Avalon Games/Avenger Presents

Starships and Spacecraft Book I:

A Jupplement for Far Avalon







Compatible Product

Requirer the use of the TravellerTM. Main Rulebook, available from Mongoose Publishing

Starships and Spacecraft Book 1: Vendetta

For the Far Avalon Science Fiction Game Setting

Credits

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Starships and Spacecraft Book 1: Vendetta

About This Book

Starships and Spacecraft 1: Vendetta is part of a line of books from Avenger Enterprises, detailing... yes, starships and spacecraft. It is fully compatible with the Traveller RPG from Mongoose Publishing, but offers a different take on some aspects of interstellar travel. This book lays out the necessary concepts which will be referred to in future volumes of the series.

About The Author

Martin J Dougherty is a freelance author specialising in military history, space travel and related topics. He has written or contributed to over four dozen books and book-like objects (depending on what you count as a book) not counting ebooks, online copy, magazine articles and television work. He has previously worked as a teacher, an engineer, a self-defence instructor, a fencing coach and a defence analyst.

When not randomly poking at a keyboard, Martin is heavily involved with the Self-Defence Federation, with whom he holds three black belts and a Master Level instructorship. He trains in and teaches Ju-Jitsu, Self-Defence and the European Sword Arts. Despite all this, the majority of people involved with Avenger enterprises refer to him as 'some hack writer we met' and steadfastly refuse to take him seriously. This is probably for the best.

About Avenger Enterprises

Avenger Enterprises is a publishing venture jointly owned by Martin J Dougherty and William Anderson. Avenger was originally created to produce licensed materials for the Official Traveller Universe, but has since diverged to become an umbrella for a variety of activities ranging from publishing game materials and fiction through convention appearances to personal combat with swords and other weapons.

Avenger Enterprises created this book. But if you can find someone else to blame, that would be nice.

MJD, Late Summer 2011.

Introduction

This book is compatible with the Traveller rules published by Mongoose Publishing, and presents a variant system for handing interstellar travel. All starship components and design concepts in this book can be used without alteration in any game universe based on the Traveller rules, either with or without the extra and variant concepts discussed below.

The starships presented in this series of books were created specifically for the Far Avalon game universe, but can easily be transplanted to another setting. Thus although we do present an alternative system for faster-than-light (FTL) travel, our designs still work with the standard Traveller Jump drive. They have enough fuel to power their drives and sufficient tonnage for all components.

This book draws on data presented in Book 0 of the series: Cawthorne. Where necessary that data has been summarised here. Note that these game products from Avenger Enterprises use a set of background assumptions somewhat different from those implied by the standard Traveller rules. Notably:

- We use a slightly different technology scale
- We use a different system for faster than light travel, which allows some communication between ships and greatly varied transit times, rather than the oneweek-jump system.

Book 1: Vendetta

- We use a 5-LY hex mapping system, with the standard FTL-1 drive covering 1 LY per day. Thus with FTL-1, reaching a system in the next map hex takes 5 days plus some time travelling in-system rather than the 1-week-per Jump system.
- We refer to faster than light movement as Translight movement, abbreviated TL.
- We allow in-system (Intrasystem) Translight movement, referred to as ITL
- Interstellar Translight movement requires a more powerful Full-Translight (FTL) drive
- We rate starships differently. For example in the Traveller rulebook a 'cutter' is a very specific type and tonnage of vessel. We use a more generic terminology.
- Most of ships are designed using technology available in the Interstellar period (TL 9-13 if you will), which makes the FTL-4 (Jump-4) drive the best available. Some designs will make use of more advanced technology.

Data

The Translight drives used in the following designs (where they are fitted) equate to Traveller Jump drives. Size and cost translates directly for Full-Translight (FTL) drives (i.e. FTL-4 = Jump-4). Intrasystem Translight (ITL) drives cannot be used outside a star system without severe risk of disaster but can make the relatively short transit between components of a binary system. ITL drives cost half as much and take up one-quarter of the tonnage of an equivalent FTL drive.

The ITL-0 drive is a rather basic and crude system which has the same cost and mass as an ITL-1 but lower performance. FTL drives can be used for in-system movement at the same rate as the equivalent ITL drive (i.e. a ship with an FTL-1 drive moves as fast in-system as a vessel with an ITL-1 drive).

