

*Golden Age Starships 3
Archaic Small Craft,
Launches and Gigs*

AVENGER ENTERPRISES

Approved For Use With

TRAVELLER²⁰

Science-Fiction Adventure in the Far Future

*Golden Age Starships 3
Archaic Small Craft,
Launches and Gigs*

AVENGER ENTERPRISES

GOLDEN AGE STARSHIPS 3: ARCHAIC SMALL CRAFT, LAUNCHES AND GIGS

FOR T20 AND CLASSIC TRAVELLER

BASED ON THE AWARD-WINNING *TRAVELLER* GAME SYSTEM AND UNIVERSE BY MARC MILLER

Avenger Enterprises is the private venture of Martin J Dougherty, *Traveller* line editor at QuikLink Interactive. Avenger adventures and supplements are compatible with *Traveller* for the d20 system (T20) and Classic *Traveller*, and are published under license through QuikLink Interactive.

GOLDEN AGE STARSHIPS 3: *Archaic Small Craft, Launches and Gigs* is set in the Official Traveller Universe. As such it is compatible with either the official Hard Times – Collapse – Recovery – New Era timeline or an alternate wherein the assassination of Emperor Strephon does not occur.

Avenger Enterprises can be contacted by email at: mjd.qli@virgin.net

CREDITS

AUTHORS

Ron Vutpakdi and Michael Taylor

SHIP DESIGNS

Ron Vutpakdi and Michael Taylor

DECKPLANS

Ron Vutpakdi

ARTWORK

David Daniel

LAYOUT

Michael Taylor

AVENGER LINE EDITOR

Martin J. Dougherty

ADDITIONAL ASSISTANCE

Thomas Jones-Low

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INTRODUCTION





















This supplement looks at archaic TL 7 and 8 small craft, as well as 10 and 20 ton small craft found in the Traveller Universe. Small craft are defined as non-jump capable spaceships under 100 displacement tons. Although there are hundreds of variations of the craft found in this book, the main variants are described, and fall into broadly similar categories. Gigs and launches displace 20 tons, ship's boats and slow boats 30 tons, pinnaces 40 tons and cutters 50-65 tons. Shuttles generally displace 90 tons plus, some being as large as 400 tons. 30, 40, 50 and 95 ton small craft will be covered in later editions.

The first section covers extensions to the T20 starship design sequence and vehicle design sequence to allow T20 players to design "archaic" TL-7-8 rocket propelled small craft, including small space capsules, planetary landers, space stations and rocket launch vehicles. Some example craft are presented, including deckplans. This section will be particularly useful in the post-Third Imperium 1248 Milieu where technologically regressed societies abound. In some cases those regressed societies may only have access to data on primitive rocket power, despite having a nominal tech level of 7-8. Therefore they may use rockets as opposed to the standard maneuver drives found at the same tech levels.

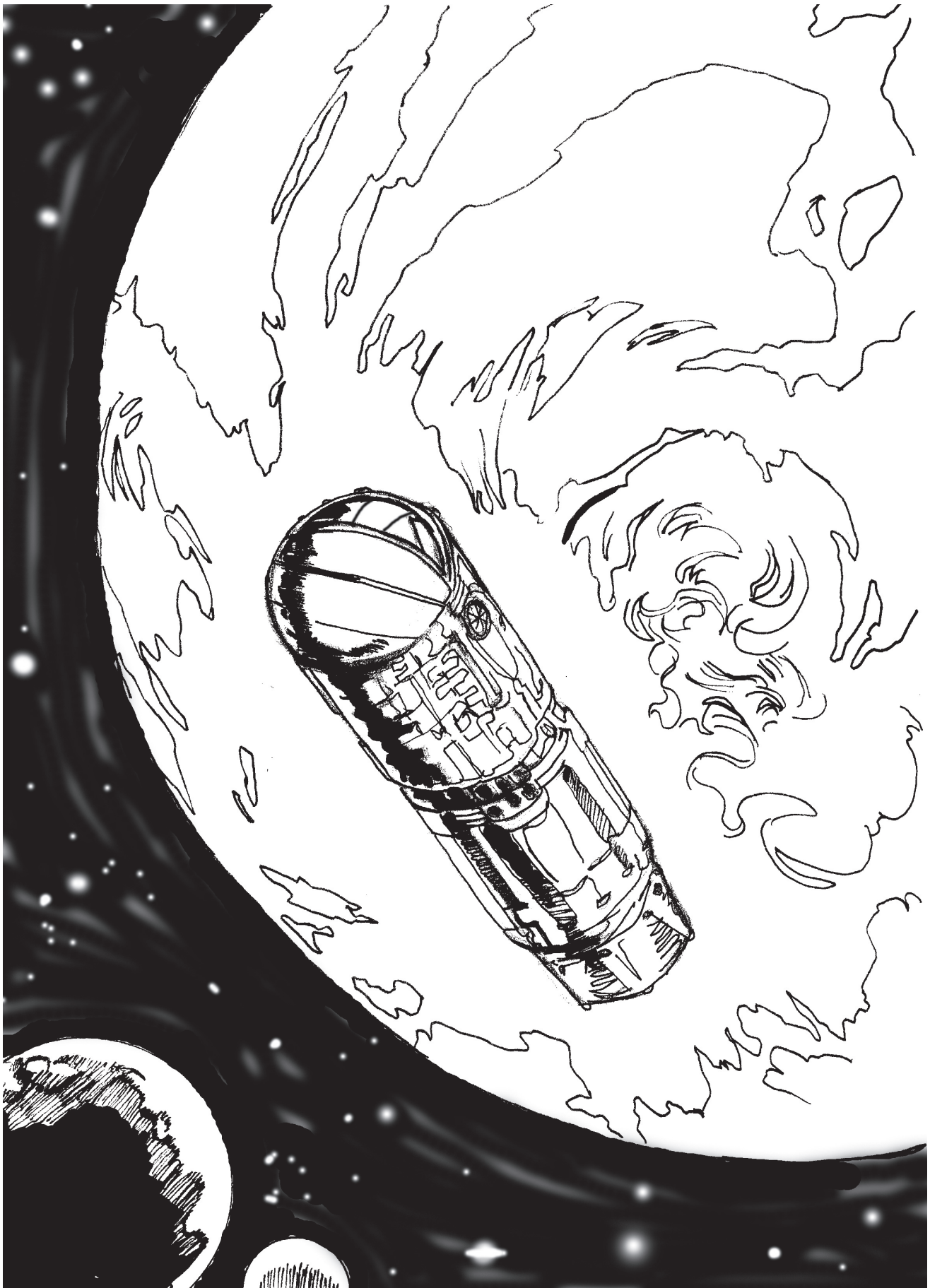
The second section covers 10 and 20 ton small craft, including deckplans and variants on the standard craft. Both T20 and Classic Traveller statistics are included. While the small craft in this book are defined using those statistics, the statistics and deckplans may be used with little modification for Traveller games based on other Traveller rule sets. Full deckplans are included, as are adventure seeds based around the small craft in this booklet.

Future editions of "Golden Age Starships" will cover slow boats, ship's boats, pinnaces, cutters and shuttles.

Symbol Guide

	Bulkhead		Avionics/Computer/Sensors/Comm
	Wall (Partition)		Controls/Displays
	Viewport		Drives/Power Plant
	Sliding Door		Food Dispensers/Storage/Prep
	Maintenance Hatch		Fuel
	Lift		Life Support
	Iris Valve		Manual Hatch
	Floor Iris Valve		Floor Manual Hatch
	Ceiling Iris Valve		Ceiling Manual Hatch
	Floor and Ceiling Iris Valves		Floor and Ceiling Manual Hatches

A standard Launch begins a regular passenger/freight journey to a colony on a nearby moon.



TL 7-8 ARCHAIC SMALL CRAFT

Low Tech small craft are uncommon in TL-9+ star systems, but can be commonly encountered in TL7-8 systems and are sometimes used in higher tech systems due to their very low cost. The small craft outlined below can be used in virtually any situation and can provide an interesting diversion from encounters with the usual high tech small craft. Because of their low tech rocket drives these craft may be encountered reasonably frequently in the 1248 environment.

The rocket option has the following characteristics per unit installed:

- 1-G: TL 6, 4 tons, Mcr1.5, 77 tons/hr fuel.
- 2-G: TL 6, 8 tons, Mcr3, 154 tons/hr fuel.

Due to the fact that a powerplant for a rocket drive train is not required, and not all designers will choose fission or fusion reactors for their craft, there are other low cost options available to provide electrical power for the spacecraft's vital systems including computers and life support. For every 10 tons of habitable volume 0.1EP per hour is required which provides this electrical power. Some alternative electrical systems are listed below.

Batteries cannot generate continuous power. If the spacecraft is fitted with solar panels the batteries may be recharged while the solar panels are in sunlight. 1 ton of batteries will hold 10EP which can be discharged at any rate required. Thus 1 ton of batteries will supply the electrical systems of a 10 ton spacecraft for 100 hours.

Fuel cells **convert hydrogen and oxygen into water, creating electricity as a byproduct. As long as there is a constant flow of oxygen and hydrogen to the fuel cell, it will keep generating electricity. For every 0.5 ton of fuel cells installed, those fuel cells require 0.125 tons of hydrogen/oxygen fuel per hour of operation. 0.15 EP is output per hour.**

Solar panels generate continuous power, but are limited in the amount of EP they generate and there is a limit to the size of solar arrays that can be fitted to a spacecraft. Solar panels can be folded and unfolded. Solar Panels are popular because they provide continuous power, but do not provide that power when the craft is in darkness, so batteries are required to provide power while the Solar Panels are not operating. The batteries are recharged by the solar panels. The power output is for the habitable zone of a star. For each orbit further from the star the craft is in, drop the power output by 1/4. One orbit out is 1/4 power, two is 1/16, three is 1/64. For the one orbital zone closer to the star from the habitable zone, increase power output by x4. Power output cannot increase by more than x4 regardless of how close to the star the spacecraft is.

Radiothermal fission generators have a slow-decaying radioactive core which generates heat and is converted to electric power. The radioactive core needs to be replaced every 3 years.

