayspan (Grade I)	150	400 or more
Time Drive, Yearspan (Grade II)	200	600 or more
Time Drive, Century Span (Grade III)	300	750 or more
Time Drive, Aeon Span (Grade IV)	450	1,000 or more

offline for an additional 24 hours of recharge and repair. Where, exactly, these temporal 'lines' get drawn is a matter of game master fiat. Just be aware you won't be able to fire your Time Drive again for at least a day, probably longer,

RELATIVE POSITION
All Time Drives fire in conjunction with the ship's conventional and FTL engines so the ship holds it's relative position in space during a time jaunt. That means if you are orbiting the 46th Century Earth when you activate your Centuryspan Drive to travel to Earth circa 1,776 CE, you will arrive in orbit above late 18th Century Earth, despite the fact the planet's position changed radically in the interim. Bypassing this basic safety precaution is suicidal, and a great way to have your starship reappear inside a planet, at the core of a star, or even worse, trapped forever in the void between galactic clusters.

THE SOLAR SLINGSHOT MANEUVER
A desperate stunt uses the massive gravity of a star at least as massive as Earth's Sun to hurl a Time Drive-equipped vessel farther back than the Drive can under its own power. If you don't have a main sequence star handy, the event horizon of a black hole works similarly. Effectively, the Time Drive equipped starship uses the star's immense gravity as a 'slingshot' to hyper-accelerate itself into the time stream.

Doing so requires a successful DC 30 + 4d6 Piloting check; the Pilot may add half the tier of their starship as an equipment bonus on this check. Success allows your Time Drive to function as if were one grade better: a *Yearspan Drive* is treated as a *Centuryspan Drive* for the duration of a single jaunt, for instance. If successful the vessel appears in close orbit around the star at the desired temporal destination. Failure means the crew doesn't live long enough to realize anything's gone wrong, as they are atomized by the star's photosphere.

THE FLASH BACK CLASS TIME DRIVE
A Flash Back Drive functions differently from other Time Drives. Other Drives physically send the starship into the past (probably creating Temporal Duplicates), while a Flashback Drive converts the equipped starship and all its passengers and crew into electrical data and then sends that ghostly data several seconds backward in time. As a collection of electrical impulses, the minds of the crew are shunted into the immediate past, where they effectively possess and overwrite the consciousness of their past selves. The result is a split-second of insight into the immediate future, a perfect awareness of what the next few choices will bring.

In game terms, the Flash Back Drive reverts the starship and all characters aboard to the exact condition they were in at the beginning of the preceding starship combat round. All characters aboard 'remember' everything they experienced prior to the Drive firing. While the characters aboard the starship are free to choose new actions on this 'run-through', most creatures outside the starship will confirm their actions and choices as closely as possible to their actions prior to the Drive firing. They may take new actions if the characters on your ship take dramatically different actions based on their foreknowledge, but if the characters on your ship take similar actions, things likely turn out similarly to events before the Flash Back Drive fired.

NEW EXPANSION BAYS

BAR

Depending on what the owners want, this space can be a relaxing joint where a hardworking spacer can enjoy a few quiet drinks, or a throbbing nightclub fitted with stripper poles and zero-G go-go cages, or anything between. Spacer bars offer a dizzying assortment of intoxicants compatible with most hominid species and even some weirder boozes for non-humanoids. Depending on the captains' mores and how much trouble the ship wants with local law enforcement, some harder drugs might be on offer, or not.

BRIG

This fortified chamber is a difficult to escape cell for the storage of prisoners. Included in the cell are 2-4 cots, a sink, toilet and few other amenities, as well as recessed and protected cameras or other sensors to monitor prisoners remotely. The cell is lockable with high quality locks (Engineering DC 35).

A Brig cell can be fitted with transparent (or color-changing) walls allowing an unobstructed view of the captive, as well as more pleasant accommodations or species-specific facilities to serve as a display space for prized captives or the animals in a zoo.

CATAPULT
Gargantuan and Colossal ships only, requires Hanger Bay

An enormous magnetic or pneumatic acceleration launches Tiny fighters from the starship with incredible speed. Each Catapult is built adjacent to a single Hanger Bay. Fighters launched from that specific Hanger Bay double their speed and gain a +4 circumstance bonus on Pilot checks for the first Piloting Phase of combat.

COLONIZATION DROP POD
Gargantuan and Colossal ships only

Each CDP Expansion Bay is a densely packed cube of machinery and modular components that are inaccessible during flight. However, when in orbit over a planet to be colonized, these pods are ejected to the surface. Once planet-side, these modular pods expand outward into a self-assembling habitat. CDPs can be programmed to form barracks, hangers, foundries, mining and terraforming equipment and other useful facilities to aid in colonization.