Technological Era	Traveller Tech Level	Interstellar
		Drive
		Systems
Advanced Spacefaring*	9	None
Primitive Interstellar*	9	ITL-0
Early Interstellar	10	FTL1, ITL-1
Mid Interstellar	11	FTL2, ITL-2
Mature Interstellar	12	FTL3, ITL-3
Advanced Interstellar	13	FTL4, ITL-4
Primitive Galactic	14	FTL5, ITL-5
Early Galactic	15-16	FTL-6, ITL-6

Technological Eras

* The point where a civilisation goes from 'spacefaring' to 'interstellar' is open to some debate. Many scholars suggest that the capability to construct a faster-than-light drive system is the indicator, but some argue that the ITL drive only gives the capability. A civilization could theoretically expand outside its home system using sublight craft or ITL ships. Either one is clumsy and dangerous, whereas expansion is made easy by true FTL drives. The most sure indicator is what the society does, not what it is capable of. Despite the risks, most civilizations that independently develop ITL drives will launch an expedition to another star system. Some actually succeed, but more importantly it is the willingness and capability to reach out in this manner that defines the era, rather than the available technology.

Drive	In-System Average Speed (AU/hour)	Average TL Speed (LY/day, or LyD)	Average Time per LY (hours)	Average Time to Cross 5-LY Hex (hours)	Safe Range (LY)
ITL-0	10	0.1	240	1200	0.25
ITL-1	25	0.2	120	600	0.50
ITL-2	50	0.4	62.5	312	0.60
ITL-3	75	1	24	120	0.70
ITL-4	100	1.26	19	96	0.80
ITL-5	125	1.14	17	84	0.90
ITL-6	150	1.6	15	74.5	1
FTL 1	25	1	24	120	5
FTL 2	50	2	12	60	10
FTL 3	75	3	8	40	20
FTL 4	100	4	6	30	30
FTL 5	125	5	4.8	24	40
FTL 6	150	6	4	20	50
ETL-1	25	0.25	96	480	2
ETL-2	50	0.5	48	240	4

Drives and Transit Speeds

Fuel Consumption

Ships in the Far Avalon universe do not use as much fuel as standard Traveller vessels, but FTL drives take up much more tonnage, so the overall design is not hugely affected by this consideration. So long as a ship has fuel for its powerplant, it can use its FTL, ETL or ITL drives at will. Powerplant fuel is consumed at the normal rate described in the Traveller rules.

Craft and Ship Designs

Most of the following designs are common enough that they can be encountered more than once and in different areas. Each specific example of a given class will be unique in terms of details, but the basic configuration will not vary much without a good reason.

Older ships tend to have been repaired and modified more than newer vessels, and may have a number of quirks. These can vary from annoying or interesting but trivial details like doors that stick or an unusual bridge layout to a complete rebuild or a dangerous flaw such as malfunctioning drive or power systems. There is always the possibility that a ship has been modified to an entirely different role, possibly several times in its career.

Merchant vessels, with their large volume of cargo space, are the most amenable to conversions. As a result a given commercial class can be the basis for a wide range of variants including exploration and laboratory ships, troop and colonist transports, pirates and escorts, and even a rather basic fighter-carrier. It is not always possible to tell what modifications have been made from an external scan.

BN-030 Class Utility Boat

Utility Boats are, as the name suggests, small craft designed to be used for a range of tasks. Most, but not all, utility boats are not streamlined and cannot land on a planetary surface if there is a significant atmosphere. Such vessels are used for cargo and personnel transfers between starships, spacecraft and non-planetary installations. They are also outfitted for a variety of other tasks including search and rescue, sensor picket and repair work.

Utility boats are ubiquitous, and there are several designs on the market. Most are fairly small; under 40 tons displacement. The *BN-030* is one of the commonest, with a middling displacement of 30 tons. It is not fast nor especially comfortable, but it is a reliable craft and extremely easy to pilot. The controls are basic and, unusually, have very few user-configurable settings. Thus any pilot sitting down in the cockpit of a *BN-030* will be immediately familiar with all the control settings.