ARCHAIC SMALL CRAFT POWER SOURCES

Power Source	TL	Size (tons)	Cost	EP generated (per hour)	Fuel (per hour)
Batteries	5	1	Cr7000	10 Discharged	-
Crude Fuel Cells	7	0.5	Cr280,000	0.15	0.125 tons of hydrogen/oxygen
Solar Panels	7	0.2*	Cr100,000	0.1	Sunlight
Radiothermal Fission	7	0.5	Cr500,000	0.1	Core replacement every 3 years

Only one "set" of solar panels may be attached per 10 tons of spacecraft.

SMALL CRAFT DESIGNED AS VEHICLES

Archaic small craft can also be designed under the vehicle design sequence. They must be pressurized and have climate control systems installed. Small craft designed under the vehicle design sequence must have at least armor-factor 5 to allow for sufficient radiation shielding in space and for ablative heat shield during re-entry. Maneuver can be provided by a rocket drive. The amount of burn time required for a re-entry task is determined by the type of atmosphere the vehicle will enter. For an atmosphere 0 or 1 world, the vehicle needs to have sufficient fuel for a 5 minute fuel burn at 1-G to maintain controlled descent. For atmospheres 2+, the vehicle must use an aerobraking maneuver, using atmospheric drag to reduce speed to ensure a parachute (or retro-rocket) landing. The fuel and thrust requirement for a retrofire for aerobraking descent is 1 minute at 1-G (or 1080kph), or a two minute burn at 540kph (1/2-G). The size of the retro-firing engine is irrelevant. The length of the burn is. For example, the Soviet Union's Vostok spacecraft had a powerful retro-firing rocket that only needed to burn for 45 seconds, while the Soviet Soyuz spacecraft had a small rocket which meant the burn time was 3 minutes 14 seconds.

Examples of two such vehicles are listed on the following pages.

LAUNCH VEHICLES

Launch vehicles are rockets designed to boost payloads into orbit. They are designed using the rocket drive. Launch vehicles must be streamlined cylinder, cone or wedge configuration.

Launch vehicles require a rocket drive of 2 times the surface gravity of the world (see p.375 of THB). For instance, for a size 8 world, a 2-G rocket drive is required. Fuel is required for 10 minutes to boost the payload into orbit. For vehicles, the size of rocket drive required is dependent on the size of the planet the vehicle is launched from. 10 minutes fuel is also required, but in terms of maximum speed the speed required for the rocket launched from a size-8 world is 1080kph per G or 2160kph for a 2-G rocket drive. For different sized worlds, multiply the 1080kph figure by the surface gravity modifier from p.375 of THB. For instance, a rocket vehicle launched from a size 1 world would need a maximum speed of $0.125 \times 2160\text{kph}$ (270kph). Thus the hull of rocket vehicles launched from a larger world would need to be streamlined to ensure it could reach the maximum speeds required.

Launch vehicles do not require a bridge or manning, but do require a minimum Model/1 avionics package and communications package to ensure the rocket has a controlled ascent. Batteries are required for these electronics, for a duration of 1 hour, so it is assumed 0.1EP is required.

If the rocket is designed to be reusable a parachute system must be installed for the weight of the Launch Vehicle. The parachute system takes up 5% of the volume of the Launch Vehicle and costs Cr10,000 per ton of parachute system installed.

A payload shroud is required for any payloads that are not themselves fully streamlined. So a partially streamlined or unstreamlined payload will require a payload shroud. The payload shroud includes the explosive devices necessary to separate the payload shroud and expose the payload. The volume of the shroud is 5% of the total volume of the launch vehicle, at a cost of MCr0.1 per ton of shroud. For instance, a payload shroud for a 100 ton launch vehicle would be 5 tons and would cost MCr0.5.

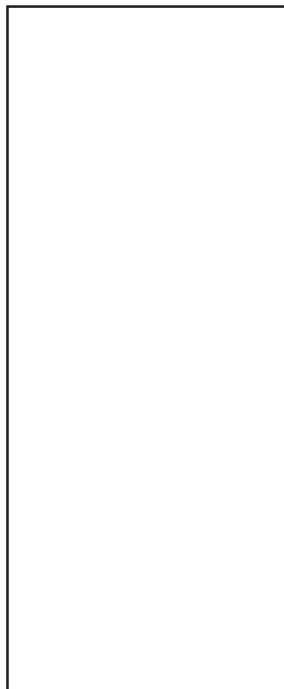
Launch Vehicles have a cargo volume, being the maximum payload a launch vehicle can deliver into low orbit. The payload capacity is determined by the volume left after fuel, maneuver drive, avionics, communications, battery power and payload shroud are deducted. The amount a Launch Vehicle can lift into geostationary orbit or to escape velocity from the planet launched from, is 30% of close orbit payload. The balance of the payload volume (the remaining 70%) is taken up by a rocket transfer vehicle that orbits with the payload and then boosts the payload into geostationary orbit or escape velocity.

EXAMPLE LAUNCH VEHICLE: SATURN 1B ROCKET (TERRA, 1961-1975 AD)

This two-stage rocket was used by the United States of America to launch Earth-orbit Apollo missions for the lunar program and Skylab program. This variation on the original design includes a parachute system to allow recovery of the Launch Vehicle.

SATURN 1B LAUNCH VEHICLE

Class: Launch Vehicle	EP Output: 1
Tech Level: 7	Agility: 0
Size: Medium (100t)	Initiative: +0
Streamlining: Streamlined	AC: 10
Jump Range: 0	Repulsors: None
Acceleration: 2	Nuclear Dampers: None
Fuel: 51.33 (Rocket)	Meson Screens: None
Duration: 10 minutes	Black Globes: None
Crew: 0	AR: 0
Staterooms: 0	SI: 100
Small Cabins: 0	Main Computer: None
Bunks: 0	Sensor Range: None
Couches: 0	Comm. Range: Close (Model/1)
Low Berths: 0	Avionics: Model/1
Cargo: 21.97 tons, 6.59 tons into Geostationary orbit	Cost: MCr13.75256 with discount
Atmospheric Speeds:	NoE = 1175kph
Cruising = 3525kph	Maximum = 4700kph
Other Equipment: Payload shroud, parachute system.	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

SATURN 1B

	Size	Cost	EP	Notes
100-ton streamlined cylinder	+100	MCr10.5	-	
Flight Avionics	-0.4	MCr0.9	-	
Close Range Communications	-0.2	MCr0.5	-	
2-G Rocket Drive	-16	MCr6	-	
Batteries	-.1	MCr0.0007	1	
Rocket Fuel (10 minutes)	-51.33	-	-	10 mins required for orbital insertion
Payload Shroud	-5	MCr0.5	-	
Parachute system	-5	MCr0.05	-	
Low Orbit Payload	-21.97	-	-	Geostationary orbit payload: 6.59 tons.
<i>Totals</i>	<i>100</i>	<i>MCr17.1907 (MCr13.75256 with 20% volume discount)</i>		

EXAMPLE LAUNCH VEHICLE: PATHFINDER ROCKET, (ILLELISH SECTOR, 1248)

This small reusable solid fuel rocket is used to loft small satellites into orbit and is being manufactured on worlds close to the border of the 4th Imperium. The Pathfinder plans are sold to many worlds who require unmanned satellite launch capability. A few dictatorships have converted the Pathfinder to military use, probably as a means to launch nuclear weapons against adversaries.

PATHFINDER ROCKET

Class: Launch Vehicle	EP Output: 0.1
Tech Level: 7	Agility: 0
Size: Small (10t)	Initiative: +0
Streamlining: Streamlined	AC: 11 (+1 size)
Jump Range: 0	Repulsors: None
Acceleration: 2	Nuclear Dampers: None
Fuel: 5.13 (Rocket)	Meson Screens: None
Duration: 10 minutes	Black Globes: None
Crew: 0	AR: 0
Staterooms: 0	SI: 75
Small Cabins: 0	Main Computer: None
Bunks: 0	Sensor Range: None
Couches: 0	Comm. Range: Close (Model/1)
Low Berths: 0	Avionics: Model/1
Cargo: 1.66 tons	Cost: MCr2.48405 with discount
(0.498 tons to geostationary orbit)	NoE = 1175kph
Atmospheric Speeds:	Maximum = 4700kph
Cruising = 3525kph	
Other Equipment: Payload Shroud, parachute system.	



Ship's Data (Commercial)

TAS Form 3.1 (Condensed)

PATHFINDER ROCKET

	Size	Cost	EP	Notes
10-ton streamlined cylinder hull	+10	MCr1.05	-	
Flight Avionics	-0.4	MCr0.9	-	
Close Range Communications	-0.2	MCr0.5	-	
Batteries	-0.01	MCr0.00007	0.1	
2-G Rocket Drive	-1.6	MCr0.6	-	
Rocket Fuel	-5.13	-	-	
Payload Shroud	-0.5	MCr0.05	-	
Parachute system	-0.5	MCr0.005	-	
Low Orbit Payload	-1.66	-	-	0.498 tons into geostationary orbit.
Totals	10	MCr3.10507		<i>(MCr2.48405 with 20% volume discount)</i>

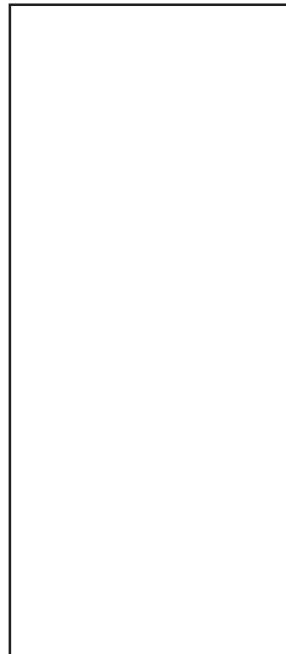
TL-7 SPACE EXPLORATION VEHICLE (SEV)

This 12 ton design is an attempt by low tech societies to provide an exploration spacecraft to explore low orbit and nearby moons. It is not designed to land on planets, rather it is designed for pure space travel. Fitted with a bridge and a small cabin, the CEV is cramped, especially with its normal crew of two or three. Typical mission profile consists of a rocket boost from orbit to either a higher orbit or a nearby moon or space station. The engine need not be firing for all this time – it simply burns to accelerate the craft to the desired velocity, then executes a short retro-burn to slow the craft at the end of the journey. A Crew Return Vehicle (CRV) is carried, essentially a small capsule for returning crew members to their home planet through a re-entry and soft-landing procedure by parachute.