CRYO-SLEEP CHAMBER

By placing passengers in suspended animation for the journey's duration, you cut down on life support requirements and keep them out of danger during the journey. Each Cryo-Sleep Chamber can accommodate up to 12 passengers, who are in a comatose state of stasis that functions much like the *temporal stasis* spell. The duration of stasis is determined when the creature enters its pod. Awakening a creature early requires a DC 10 Computer Use check; creatures are considered *sickened* for 1d4 hours after awakening (FORT DC 12 negates). While in stasis, creatures do not consume Atmos.

FAUNA/FLORA REPLICATOR
Gargantuan and Colossal ships only

Using the stored genetic codes of millions of plant, animal and insect species as well as fast-gestation exo-wombs, this facility can mass produce non-sentient life to order. This system can produce food and draft animals for use by colonists, durable, fast growing crops that can be planted in a new world's soil, or insects and microorganisms to aid in terraforming and agriculture. While in flight, a few food animals at a time can be produced for slaughter to liven up the ordinary shipboard cuisine.

GAMING TABLES

This entertainment option can also be a moneymaker for a starship designed as a gambling yacht. Serving much the same function as a Recreation Suite, gaming tables usually offer a wide variety of low-tech games of chance, but some might include some more exotic, alien gambling options. When this component is chosen choose one of the following options.

- *Fair Games* – neither the house nor visitors have an advantage on Profession (gambler) checks. Popular with both casual tourists and pro gamblers, for obvious reasons.
- *House Advantage* – the house gets a +1 competence bonus on Profession (gambler) checks here. Ordinary tourists can't tell the difference, and pro gamblers don't

grumble too much about the house having a minor advantage. They tend to expect this level of unfairness as just the cost of doing business.

- **Rigged Games** – the house gets a +2 competence bonus on Profession (gambler) checks here. Ordinary tourists tend to avoid these tables after the first time, and pro gamblers can spot a rigged game before they step through the door. Sooner or later, somebody's gonna pull a blaster out after getting cheated.

HYDROPONICS BAY

This climate controlled chamber encourages the growth of plants in highly efficient water gardens. Normally, the Hydroponics Bay can be used to grow ordinary fruits and vegetables, but it can also be repurposed to grow medicinal herbs or other plants (including Glow) or purely as a morale boosting green space for the crew's enjoyment.

Choose one purpose from the following list for each Hydroponic Bay installed. In addition, Hydroponics Bays are natural CO_2 scrubbers. Each Hydroponics Bay installed extends emergency life support capabilities by a day. Installing at least one Hydoponics Bay per size category of the starship effectively removes the Atmos Requirement Power Core Modification's consequences.

- **Food Production:** The Hydroponics Bay produces fresh fruits and vegetables enough to sustain 5 humanoids per ship size category.
- **Glow Production:** Produces 2d6 doses of any Glow strain per day. Functions as a Zixa Plant Colony (*Heavy Grimorie, Otherverse Games, 2016*).
- **Medicinal Production***: Provides a +2 circumstance bonus to all Medicine checks performed aboard ship.
- **Morale Booster:** Provides a +1 morale bonus on all skill checks performed aboard the vessel.

LANDING COMPRESSION SYSTEMS
Huge and smaller starships only

As the starship comes in for a landing, it folds its wings, retracts flight components and otherwise makes itself smaller. This modification allows a starship to utilize Hanger Bays, Shuttle Bays, docking facilities and other services as if it were one size category smaller, to a minimum of Tiny.

RAM SCOOP

These massive, electromagnetically charged funnels attract stray hydrogen molecules and other trace gases that are present even in the depths of deepest space. A starship equipped with a Ram Scoop effectively negates either or both of the Atmos

Requirement or Fuel Hungry Power Core modifications, as it can fuel itself and provide atmosphere from 'cracked' molecules indefinitely. Each week of travel produces an additional Period worth of fuel and/or atmos, which be stored, used or traded at a profit. Starship fuel and atmos are considered trade goods. If storage space is not provided, in the form of expansion bays or properly fitted cargo holds, excess fuel and atmos gained in this manner is simply wasted.

REFINERY
Gargantuan and Colossal ships only, requires Ram Scoop

Refining ships are truly massive vessels, often stretching for kilometers and capable of processing billions of tons worth of volatiles or valuable ores. A Refinery provides effectively unlimited storage for fuel and atmos gathered by a Ram Scoop.

A successful DC 30 Profession (chemical engineer or similar) check made each week of a long voyage allows the crew to refine that week's Period of fuel and atmos into more valuable trade chemicals worth the check result x 100 credits. Add the ship's tier as an equipment bonus on the check. A failure wastes that week's Period with no benefit.