The inability of pilots to reconfigure the controls to the optimum efficiency (or, in the words of the next pilot to come along, 'mess up the control settings to a degree that would embarrass a total idiot') is a cause of frustration for some crews, but it does reduce the potential for pilot error. It also makes the *BN-030* a popular training vessel. Some crews refer to it as the 'White Line' as it's so middle-of-the-road, but it gets the job (actually, almost any job) done whilst not costing much.



BN-030 Class			Tons	Price (Cr)
Utility Boat TL9				
Hull	30tn	Hull 0		1,300,000
	Streamlined	Structure 1		130,000
Armour	None			-
Manoeuvre Drive sE	Gravitic	Thrust 3	2.5	4,000,000
Power Plant sE	Fusion	Rating 3	2.4	5,000,000
Bridge	Control Cabin for One		3	150,000
Computer	Model 1	Rating 5		30,000
Electronics	Standard	DM-4	-	-
Weapons	None			
Fuel		2 weeks operation	1.5	-
Cargo			7.6	-
Staterooms	Cabins for eight		12	600,000
Extras	Fuel Scoops		-	-
	Airlock		1	200,000
	Ship's Locker		-	-
Software	Manoeuvre / 0			
	Library / 0			
Maintenance Costs (monthly)				951
Life Support Costs (monthly)				18,000
Total Tonnage & Cost			30	11,410,000

Crew = 1 pilot in a large control cabin No weapon HP, small cabins for 8 passengers. Airlock for access.



Glen Uske Class General-Purpose Shuttle

By convention, craft intended for interface work (i.e. operating between space vessels or installations and a planetary surface) are termed shuttles. Some are very large; bulk cargo shuttles can be bigger than many small merchant vessels. However, the majority are under 200 tons displacement and most are sub-100.

The *Glen Uske* class is fairly typical of small cargo and personnel shuttles. It is normally carried aboard larger vessels or based at an installation, though sometimes a shuttle will be encountered plying an in-system route. In this context it is not really functioning as a shuttle but more as an atmosphere-capable transport craft. It is usually more efficient to transfer cargo or personnel to a larger in-system transport at an orbital installation or aboard the vessel itself, but some private users prefer to make the whole trip aboard their own craft.

The *Glen Ukse* class is not fast, but then it does not really need to be. Its passenger accommodation (aboard the standard version) is fairly basic as most trips are very short. Cargo capacity can be swapped for seating by installing additional seats, or removing the existing ones from the passenger area. Private shuttles are easy to customise; most commonly some of the seats are removed and a more spacious passenger areas thus created, but some users also borrow some space from the cargo area to create a sleeping or recreation area.

A 'secure' version is available. This has a small secure-cargo area in the main cargo hold, and has a mount for a single weapon system. This is usually a point-defence laser, but other options are possible. The secure variant is not a major marketplace success in its intended role as a cargo/personnel transport but it is used by a number of customs and security agencies for inspection boardings. This is very much a cheap option; a *Glen Uske* cannot chase down a fleeing suspect craft. That only matters if it operates alone; an accompanying interceptor removes that problem. Of course, spaceport operators that choose not to buy high-performance shuttles for their security forces tend not to invest in interceptors, either.

Glen Uske Class			Tons	Price (Cr)
General-Purpose				()
Shuttle TL9				
Hull	50tn	Hull 1		1,500,000
Hull	Streamlined	Structure 1		150,000
	Self Sealing Hull	Siluciule		500,000
Armour	None			
Annoul	None			
Manoeuvre Drive sE	Gravitic	Thrust 2	2.5	4,000,000
Power Plant sE	Fusion	Rating 2	2.4	5,000,000
Bridge	Control Cabin for Two		6	500,000
Computer	Model 1	Rating 5		30,000
Electronics	Basic Civilian	DM-2	1	50,000
Weapons	Hardpoint 1	Empty	1	-
Fuel		2 weeks operation	1.5	-
Cargo			19.6	-
Staterooms	Cabins for ten		15	750,000
Extras	Eucl Second			
Extras	Fuel Scoops Airlock		- 1	200,000
	Ship's Locker		1	200,000
	Ship's Locker		-	-
0 officiants	Manoeuvre / 0			
Software				-
	Library / 0			-
Maintenance Costs				1,057
(monthly)				
Life Support Costs (monthly)				24,000
Total Tonnage & Cost			50	12,680,000

Crew of 1 pilot, but control cabin rated for 2 so empty seat for co-pilot. 10 passengers in cabins, air lock, empty hardpoint.