The SEV consists of 4 main decks. The first deck is the bridge deck which contains the flight controls as well as the computer and life support systems. Communication and sensor systems are housed in the nose cone. The crew's acceleration couches are mounted with their backs on the "floor" of this deck. The second deck is the crew deck which contains the crews' zero-g sleeping sacks, the galley, and the ship's airlock. The third deck stores part of the rocket fuel supply and the CRV. The fourth deck contains the rocket drive, some fuel, batteries, and the solar panel mounts.

TL-7 SPACE EXPLORATION VEHICLE (SEV) – SHORT RANGE

Class: Small Craft	EP Output: 0.1 (0.1 extra)
Tech Level: 7	Agility: 0
Size: Small (12t)	Initiative: +0
Streamlining: Partial	AC: 11 (+1 size)
Jump Range: 0	Repulsors: None
Acceleration: 1	Nuclear Dampers: None
Fuel: 2.44	Meson Screens: None
Duration: 8 minutes	Black Globes: None
Crew: 2-3	AR: 0
Staterooms: 0	SI: 75
Small Cabins: 1	Main Computer: Model/2
Bunks: 0	Sensor Range: Close (Model/1)
Couches: 2	Comm. Range: Short (Model/2)
Low Berths: 0	Avionics: Model/1
Cargo: 0	Cost: MCr5.612 with discount
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Crew Return Vehicle, Batteries, Solar Panels.	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

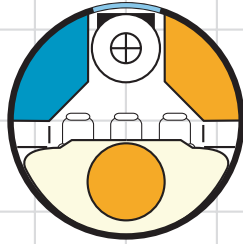
TL-7 SEV – SHORT RANGE

	Size	Cost	EP	Notes
12-ton semi-streamlined cylinder	+12	MCr1.2	-	
Model/2 Computer	-0.2	-	-	
Sensors Model/1	-0.3	MCr1.2	-	
Flight Avionics Model/1	-0.4	MCr1.8	-	
Short Range Comms Model/2	-0.4	MCr2	-	
Bridge	-4	MCr0.1	-	
Small Cabin	-2	MCr0.25	-	
Solar Panels	-0.2	MCr0.1	+1	
1-G Rocket Drive	-0.96	MCr0.36	-	
Rocket Fuel (8 mins)	-2.44	-	-	
Batteries	-0.1	MCr.0007	+1	
Crew Return Vehicle (CRV)	-1	-	-	
Cargo space	-0	-	-	
Totals	12	MCr7.0107 (MCr5.60856 with 20% volume discount)		

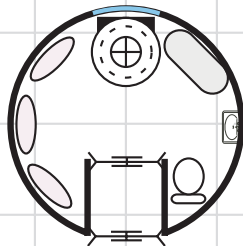
STANDARD SEV - SHORT RANGE



Deck 1 - Bridge



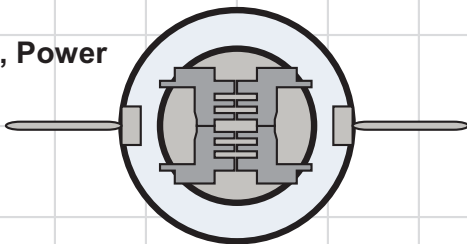
Deck 2 - Crew



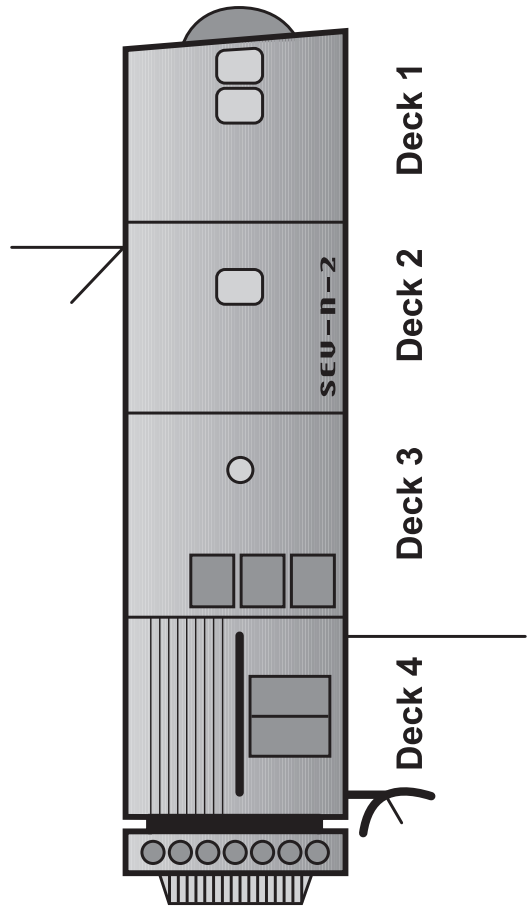
Deck 3 - CRV, Fuel



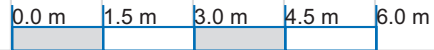
Deck 4 - Drive, Power



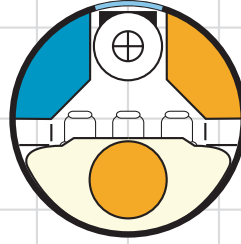
SEV - SIDE VIEW



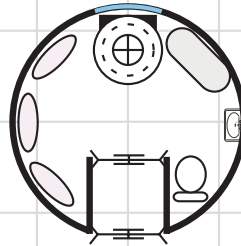
STANDARD SEV - LONG RANGE



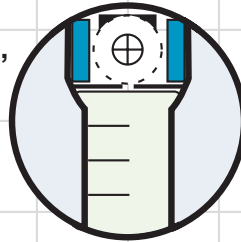
Deck 1 - Bridge



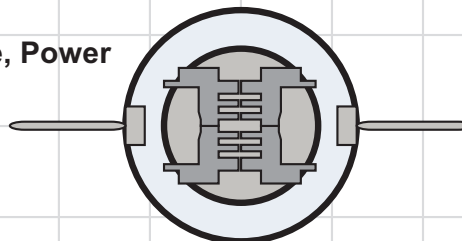
Deck 2 - Crew



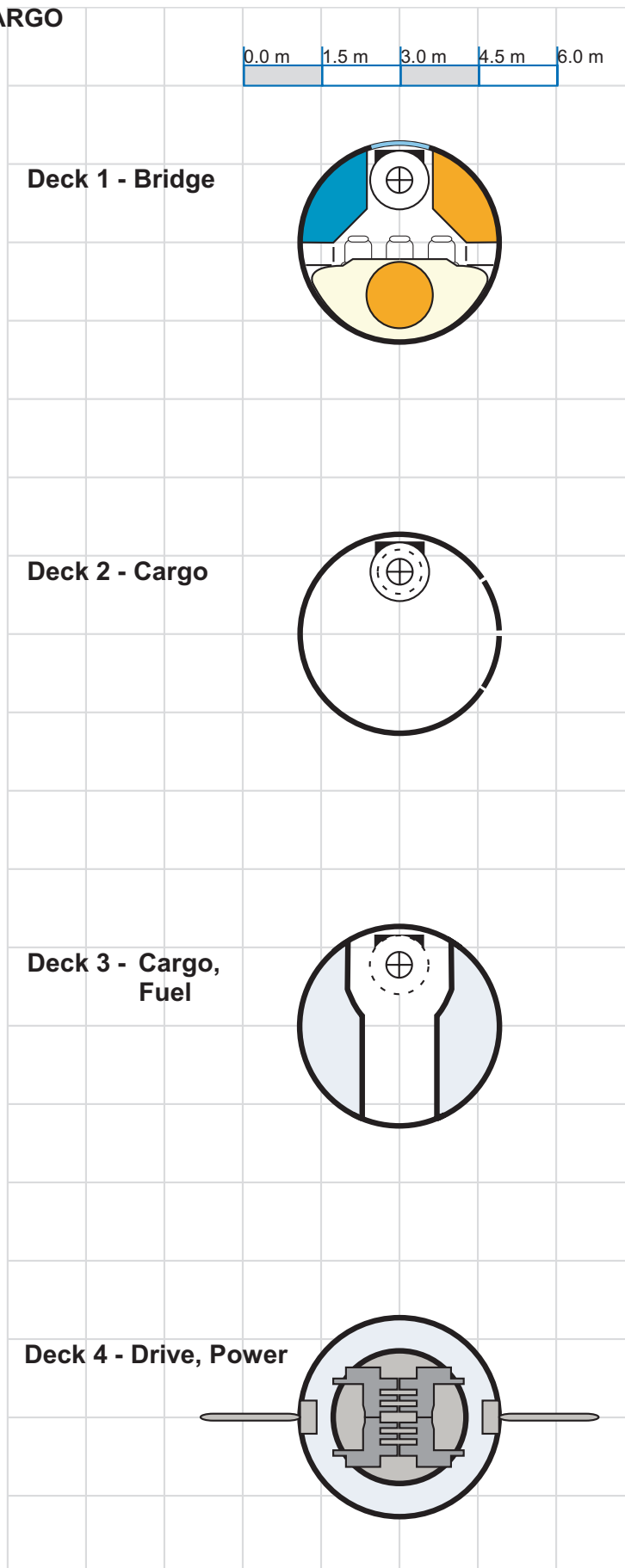
Deck 3 - E Low Berth, Fuel



Deck 4 - Drive, Power



STANDARD SEV - CARGO



The **Long-Range variant** eliminates the CRV and replaces it with an emergency low berth for 4 people. This enables a long range missions to be undertaken with the crew in cold sleep.

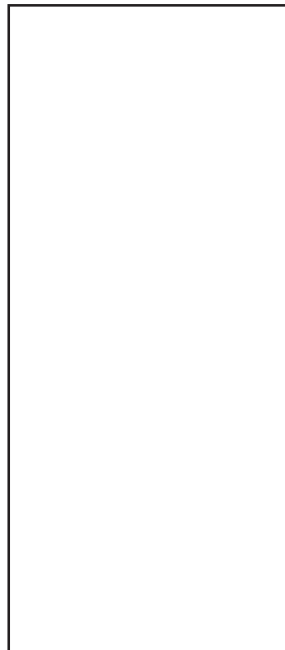
An unmanned **Cargo variant (SEV-C)** eliminates the small cabin and CRV and increases cargo space to 3 tons, enabling supplies, vehicles and landers to be carried for longer missions. Manned missions to other planets are usually undertaken by long range SEVs and cargo variants operating in unison, carrying sufficient supplies and vehicles for the mission.