Failure by more than 10 points indicates a cataclysmic fire that completely destroys the Refinery. Make a DC 25+1d12 Engineering check; success indicates the damage is restricted to the Refinery. Failure on this check indicates that the vessel suffers 4d6 x 10 Hull Points worth of damage in addition to the loss of the Refinery.

PERFORMANCE CHAMBER

A lot of the starships in *Heavy Future,* let alone other vessels throughout the Multiverse, have some top-quality recording and soundsystems aboard. These full-sensory recording studios can be used to broadcast live performances across the galaxy, or to record hit songs, full holographic video, news and fiction in an infinity of genres. The quality of the performance space provides a +4 bonus on entertainment-related Profession or Perform checks made aboard ship.

SHIP WOMB
Requires Bio-Mechanical Starship Theme, Huge starship or larger

A Ship Womb is a mysterious bio-mechanical chamber that is normally tightly sealed, resembling something much like a massive hanger bay fused with a fleshy, mammalian uterus and an orbital drydock all at once.

If impregnated by another living starship, which is a complex spatial dance as tethers and cabling bridges the physical gap between the two living vessels as well as an equally precise trade of datapackets and design schema, the Ship Womb will gradually grow a new starship. Gestation can take several months, and living starship only reproduce every few decades, though some captains can coax their vessels to mate more often to shore up forces either prior to a massive space battle or to replace the casualties of one.

The resulting starship is typically a Tiny or Small starship of relatively low tier that can operate independently of the 'mother' starship immediately after launch/birth. This vessel also has the Bio-Mechanical Starship Theme. Over the next several years (or perhaps even longer), the newborn vessel may naturally grow in size and tier, if it has ready access to exotic fuels, rare-earth minerals and inorganic mass to be used as raw materials.

Expansion Bay	PCU Req.	BP Cost
Bar	3	2
Brig	8	4
Catapult	10	10
Cryo-Sleep Chamber	1	1
Colonization Drop Pod	2	10
Fauna/Flora Replicator	12	30
Gaming Tables	2	4
Hydroponics Bay	2	2
Landing Compression System	4	2x Ship Size
Ram Scoop	2	1x Ship Size
Performance Chamber	2	3
Refinery (6 bays)	120	40
Ship Womb	18	22

NEW RULES FOR COMMUNICATIONS

The default *Starfinder Roleplaying Game* rules handwave how communication works at stellar distances, treating communications in a manner fundamentally similar to lower tech methods like the Pony Express or an intergalactic mail system. This section modernizes the more 'hard sci-fi' flavored communications devices from the *D20 Future SRD* for use with the newer system. Distances are given in real measurements rather than more abstract hexes. However, given the great distances involved, assume that any comms

system described here has effectively unlimited range in terms of a starship encounter's tactical map.

Some of these comms devices imply a galactic communications infrastructure, such as signal amplifiers, communications satellites or relays spread throughout the cosmos. Often the most critical of these facilities are built into cosmic facilities like space stations, warp gates, or FTL jump networks. Local communications devices are free standing and handle local comms, while larger devices are regional trunks.

TERMS

The speed of light is around 196,000 miles per second, and a light year covers nearly 6 trillion miles of distance. An Astronomical Unit (about 93 million miles) is the distance from Earth to the Sun, which at the speed of light, takes a little over 8 minutes to cross. Messages limited to the speed of light can take hours or days to get a response from within a solar system, and it might take months, weeks or even years for the message to cross interstellar distances. Even planet-to-planet communication between neighboring worlds can have an annoying lightspeed delay of several seconds each way that breaks up conversational flow.

ANSIBLE

Ansibles are ultra-advanced devices that induces precise changes in the energy states of atomic nuclei without regard to distance or time. In effect, by warping physics, ansibles permit interstellar communications – voice, video or data transfer – to any other ship or station equipped with an Ansible. However, much like a radio, the receiving station must be attentive to a particular 'frequency', so two anisble-equipped ships or stations must have some prearranged communications protocols. An ansible cannot pick up any ansible transmission not intended for a specific frequency.

An ansible can transmit to any point within the same galaxy, and ansible signals have no delay due to distance.

BASIC RADIO COMMS

Basic Radio Comms systems can transmit on multiple frequencies either in line of sight or omni-directional mode. Messages are limited to the speed of light.

FTL TRANSCEIVERS

Transceivers capable of transmitting encoded electronic signals faster than light are expensive and bulky components. These devices shunt data signals into the same Hyperspace dimensions that starships travel through, enabling them to

cross cosmic distances far more swiftly than conventional radio signals.

Lower grade FTL Signals require the sending or receiving station to be immobile. If the ship moves while its FTL is in use, the ship's communications officer must succeed at a DC 30 Computer Use check or the signal is lost and cannot be established for 2d6 minutes. FTL Transceivers transmit signals that travel at a rate of roughly 5 light years/hour, with an effective range determined by the Transceiver's grade.