Glen Uske Class			Tons	Price (Cr)
General-Purpose				
Shuttle: Secure				
Courier Variant				
TL9				
Hull	50tn	Hull 1		1,500,000
Hull	Streamlined	Structure 1		150,000
	Self Sealing Hull			500,000
Armour	None			-
Manoeuvre Drive sE	Gravitic	Thrust 2	2.5	4,000,000
Power Plant sE	Fusion	Rating 2	2.4	5,000,000
Bridge	Control Cabin	Ŭ	6	500,000
	for Two			, -
Computer	Model 1	Rating 5		30,000
Electronics	Basic Civilian	DM-2	1	50,000
Weapons	Hardpoint 1	Single Turret: Point Defence Laser	1	450,000
Fuel		2 weeks operation	1.5	-
Cargo		•	7.6	-
Staterooms	Cabins for ten		15	750,000
Extras	Fuel Scoops		_	
Extras	Airlock		1	200,000
	Ship's Locker		-	
	Vault		12	6,000,000
Software	Manoeuvre / 0			-
	Library / 0			-
	Fire Control / 1	Rating 5		2,000,000
Maintenance Costs (monthly)				1,761
Life Support Costs (monthly)				24,000
Total Tonnage & Cost			50	21,130,000

Crew of 1 pilot, but control cabin rated for 2 so empty seat for co-pilot. 10 passengers in cabins, air lock, single turret on hardpoint. Large vault in former cargo bay, size = 12tn, capacity = 6tn.



Firebird Class Personal Transport

There is a fairly large marketplace for small vessels capable of moving a few people or a little cargo around. While the cost of building a starship is enormous, many large corporations, and some governments, find that it is more effective to have dedicated transportation available than to rely on commercial ships. This especially true of those that do business or have holdings in remote areas, or who wish to conceal some of their activities for whatever reason.

There are several possible approaches to this role, ranging from simply using a small trade vessel to buying a converted military ship. For VIPs a luxury yacht might be an acceptable expense, especially if it can be used to entertain and impress clients or other dignitaries. However, most officials have to make do with merely functional transportation.

The Firebird was designed, to some extent, as a 'poor man's yacht'. Although it is capable of carrying a little cargo the design is not commercially viable, nor is it intended to be. The Firebird is primarily a means of getting an individual or a small group to a destination where they are needed.

Firebirds are sometimes used by corporations as courier vessels, but their primary asset is their ability to reach most worlds without relying on commercial transport or tying up a more expensive yacht or courier. As such they are often assigned to troubleshooter teams or roving inspectors. Some interstellar states use Firebirds as transport for mid-level audit teams, which carry out semi-random inspections of the financial affairs of worlds and corporations to ensure compliance with the relevant tax laws.

Firebirds are also pushed into a variety of different roles. Some are armed and used as lowend patrol vessels or escorts for more expensive craft. Others serve as mail ships and in a range of similar roles.

Firebird Class Personal			Tons	Price (Cr)
Transport TL11				
Hull	200tn	Hull 4		8,800,000
	Streamlined	Structure 4		
Armour	None			
FTL Drive A		FTL 1 = 1 LY/Day	30	10,000,000
Manoeuvre Drive A		Thrust 1	2	4,000,000
Power Plant A		Rating 1	4	8,000,000
Bridge			10	1,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Standard	DM-4		
	Low Power TL		1	250,000
	Comms			
Weapons	Hardpoint #1	Empty	1	-
Fuel		4 weeks operation	4	
Cargo		·	40	
Staterooms	14 Single Occupancy	7 crew, 7	56	7,000,000
		passengers		
Extras	Ship's Locker			
	Modular Hull 25%			2,200,000
<u> </u>	Modular Area		50	2,200,000
<u> </u>			50	-
	Fuel Scoops Fuel Processor		1	50,000
	Luxuries 1	Steward - 1	1	
				100,000

Software	Manoeuvre / 0			-
	Library / 0			-
	FTL Control / 1	Rating 5		100,000
Maintenance Costs				3,461
(monthly)				
Life Support Costs				28,000
(monthly)				
Total Tonnage & Cost			200	41,530,000

Crew = 7: 3 pilots, navigator, medic, engineer, steward. Pass = 7 Luxuries and a steward make the passage seem more up market than it might be.