TL-7 SPACE EXPLORATION VEHICLE - NUCLEAR (SEV-N)

The advent of fission technology at TL-7 is not without its dangers, but the use of such technology in spacecraft eliminates many problems associated with fuel consumption and range. This variant of the SEV also sports standard 1-G maneuver drives. The nuclear powered version has more cargo space and contains an emergency low berth for long-duration missions.

TL-7 SPACE EXPLORATION VEHICLE - NUCLEAR (SEV-N)

Class: Small Craft	EP Output: 0.1 (0 extra)
Tech Level: 7	Agility: 0
Size: Small (12t)	Initiative: +0
Streamlining: Partial	AC: 11 (+1 size)
Jump Range: 0	Repulsors: None
Acceleration: 1	Nuclear Dampers: None
Fuel: 0.36	Meson Screens: None
Duration: 3 Months	Black Globes: None
Crew: 2-3	AR: 0
Staterooms: 0	SI: 75
Small Cabins: 1	Main Computer: Model/2
Bunks: 0	Sensor Range: Close (Model/1)
Couches: 2	Comm. Range: Short (Model/2)
Low Berths: 1	Emergency Avionics: Model/1
Cargo: 1.86	Cost: MCr6.184 with discount
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Crew Return Vehicle.	



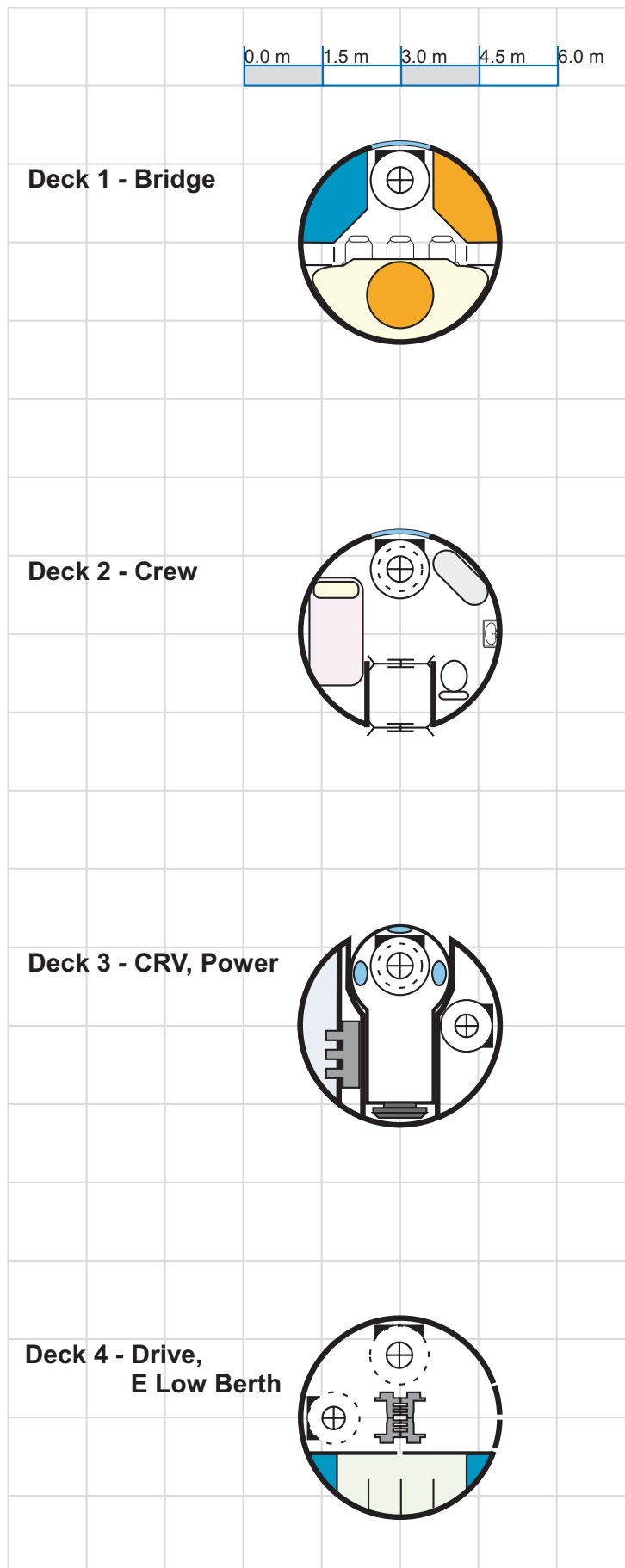
TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

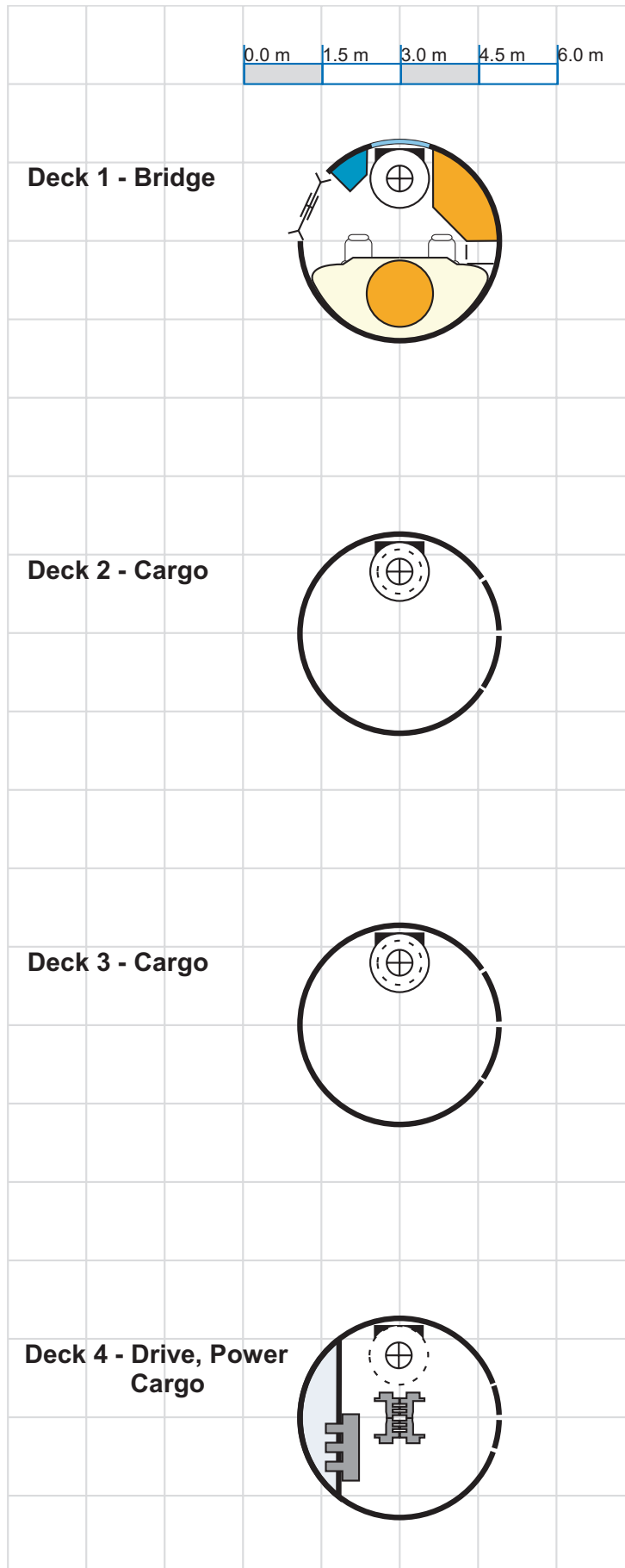
TL-7 SEV-N

	Size	Cost	EP	Notes
12-ton semi-streamlined cylinder	+12	MCr1.2	-	
Model/2 Computer	-0.2	-	-	
Sensors Model/1	-0.3	MCr1.2	-	
Flight Avionics Model/1	-0.4	MCr1.8	-	
Short Range Comms Model/2	-0.4	MCr2	-	
Bridge	-4	MCr0.1	-	
Small Cabin	-2	MCr0.25	-	
1-G Maneuver Drive	-0.24	MCr0.36	-0.12	
TL-7 Fission Powerplant	-0.24	MCr0.72	+0.12	
Fuel (3 months)	-0.36	-	-	
Emergency Low Berth	-1	MCr0.1	-	
Crew Return Vehicle (CRV)	-1	-	-	
Cargo space	-1.86	-	-	
Totals	12	MCr7.73		<i>(MCr6.184 with 20% volume discount)</i>

The cargo variant of the SEV-N has no small cabin, CRV or emergency low berth, increasing cargo capacity to 5.86 tons.



SEV-N - CARGO



TL-7 CREW RETURN VEHICLE (CRV)

This small craft is actually a vehicle designed to return crew through an atmosphere and parachute to either a land or sea landing. An ancient Terran equivalent would be the Apollo command module. Batteries in the CRV provide power to life support and computer systems for two hours. The rocket fires in a retro burn for two minutes, slowing the craft to enable an aerobraking descent into the atmosphere. A small reserve of rocket fuel is carried to enable corrections to the attitude of the spacecraft.

TL-7 CREW RETURN VEHICLE CRV

Class: Rocket Craft **EP Output:** 4.08 (0.00755 excess)
Tech Level: 7 **Agility:** 0
Size: Large (1350vl) **Initiative:** +0
Streamlining: Streamlined **AC:** 14 (-1 Large, +5 Armor)
Pressurized?: Yes **AR:** 5
Climate Control?: Yes **SI:** 40
Drive Train: Rocket **Visual:** None
Crew: 1 **Sensors:** None
Passengers: 2 **Comm:** 5000km range 2 way radio
Cargo Space: 11vl
Fuel: 48.27vl
Range: 3 mins fuel Acceleration: 55kph
Speeds: Offroad: N/A Very Slow: 55kph
Slow: 137kph Cruising: 275kph
Fast: 412kph Maximum: 550kph
Cost: Cr17,689 in Quantity
Other Equipment: TL-7 Linear Model B1 PP2 Computer, Parachute.