Solar Transceivers are short range FTL communicators perfect for in-system use by military patrol craft, in-system traders and other ships not designed for true galactic travel. Solar Transceivers can transmit messages within their range with absolutely no FTL delay. However, they have a maximum range of about 100 AU, which limits them to use in system.

FTL Transceiver	Usable While in Motion?	Effective Range	Minimum Starship Size
Solar Transceiver	Yes	100 AU	Small
Grade I Transceiver	No	1 Light Year	Small
Grade II Transceiver	No	5 Light Years	Large
Grade III Transceiver	Yes	50 Light Years	Huge
Grade IV Transceiver	Yes	Unlimited	Huge

TIGHTBEAM LASER

This beam of coherent light is a unidirectional communications method. Tightbeam lasers are an ultra-secure communications method as they cannot be jammed or intercepted, unless it is beamed directly as a hostile ship or station. However, the receiving station's exact position must be known. This has some hidden drawbacks, a character cannot use the laser for a general distress call to all stations in the area, for example. Tightbeam lasers are limited to the speed of light.

Communications Component	PCU Requirement	BP Cost
Ansible	55	60
Basic Radio Comms	0	0
FTL Transceiver, Solar	3	5
FTL Transceiver, Grade I	3	5
FTL Transceiver, Grade II	7	8
FTL Transceiver, Grade III	9	11
FTL Transceiver, Grade IV	11	14
Tightbeam Laser	2	4

Components from Other Sourcebooks

Some of the new items from *Technology Unleashed, The Heavy Grimorie* and *Techno-Magick Unleashed Volume I: Occult-Tech Arsenal* can be purchased either as Expansion Bays or as new starship components. Price, number of Expansion Bays required to install, PCU and BP costs are all listed here, along with any additional requirements.

Techno-Magick Unleashed: Occult-Tech Arsenal				
Component	Special Notes	Expansion Bays	PCU Requirement	BP Cost
Armor Assembly Forge	-	2	25	32
Cloning Banks	Requires Medlab	1	30	72
Cosmic Loom	-	-	14	22
Observatorus Gate (artifact)	Huge or larger ships only	2	135	250 or more
Recollect Memory Implanter	-	1	20	20
Sanitizing Airlock	-	-	10	13
Stasis Pod, Medical	Requires Medlab	-	25	30
Stasis Pod, Re-Edu	Requires Medlab or Brig	-	20	40
Tacticus (artifact)	Large or larger ships only	1	125	140 or more

Technology Unleashed

Component	Special Notes	Expansion Bays	PCU Requirement	BP Cost
3D Printer, any grade	-	-	2	3
Adamantine Suspension Cocoon	Large or larger ships only	1	8	20
Auto-Doc I	Requires Medlab	-	2	2
Auto-Doc II	Requires Medlab	-	2	5
Auto-Doc III	Requires Medlab	-	3	7
Auto-Doc Omega	Requires Medlab	-	14	15
Auto-Doc Theta	Requires Medlab	-	12	12
Auto-Tailor	-		1	1
Bio-Cauldron	-		1	2
Decon Shower	-		0	1
Exo-Womb or Advanced Exo-Womb	Requires Medlab		4	5
Fast-Sleep Tube	-	-	1	5
Machine Aided Workshop I	Requires Tech Workshop	-	3	10
Machine Aided Workshop II	Requires Tech Workshop	-	3	15
Machine Aided Workshop III	Requires Tech Workshop	-	5	20
Machine Aided Workshop, Occult	Requires Synthesis Lab	-	5	10
Machine Aided Worktable	-	-	3	2
RNA Transcriptor	-	-	6	11
Stepping Booth	-	1	22	60

The Heavy Grimorie

Component	Special Notes	Expansion Bays	PCU Requirement	BP Cost
Arcade Gate (artifact)	Requires Recreation Suite (trivid arcade)	-	12	40 or more
Arcade Magician, *Omega Starfighter* (arcade)	Requires Recreation Suite (trivid arcade) and Hanger Bay	-	35	150 or more
Arcade Magician (any)	Requires Recreation Suite (trivid arcade)	-	5	23
Arcade Oracle (artifact)	Requires Recreation Suite (trivid arcade)	-	20	90 or more
Arcade Zookeeper (any)	Requires Recreation Suite (trivid arcade)	-	6	16
Groove Lamp	-	-	3	2
Hookah, Everliving	-	-	5	6
Hookah, Sexbong	-	-	3	5
Hookah, Starwarper	-	-	6	8
Hyperspatial Hypercubes	-	-	12	17
Pinball Wizard (any)	Requires Recreation Suite (trivid arcade)	=	10	20