Mangold Hauler Class In-System Supply Vessel

Star systems are big places, and it takes quite a while to travel between two planets, even if they have adjacent orbits. For extremely distant outposts, sublight journey times may become prohibitive. ITL (Intrasystem Translight) capable vessels are often used to resupply these outposts, but for most transportation work within a system a sublight vessel is entirely adequate.

Originally designed by Mangold Shipping LIC, a long-defunct firm, the Mangold Hauler is a simple sublight transport vessel designed to supply outsystem bases and space stations. It is a very basic craft, with few amenities. Indeed, Haulers are little more than cargo crates with an engine attached.

Crew accommodation is more spacious than might be expected, to reduce fatigue and disenchantment during long hauls out to distant parts of a system. Translight vessels are quicker on any given route but also far more expensive. For non-time-critical runs, a sublight vessel is a cheaper alternative.

Haulers are often modified into other roles, including prospecting craft, laboratories or observation platforms, and even a sort of mobile home for very reclusive individuals.

Mangold Hauler In-System Cargo Lighter TL9			Tons	Price (Cr)
Hull	200tn	Hull 4		8,000,000
	Standard	Structure 4		
Armour	None			
FTL Drive	None			
Manoeuvre Drive A		Thrust 1	2	4,000,000
Power Plant A		Rating 1	4	8,000,000
Bridge			10	1,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Standard	DM-4		,
Weapons	Hardpoint #1	Empty	1	-
Fuel		4 weeks operation	12	
Cargo			155	
Staterooms	4 Single Occupancy		16	2,000,000
Extras	Ship's Locker			-
Software	Manoeuvre / 0			-
	Library / 0			-
Maintenance Costs (monthly)				1,920
Life Support Costs (monthly)				8,000
Total Tonnage & Cost			200	23,030,000

Crew = 4: pilot, navigator, engineer, medic

A basic slow non-jump capable in-system cargo vessel for bulk haulage. Designed to operate between bases where it can get refined fuel.





Front View



Section thru Cargo Hold



Section along Centerline

Mominea Splendor Class Passenger Ship

A variety of ships are capable moving personnel around. The elite can afford to travel aboard luxury liners, while those that have to simply get to their destination anyhow will usually find a berth aboard any kind of ship travelling the right way. However, most people travelling in space or between star systems will pay for passage aboard a commercial ship of some kind.

Some vessels that carry passengers are freighters or tramp traders that pay their way with cargo and take on a few passengers now and then on the side. Some merchant ships which are not supposed to carry anything but freight will squeeze the crew into a few cabins to free space for paying passengers. This bends a few rules but it generates extra revenue.

Dedicated passenger ships are less common than freighters with a few cabins. However, they do exist and can be encountered plying between population centres. They are uncommon off the main spacelanes. These passenger vessels vary in size but most are fairly small; empty cabins generate no income. The majority can carry a little cargo in addition to their personnel complement.

Despite its rather pretentious class name, the *Mominea Splendor* is a low-cost passenger transport rather than a liner. Designed to provide inexpensive movement for the maximum number of people, the class is a no-frills people-transporter which has achieved reasonable success in some areas of the Imperium.

Built on a sloop-class hull, the *Mominea Splendor* is capable of landing on a planetary surface and carries no subordinate craft for this reason. Its modest maneuver and Translight performance is matched by equally basic passenger accommodation. The galley facilities, for example, are absolutely minimal. Most meals are prepackaged affairs which are simply heated up and served.

Much of the ship's accommodation is aimed at the cheaper end of the market. There are only four staterooms that could be offered to premium-fare passengers without causing offence. The rest are extremely small even for starship cabins and are just barely adequate by the standards of a standard mid passage.

The *Mominea Splendor* carries virtually no cargo other than the personal effects and luggage of the passengers, but it does have a five-ton mail safe. Ships of this class are often purchased by governments and set on regular routes where they move people and mail cheaply.

Like all mail ships, the *Mominea Splendor* is armed. There are two hardpoints which usually carry a dual turret each. Standard armament in each turret is a sandcaster and a laser, though some vessels use a different weapons mix.

Overall, this is an inexpensive workhorse vessel that can be encountered almost anywhere. Like many similar designs it is not really viable in the free-trader role and tends to be used by governments rather than trading companies.