Vehicle Data (Commercial)

TAS Form 3.1v (Condensed)

TL-7 CRV

	Size	Cost	EP	Notes
1350vl streamlined chassis	+1350	Cr4050	-	
Armor-5	-324	Cr5916	-	
Manned Controls	-270	Cr675	-	
Drive Train: Rocket	-48.21	Cr6750	-	
Rocket Fuel (3 minutes)	-48.27	-	-	
3 Passenger Couches	-330	Cr300	-	
Batteries	-1.632	Cr8.16	+4.08	
Pressurized	-67.5	Cr1687.5	-1.6875	
Climate Control	-13.5	Cr675	-0.135	
5000km range 2-way radio	-3	Cr450	-0.12	
TL-7 Linear B1 Portable Computer	-1.35	Cr250	-0.09	
Parachute	-135	Cr1350	-	
Cargo space	-107.538	-	-	
Totals	1350	Cr22,111		<i>(Cr17,689 with 20% volume discount)</i>

TL-7 LANDER

This 3-man vehicle is designed to land on atmosphere 0 or 1 worlds and is carried by a cargo SEV. Crew will usually transfer to the Lander in orbit and descend to the surface of the target world for an exploration period of up to 96 hours (4 days). The Lander has 15 minutes of rocket fuel, enough to boost the Lander back into orbit from a size S, 1 or 2 world as well as a maximum 5 minute controlled burn when descending. The Lander can carry up to 673.62vl of cargo, usually scientific experiments. The Lander takes up 3 tons of cargo capacity. A remote controlled cargo variant can land up to 2503.9vl of cargo to enable longer stays and carry vehicles like buggies. To achieve this cargo capacity the Cargo Lander has its pressurization system, climate control, two passenger couches, fresher, galley and 72 hours of batteries removed, as well as its manned control system replaced by a remote control system. A Cargo Lander's descent would usually be controlled by a SEV in orbit. An ancient equivalent is the Apollo Lunar Lander.

TL-7 LANDER

Class: Rocket Craft
Tech Level: 7
Size: Large (4050vl)
Streamlining: Airframe
Pressurized?: Yes
Climate Control?: Yes
Drive Train: Rocket
Crew: 1
Passengers: 2
Cargo Space: 673.62
Fuel: 781vl
Range: 15 minutes Rocket Fuel, 96 hours Batteries
 Acceleration: 59.4kph
Speeds: Offroad: N/A Very Slow: 59.4kph Slow: 149kph
 Cruising: 297kph Fast: 446kph Maximum: 594kph
Cost: Cr446,382 in Quantity
Other Equipment: Galleyx1, Fresherx1, Passenger Couchesx2, Privacy Cubiclex1, TL-7 Model B1 Linear PP 2 computer.

EP Output: 622.8 (Battery)
Agility: 0
Initiative: +0
AC: 9 (-1 Large)
AR: 0
SI: 53
Visual: Video+Monitor+IR+LI 100m, 2x15m Area Lights
Sensors: 50km range Radar
Comm: 5000km range 2-way Radio



TAS Form 3.1v (Condensed)

Vehicle Data (Commercial)

TL-7 LANDER

	Size	Cost	EP	Notes
4050vl Airframe chassis	+4050	Cr16,200	-	
Manned Controls	-810	Cr2025	-	
Drive Train: Rocket	-156.2	Cr21,870	-	
Rocket Fuel (15 minutes)	-781	-	-	
2 Passenger Couches	-220	Cr200	-	
Galley	-200	Cr1000	-	
Fresher	-200	Cr750	-	
Privacy Cubicle	-500	Cr4000	-	
Batteries	-249.12	Cr1245.6	+622.8	
Pressurized	-202.5	Cr5062.5	-5.0625	
Climate Control	-40.5	Cr2025	-0.405	
5000km range 2-way radio	-3	Cr450	-0.12	
TL-7 Linear B1 Portable Computer	-1.35	Cr250	-0.09	
Video+Monitor 100m	-0.9	Cr700	-0.05	
LI 100m	-0.01	Cr500	-0.01	
IR 100m	-1	Cr1500	-0.03	
Lights 2x15m Area	-0.8	Cr200	-0.22	
50km Range Radar	-10	Cr500,000	-0.5	
Cargo space	-673.62	-	-	
Totals	4050	Cr557,978		<i>(Cr446,382 with 20% volume discount)</i>

RUNABOUT

TL9, MCr3.322, 10 tons. The Runabout is a small transfer craft used for errands that do not justify a launch or a 30 ton boat. Cheap to build and maintain, the Runabout is found engaged in the most menial tasks: checking highport exteriors for meteorite damage, assisting in EVAs, or transporting personnel between a highport and an orbital shipyard. They are rarely used for journeys longer than 1 day due to the lack of a small craft cabin. Runabouts are not usually found aboard starships as they are too small to be cost effective at carrying cargo or passengers on a regular basis.

Runabouts are typically available in two configurations: a utility version with room for 2.8 tons of cargo and 2 passengers and a passenger version with room for 7 passengers.

Runabouts require a crew of two, at least one of whom must have a Pilot skill rank of one or higher, and take 5 months to build.

RUNABOUT

Class: Smallcraft	EP Output: 0.2 (0.1 excess)
Tech Level: 9	Agility: 1 (+0.1 EP)
Size: Small (10 tons)	Initiative: +1 (+1 agility)
Streamlining: Streamlined	AC: 12 (+1 agility, +1 size)
Jump Range: None	Repulsors: None
Acceleration: 1-G	Nuclear Dampers: None
Fuel: 0.2 tons	Meson Screens: None
Duration: 4 weeks	Black Globes: None
Crew: 2	AR: 0
Staterooms: 0	SI: 75
Small Cabins: 0	Main Computer: Model/1
Bunks: 0	Sensor Range: Close (Model/1)
Couches: 2	Comm. Range: Close (Model/1)
Low Berths: 0	
Cargo Space: 2.8 tons	Cost: MCr3.322 (new)
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Fresher	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL9 DESIGN SPECIFICATIONS

	Size	Cost	EP	Notes
10-ton streamlined cylinder hull	+10	MCr1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/1 Computer	-0.1	MCr2	-	Model/1
Flight Avionics	-0.4	(MCr0.9)	-	Model/1
Close Range Sensors	-0.3	(MCr0.6)	-	Model/1
Close Range Communications	-0.2	(MCr0.5)	-	Model/1
1-G Acceleration	-0.2	MCr0.3	-0.1 EP	-
TL9 Fusion Power Plant	-0.2	MCr0.9	+0.2 EP	-
Fuel	-0.2	-	-	-
2 Small Craft Couches	-1	MCr0.05	-	-
Fresher	-0.5	MCr0.002	-	-
Cargo	-2.8	-	-	-
<i>Totals</i>	<i>+0</i>	<i>MCr4.152 (MCr3.322 with 20% standard design discount)</i>		