Mominea Splendor			Tons	Price (Cr)
Class Passenger				
Ship TL10				
Hull	400tn	Hull 8		16,000,000
man	Standard	Structure 8		10,000,000
	Self Sealing Hull			4,000,000
Armour	None			-
FTL Drive B		FTL 1 = 1 LY/Day	55	20,000,000
Manoeuvre Drive B		Thrust 1	3	8,000,000
Power Plant B		Rating 1	7	16,000,000
Bridge			20	2,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Standard	DM-4	-	-
	Low Power TL		1	250,000
	Comms			
Weapons	Hardpoint #1	Dual Turret (BL/SC)	1	1,750,000
	Hardpoint #2	Dual Turret (BL/SC)	1	1,750,000
Fuel		4 weeks operation	8	
Cargo	Hold 1		2	-
Staterooms 74	11 crew, 4 high, 59 medium		296	37,000,000
Extras	Ship's Locker			-
	Mail Safe		5	-
	Luxuries	Steward 1	1	100,000
Software	FTL Control / 1			100,000
	Manoeuvre / 0			
	Library / 0			
			1	
Maintenance Costs (monthly)				8,915
Life Support Costs (monthly)				148,000
Total Tonnage & Cost			400	106,980,000

Crew: pilot, navigator, 2 engineer, medic, 2 gunners, 4 stewards. Luxuries for the high passengers, 1 steward per 15 medium passengers (economy class)







Carson Class Frontier Trader

In settled or well patrolled areas, the majority of starships are unarmed or carry only pointdefence weapons. However, those that venture into more hazardous regions for whatever reason require improved protection.

The *Carson* class is almost never encountered in settled areas where the extra cost of its defenses makes it incapable of competing with vessels that have more space dedicated to cargo carrying. It is, however, a good investment for trading on the frontiers where combat capability is a vital form of life insurance. The design has found favor as a naval auxiliary in some regions, and is sometimes operated as a rather basic escort or police vessel.

The *Carson* is only capable of 1g acceleration, but has respectable FTL performance. It has four hardpoints as standard but normally only carries two turrets. If a heavier armament is desired, two of the turrets can be connected to a naval-style missile magazine, something not normally seen on civilian vessels. This space is normally used for stores and assorted random clutter on ships without missile turrets in place.

Despite its capability to carry heavy armament, the *Carson* is no warship. It is a commercial starship capable of carrying a few passengers and a fair amount of cargo in reasonable security. Some examples have been converted to mail ships or corporate transports; the *Carson*'s armament and durability make it a good choice for moving valuable cargoes.

The *Carson* is streamlined and carries a fuel purifier, enabling it to refuel by skimming and to land directly at a port. This does create a certain vulnerability when on the ground, so an advanced security system is fitted as standard and most vessels carry a couple of guards, just in case.

Carson Class			Tons	Price (Cr)
Frontier Trader				· · /
TL11				
	4000	Hull 8		17 000 000
Hull	400tn Streamlined	Structure 8		17,600,000
		Structure 8		4 000 000
Armour	Self Sealing Hull	4 points	20	4,000,000 3,200,000
FTL Drive D	Crystal-iron	FTL 2 = 2 LY/Day	105	40,000,000
Manoeuvre Drive B		Thrust 1		
Power Plant D		Rating 2	3 13	8,000,000 32,000,000
Bridge		Raung Z	20	2,000,000
Computer	Model 2	Rating 10	20	
Electronics	Basic Civilian	DM-2	1	160,000 50,000
Electronics	Low Power TL	DIVI-Z	1	
				250,000
Maanana	Comms Hardpoint #1	Dual Turrat /Daam	1	1,750,000
Weapons	Harupoint #1	Dual Turret (Beam Laser / Sandcaster)	1	1,750,000
	Hardpoint #2	Dual Turret (Beam	1	2,250,000
	Harupoint #2	Laser / Missile	1	2,250,000
		Rack)		
	Hardpoint #3	Empty	1	
	Hardpoint #4	Empty	1	
Fuel		4 weeks operation	16	
Cargo	0		140	7 500 000
Staterooms 15	9 crew, 6		60	7,500,000
	passengers			
Extrac	Chin's Losker			
Extras	Ship's Locker Escape Pods		7.5	1,500,000
	Ammo Storage		7.5	1,500,000
	Ammo Storage		5.5	-
	Spare Space		5.5	-
Coffware	FTL Control / 2			200,000
Software				200,000
	Manoeuvre / 0			
	Library / 0			
Maintenance Costs				10,039
(monthly)				
Life Support Costs				30,000
(monthly)				400 400 000
Total Tonnage & Cost			400	120,460,000

Crew = 9: pilot, navigator, medic, steward, 2 gunners, 3 engineer



Saint Christopher Class Escort Corvette

Small escort craft are used by navies, corporations and mercenary units to provide security to trade routes. Deployments vary; some vessels move around the trade routes, others escort convoys and some take station as a guardship near a port, monitoring traffic and hopefully deterring lawlessness by their presence.

The *St Christopher* class is generally named for angelic beings or guardian spirits from mythology and religion. The class is designed specifically for anti-piracy and commerce-protection duties, and was originally offered as a naval vessel. The design contained too many compromises to be taken up by naval procurement officials, but it was purchased by a number of minor governments and corporate forces to protect their assets.

Built on a small corvette hull, the *St Christopher* is as heavily armed as possible, with a mix of missile and beam weapons for maximum flexibility and range. This is augmented by four light fighters carried in bays along the ship's flanks. Launch and recovery operations are fiddly, and the fighters cannot be maintained in flight, but they do provide some useful additional capabilities. There is also a small craft of up to 40 tons (usually an atmosphere-capable shuttle, but not always) in a bay under the ship's stern. This is used for boardings and acts as a rescue boat when necessary.

The *St Christopher* class is lightly built for a combat vessel, but this is considered acceptable considering the nature of most opposition it is likely to encounter. However, against a true warship acting as a commerce raider the fact that the *St Christopher* gives up a lot of tonnage to its craft bays would be a handicap. Nor can it cannot carry cargo unless its fighter bays are emptied and used for haulage.

Saint Christopher Class Route Protector TL12			Tons	Price (Cr)
Hull	600tn	Hull 12		48,000,000
	Standard	Structure 12		
Armour	Crystal-iron	4pts	30	9,600,000
FTL Drive J		FTL 3 = 3 LY/Day	230	90,000,000
Manoeuvre Drive J		Thrust 3	17	36,000,000
Power Plant J		Rating 3	28	72,000,000
Bridge			20	3,000,000
Computer	Model 4	Rating 20		5,000,000
Electronics	Basic Military	DM0	2	1,000,000
	Enhanced Signal Processing	DM+4	2	8,000,000
	High Power TL Comms		2	500,000
Weapons	Hardpoint #1	Single Turret Particle Accelerator	1	4,200,000
	Hardpoint #2	Single Turret Particle Accelerator	1	4,200,000
	Hardpoint #3	Triple Turret 3 Beam Lasers	1	4,000,000
	Hardpoint #4	Triple Turret 3 Beam Lasers	1	4,000,000
	Hardpoint #5	Triple Turret 3 Missile Racks	1	3,250,000
	Hardpoint #6	Triple Turret 3 Missile Racks	1	3,250,000

Fuel		4 weeks operation	18	
Cargo			0	
Staterooms 36	31 Single Occupancy 5 Dual Occupancy		144	18,000,000
Extras	Ship's Locker			-
	Fuel Scoops		-	1,000,000
	1 Fuel Processor	20tns per day	1	50,000
	Magazine		8	-
	4 x 10tn Light Fighter		40	72,000,000
	40tn Pinnace in Hanger		52	30,400,000
Software	Manoeuvre / 0			-
	Library / 0			-
	FTL Control / 3	Rating 15		300,000
	Evade / 1	Rating 10		1,000,000
	Fire Control / 20	Rating 10		4,000,000
Maintenance Costs (monthly)				35,230
Life Support Costs (monthly)				77,000
Total Tonnage & Cost			600	422,750,000

Crew = 41: 3 pilots, navigator, medic, 6 engineers, 12 gunners, 4 officers, 4 fighter pilots, 4 fighter engineers, 2 pinnace crew, 1 pinnace engineer, 4 troops.