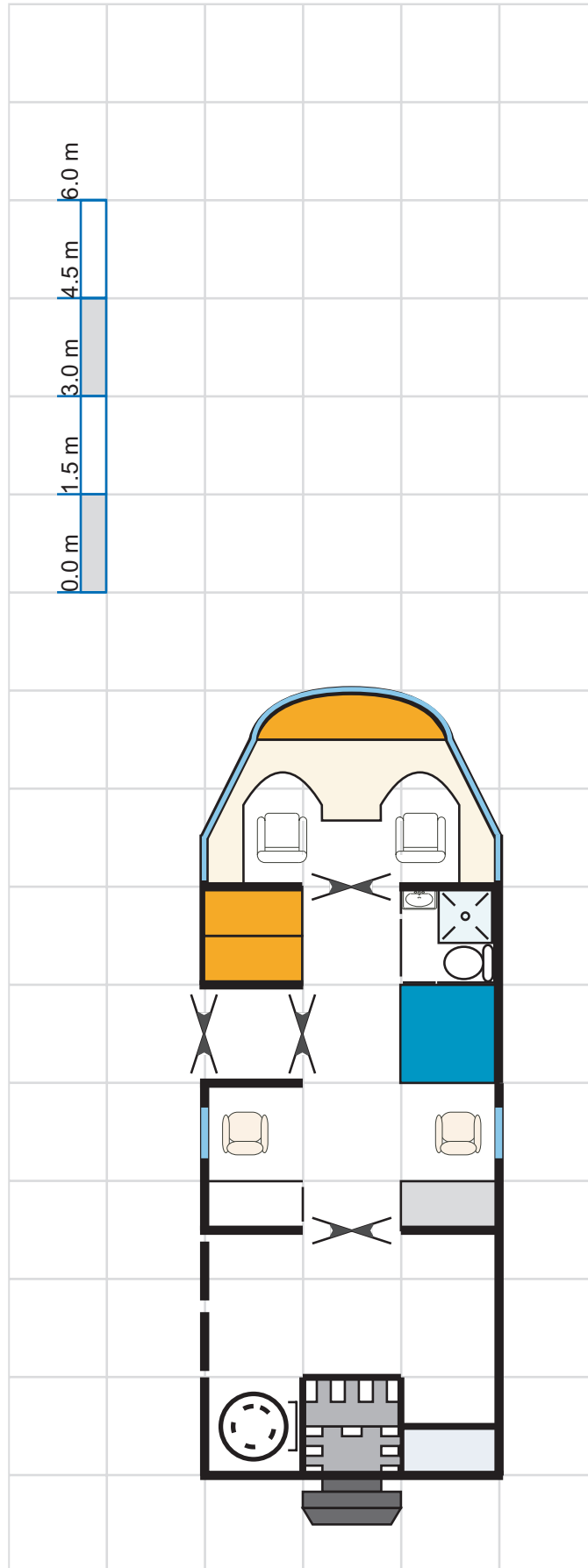
10 Ton Runabout

Runabout RA-0201111-000000-00000-0 MCr6.16 10 tons

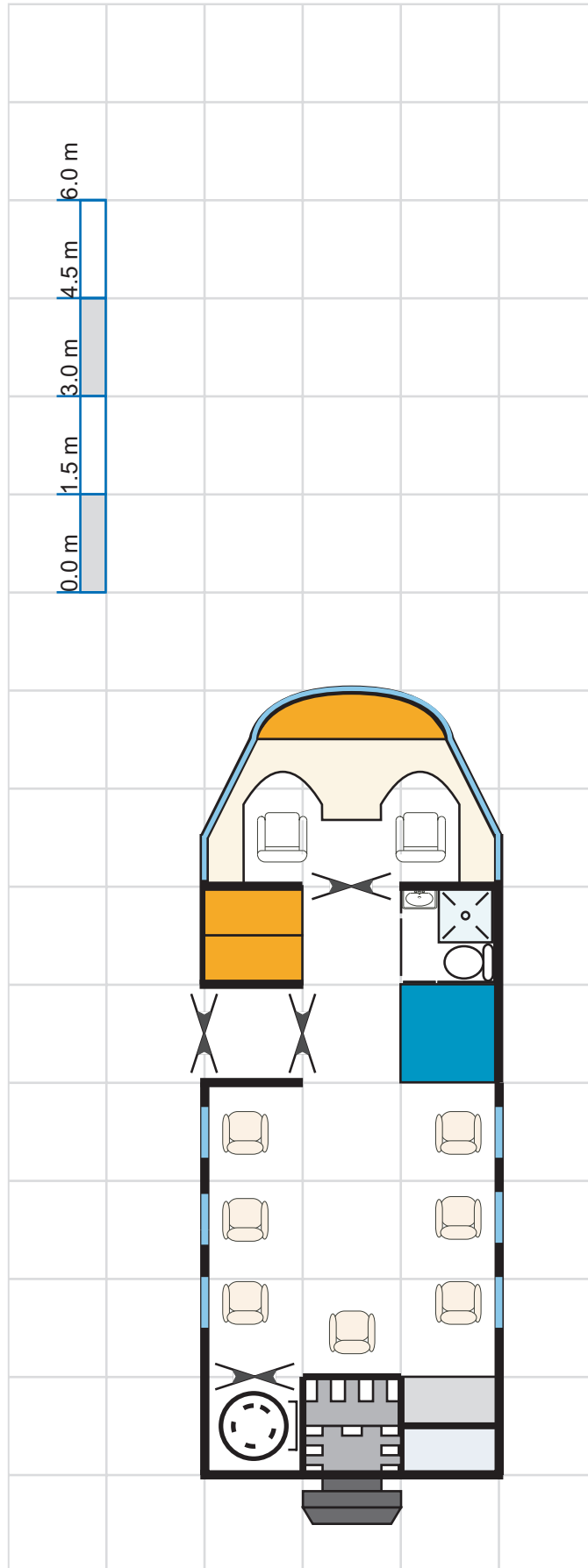
Crew=2 TL=9

Passengers=2 Fuel=1 Cargo=4 EP=1 Agility=1 Couches=2

RUNABOUT - STANDARD



RUNABOUT - PASSENGER



LAUNCHES

TL9, MCr11.282, 20 tons. The Launch is a small, slow vessel capable of fulfilling a wide range of roles from cargo and passenger transfer to lifeboat, search-and-rescue or starport utility work. Attempts to use a Launch as weapons platform are generally unsuccessful due to a lack of maneuverability, but the standard design includes a missile magazine and missile rack as standard. The magazine can double as extra cargo space if not carrying missiles.

Typically a Launch is capable of 1G acceleration, has an operational duration of 4 weeks before needing to refuel, and can carry approximately 7 tons of cargo. It requires a crew of two, at least one of whom must have a Pilot skill rank of one or higher, and takes 5 months to build.

LAUNCH - STANDARD

Class: Smallcraft
Tech Level: 9
Size: Small (20 tons)
Streamlining: Streamlined
Jump Range: None
Acceleration: 1-G
Fuel: 0.4 tons
Duration: 4 weeks
Crew: 2
Staterooms: 0
Small Cabins: 1
Bunks: 0
Couches: 2
Low Berths: 0
Cargo Space: 7.1 tons
Atmospheric Speeds:
 Cruising = 2625kph
Other Equipment: Fresher, missile magazine

EP Output: 0.4 (0.2 excess)
Agility: 1 (+1 EP)
Initiative: +1 (+1 agility)
AC: 12 (+1 agility, +1 size)
Repulsors: None
Nuclear Dampers: None
Meson Screens: None
Black Globes: None
AR: 0
SI: 77
Main Computer: Model/2
Sensor Range: Short (Model/2)
Comm. Range: Short (Model/2)

Cost: MCr11.882 (new)
 NoE = 875kph
 Maximum = 3500kph

Triple Turret: 1 missile rack, +1 attack bonus (+1 USP); Damage 1d6

TAS Form 3.1 (Condensed)

Ship.s Data (Commercial)

TL9 DESIGN SPECIFICATIONS

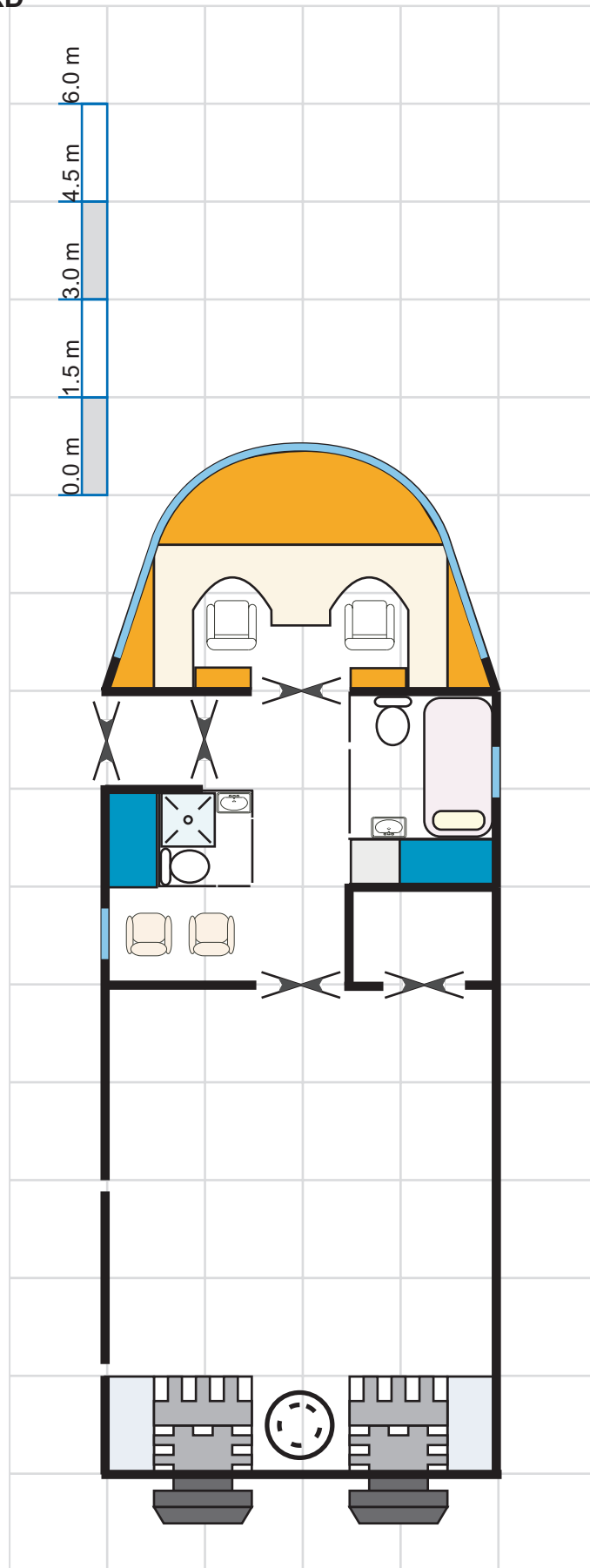
	Size	Cost	EP	Notes
20-ton streamlined cylinder hull	+20	MCr2.1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
1-G Acceleration	-0.4	MCr0.6	-0.2 EP	-
TL9 Fusion Power Plant	-0.6	MCr1.8	+0.4 EP	-
Fuel	-0.4	-	-	-
2 Small Craft Couches	-1	MCr0.05	-	-
1 Small Cabin	-2	MCr0.25	-	-
Fresher	-0.5	MCr0.002	-	-
1 Hardpoint	-	MCr0.1	-	-
Triple Turret/missile rack	-1	MCr1.75	-	-
Missile Magazine	-1	MCr0.1	-	-
Cargo	-7.1	-	-	-
Totals	+0	MCr14.852		<i>(MCr11.882 with 20% standard design discount)</i>

20 Ton Standard Launch

Launch QL-0201121-000000-00001-0 MCr13.6 20 tons
 1 Crew=2 TL=9

Passengers=2 Fuel=1 Cargo=7 EP=1 Agility=1 Couches=2 Small Craft Stateroom=1

LAUNCH - STANDARD



UNARMED LAUNCH

TL9, MCr10.402, 20 tons. The Unarmed Launch is identical to the standard Launch except the missile magazine and triple turret are sacrificed for an extra 2 tons of cargo space. Unarmed Launches are generally seen in safer areas of charted space.