Vendetta Class Light Assault Ship

Direct-assault ships are far less common than vessels that use shuttles to land their personnel, though there are advantages to not giving up space to shuttle handling equipment. Small assault ships of this sort are popular with minor navies and mercenary units, which tend to operate small forces on a self-contained basis.

The *Vendetta* class is built on a streamlined corvette-class hull and is capable of a modest performance in both sublight and Translight modes. The design was in fact created to meet a government specification but failed to win a design competition that the designers subsequently complained was rigged from the start.

As a result a redesigned *Vendetta* went on the open market and was picked up by a number of planetary armed forces, mercenary units and some nobles who felt that the ability to rapidly land troops on a planet was desirable.

The Vendetta class is a warship designed to carry troops into combat and support them there. It is designed to land directly at the combat site rather than deliver its personnel using assault boats or shuttles as these take up a lot of space. The hull is lightly armoured to protect against ground fire and there are several assault ramps around the vessel, enabling it to drop its sides and disgorge its cargo of personnel and small vehicles in a few seconds before lifting off again.

There are seven hardpoints. Typically, the three dorsal mounts are used for anti-ship weapons and the four flank hardpoints carry light turrets mounting ground-support weapons, though this is by no means universal.

The *Vendetta* is a paramilitary vessel, pure and simple, and is normally used with due respect to the legalities of conflict. However, many examples have found their way into the hands of less reputable persons. The *Vendetta* class makes an excellent planetary raider. That is, a type of pirate vessel specialising in raiding towns and installations on worlds or moons. Even a small colonial outpost can have a lot of valuable and portable equipment and little means of defense. A raiding ship can be in and out before help arrives.

Vendetta Class Light Assault Ship TL12			Tons	Price (Cr)
Hull	700tn Streamlined Reflec Hull Self Sealing Hull Radiation Shielding	Hull 14 Structure 14		$\begin{array}{r} 64,000,000\\ 6,400,000\\ 70,000,000\\ 7,000,000\\ 175,000,000\end{array}$
Armour	Crystaliron	4 points	35	12,800,000
FTL Drive G		FTL 2 = 2 LY/Day	180	70,000,000
Manoeuvre Drive G		Thrust 2	13	28,000,000
Power Plant G		Rating 2	22	56,000,000
Bridge			20	3,500,000
Computer	Model 4 Fib	Rating 20		7,500,000
Electronics	Basic Military	DM0	2	1,000,000
	High Power TL Comms		2	500,000
Weapons	Hardpoint #1	Triple Turret (BL/BL/BL)	1	4,000,000
	Hardpoint #2	Triple Turret (SC/SC/SC)	1	1,750,000

	Hardpoint #3	Triple Turret (MR/MR/MR)	1	3,250,000
	Hardpoint #4	Ground support weapons	1	-
	Hardpoint #5	Ground support weapons	1	-
	Hardpoint #6	Ground support weapons	1	-
	Hardpoint #7	Ground support weapons	1	-
Fuel		4 weeks operation	28	
Cargo	Hold 1		37	
Staterooms 65	12 crew, 102 troops	13 single occupancy, 52 dual occupancy	260	32,500,000
Extras	Fuel Scoop			
	Fuel Processor		2	100,000
	Ship's Locker			-
	Ammo Storage	12 Basic missiles, 20 sand barrels	2	25,000
	Reflec Hull		-	70,000,000
	Self Sealing Hull		-	7,000,000
	9 G-Carriers	1 HQ, 8 troop vehicles	90	-
Software	FTL Control / 2			200,000
	Manoeuvre / 0			-
	Library / 0			-
	Fire Control /2			4,000,000
	Evade /1			1,000,000
Maintenance Costs (monthly)				52,128
Life Support Costs (monthly)				182,000
Total Tonnage & Cost			700	625,525,000

Cost of vehicles not included

Crew = 15: pilot, navigator, 5 engineer, medic, 7 gunners, in 9 single occupancy and 3 dual occupancy

Troops = 102 troops

2 company officers, 1 HQ G carrier with 2 crew and 4 misc troopers. 2 marine platoons, each with: HQ element of 1 officer, 1 NCO, 1 commo tech. 4 g carriers each with 2 crew, a squad leader and 8 troopers.

Officers have single occupancy staterooms, remaining troopers in dual occupancy.



Schematic Plan (Upper and Lower Decks)

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