UNARMED LAUNCH

Class: Smallcraft	EP Output: 0.4 (0.2 excess)
Tech Level: 9	Agility: 1 (+1 EP)
Size: Small (20 tons)	Initiative: +1 (+1 agility)
Streamlining: Streamlined	AC: 12 (+1 agility, +1 size)
Jump Range: None	Repulsors: None
Acceleration: 1-G	Nuclear Dampers: None
Fuel: 0.4 tons	Meson Screens: None
Duration: 4 weeks	Black Globes: None
Crew: 2	AR: 0
Staterooms: 0	SI: 77
Small Cabins: 1	Main Computer: Model/2
Bunks: 0	Sensor Range: Short (Model/2)
Couches: 2	Comm. Range: Short (Model/2)
Low Berths: 0	
Cargo Space: 9.1 tons	Cost: MCr10.402 (new)
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Fresher	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL9 DESIGN SPECIFICATIONS

	Size	Cost	EP	Notes
20-ton streamlined cylinder hull	+20	MCr2.1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
1-G Acceleration	-0.4	MCr0.6	-0.2 EP	-
TL9 Fusion Power Plant	-0.6	MCr1.8	+0.4 EP	-
Fuel	-0.4	-	-	-
2 Small Craft Couches	-1	MCr0.05	-	-
1 Small Cabin	-2	MCr0.25	-	-
Fresher	-0.5	MCr0.002	-	-
1 Hardpoint	-	MCr0.1	-	-
Cargo	-9.1	-	-	-
Totals	+0	MCr13.002		<i>(MCr10.402 with 20% standard design discount)</i>

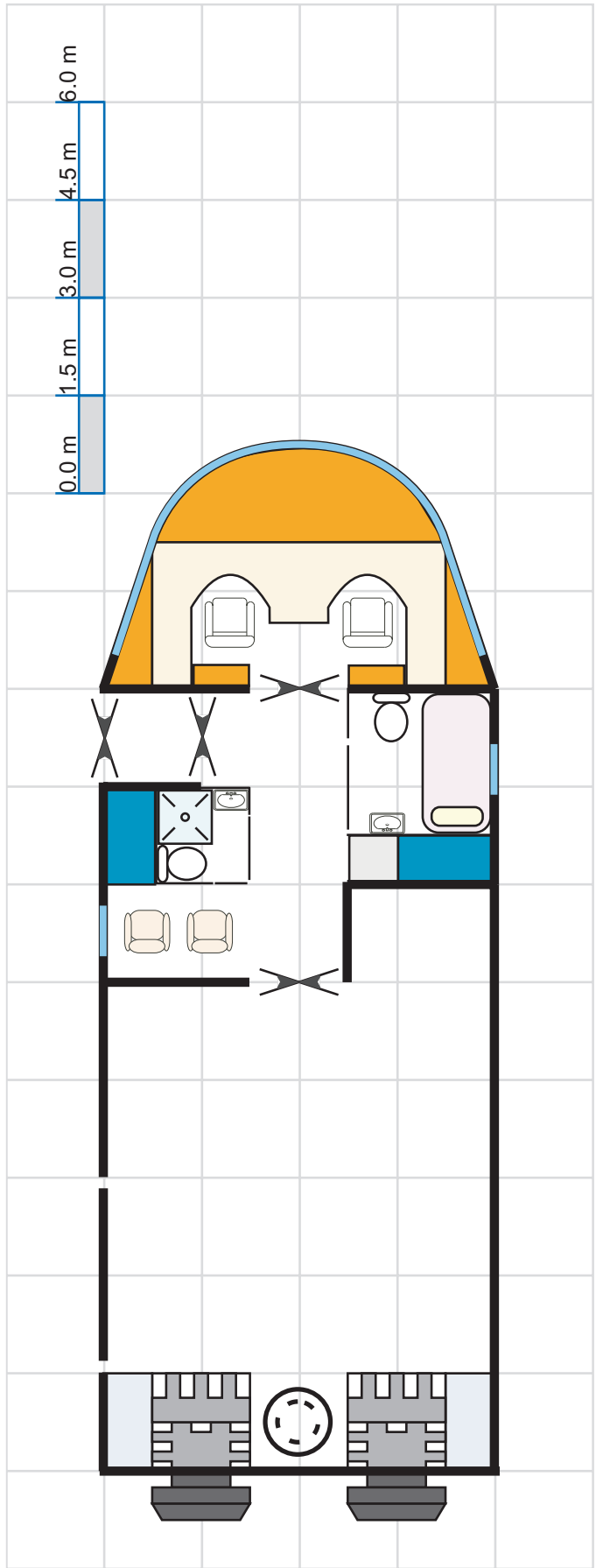
20 Ton Unarmed Launch

Unarmed Launch QL-0201121-000000-00000-0 MCr12.72 20 tons

Crew=2 TL=9

Passengers=2 Fuel=1 Cargo=8 EP=1 Agility=1 Couches=2 Small Craft Stateroom=1

LAUNCH - UNARMED



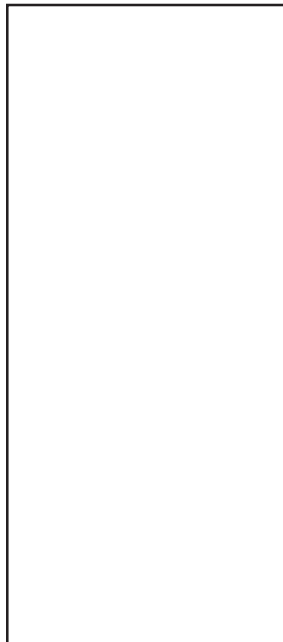
PASSENGER-CARGO TRANSFER LAUNCH

TL9, MCr10.402, 20 tons. The Passenger-Cargo Transfer version of the Launch is designed for relatively short transfers of passengers and cargo. Passenger-Cargo Transfer versions of the Launch are popular with subsidized merchants and other starships which primarily use them for orbital transfers of passengers and cargo.

A variant of the Passenger-Cargo Transfer configuration replaces four of the acceleration couches with a small cabin.

PASSENGER-CARGO TRANSFER LAUNCH

Class: Smallcraft	EP Output: 0.4 (0.2 excess)
Tech Level: 9	Agility: 1 (+1 EP)
Size: Small (20 tons)	Initiative: +1 (+1 agility)
Streamlining: Streamlined	AC: 12 (+1 agility, +1 size)
Jump Range: None	Repulsors: None
Acceleration: 1-G	Nuclear Dampers: None
Fuel: 0.4 tons	Meson Screens: None
Duration: 4 weeks	Black Globes: None
Crew: 2	AR: 0
Staterooms: 0	SI: 77
Small Cabins: 0	Main Computer: Model/2
Bunks: 0	Sensor Range: Short (Model/2)
Couches: 12	Comm. Range: Short (Model/2)
Low Berths: 0	
Cargo Space: 6.1 tons	Cost: MCr10.402 (new)
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Fresher	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL9 DESIGN SPECIFICATIONS

	Size	Cost	EP	Notes
20-ton streamlined cylinder hull	+20	MCr2.1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
1-G Acceleration	-0.4	MCr0.6	-0.2 EP	-
TL9 Fusion Power Plant	-0.6	MCr1.8	+0.4 EP	-
Fuel	-0.4	-	-	-
12 Small Craft Couches	-6	MCr0.3	-	-
Fresher	-0.5	MCr0.002	-	-
1 Hardpoint	-	MCr0.1	-	-
Cargo	-6.1	-	-	-
Totals	+0	MCr13.002		<i>(MCr10.402 with 20% standard design discount)</i>

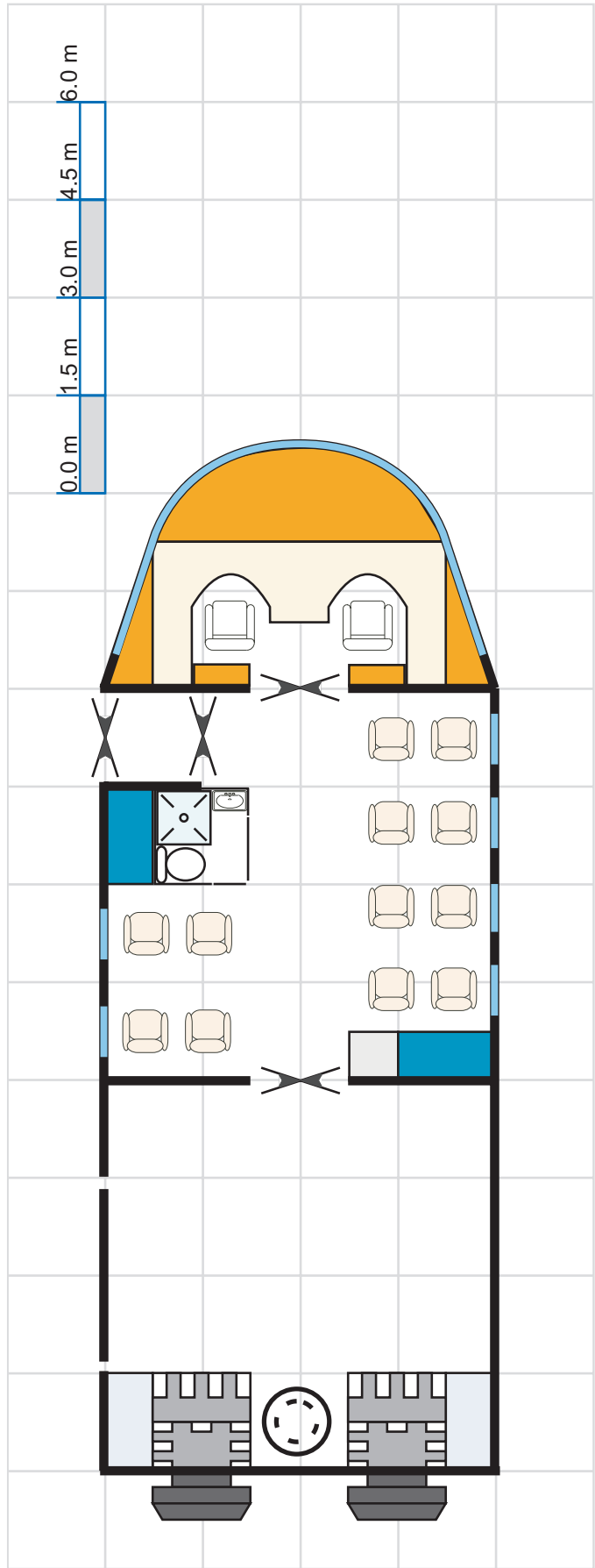
20 Ton Passenger-Cargo Transfer Launch

PCT Launch QL-0201121-000000-00000-0 MCr13.12 20 tons

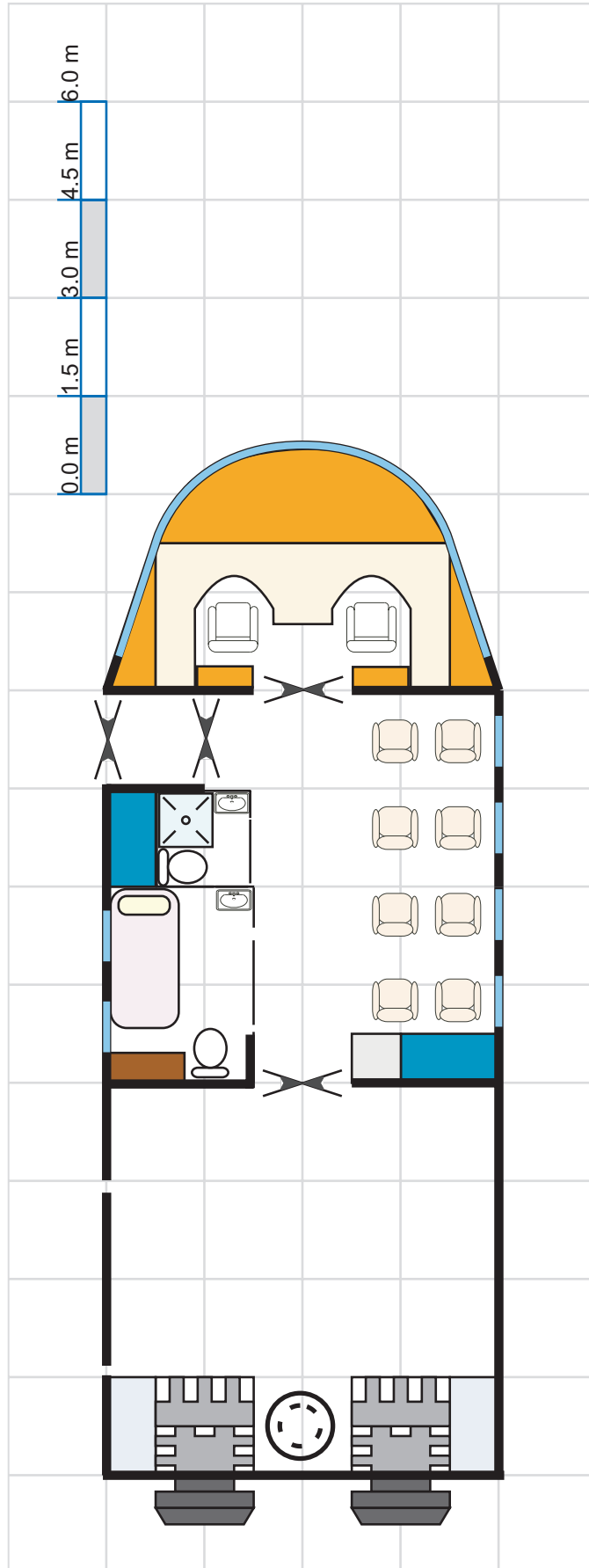
Crew=2 TL=9

Passengers=12 Fuel=1 Cargo=5 EP=1 Agility=1 Couches=12

LAUNCH - PASSENGER-CARGO TRANSFER



LAUNCH - PASSENGER-CARGO TRANSFER (SMALL CABIN VARIANT)



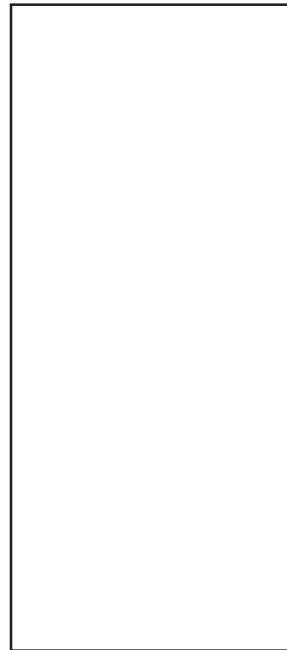
LIFEBOAT

TL9, MCr10.602, 20 tons. The Lifeboat configuration of the Launch is specifically designed to function as a lifeboat, though it can also handle minor passenger and cargo transfers. Equipped with 4 emergency low berths and extra fuel, the Lifeboat configuration is primarily used by large passenger liners. In an emergency, the Lifeboat has the capacity to carry 16 passengers in the emergency low berths and 6 passengers in acceleration couches. Cargo capacity is quite limited and is usually used to store emergency supplies.

The Lifeboat is capable of 1G acceleration and has an operational duration of 12 weeks before needing to refuel. Only 3.9 tons of cargo can be carried. It requires a crew of two, at least one of whom must have a Pilot skill rank of one or higher, and takes 5 months to build.

LIFEBOAT

Class: Smallcraft	EP Output: 0.4 (0.2 excess)
Tech Level: 9	Agility: 1 (+1 EP)
Size: Small (20 tons)	Initiative: +1 (+1 agility)
Streamlining: Streamlined	AC: 12 (+1 agility, +1 size)
Jump Range: None	Repulsors: None
Acceleration: 1-G	Nuclear Dampers: None
Fuel: 1.6 tons	Meson Screens: None
Duration: 12 weeks	Black Globes: None
Crew: 2	AR: 0
Staterooms: 0	SI: 77
Small Cabins: 0	Main Computer: Model/2
Bunks: 0	Sensor Range: Short (Model/2)
Couches: 6	Comm. Range: Short (Model/2)
Low Berths: 4 (Emergency)	
Cargo Space: 3.9 tons	Cost: MCr10.602 (new)
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: Fresher	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL9 DESIGN SPECIFICATIONS

	Size	Cost	EP	Notes
20-ton streamlined cylinder hull	+20	MCr2.1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
1-G Acceleration	-0.4	MCr0.6	-0.2 EP	-
TL9 Fusion Power Plant	-0.6	MCr1.8	+0.4 EP	-
Fuel	-1.6	-	-	-
6 Small Craft Couches	-3	MCr0.15	-	-
4 Emergency Low Berths	-4	MCr0.4	-	-
Fresher	-0.5	MCr0.002	-	-
1 Hardpoint	-	MCr0.1	-	-
Cargo	-3.9	-	-	-
Totals	+0	MCr13.252		<i>(MCr10.602 with 20% standard design discount)</i>

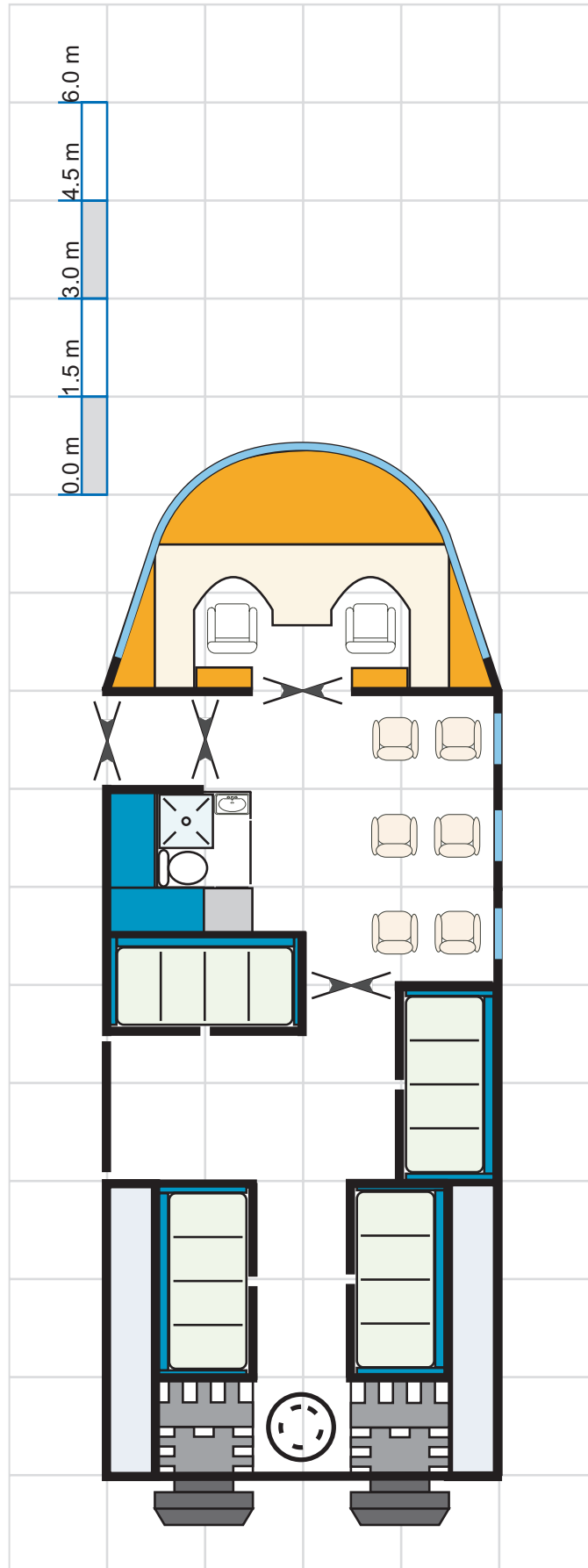
20 Ton Lifeboat

Lifeboat QL-0201121-000000-00000-0 MCr13.2 20 tons

Crew=2 TL=9

Passengers=6 Fuel=1 Cargo=4 EP=1 Agility=1 Couches=6 Emergency Low=4

LIFEBOAT



GARBAGE SCOW

TL9, MCr10.08, 20 tons. At the end of their lives, launches are often converted into garbage scows with almost everything ripped out for pure cargo carrying capacity.

Nominally capable of 1G acceleration (though poor maintenance and age may have reduced performance), a garbage scow has an operational duration of 4 weeks before needing to refuel, and can carry approximately 9 tons of cargo. It requires a crew of two, at least one of whom must have a Pilot skill rank of one or higher.

GARBAGE SCOW

Class: Smallcraft	EP Output: 0.4 (0.2 excess)
Tech Level: 9	Agility: 1 (+1 EP)
Size: Small (20 tons)	Initiative: +1 (+1 agility)
Streamlining: Streamlined	AC: 12 (+1 agility, +1 size)
Jump Range: None	Repulsors: None
Acceleration: 1-G	Nuclear Dampers: None
Fuel: 0.4 tons	Meson Screens: None
Duration: 4 weeks	Black Globes: None
Crew: 2	AR: 0
Staterooms: 0	SI: 77
Small Cabins: 0	Main Computer: Model/2
Bunks: 0	Sensor Range: Short (Model/2)
Couches: 0	Comm. Range: Short (Model/2)
Low Berths: 0	
Cargo Space: 9.1 tons	Cost: MCr10.08 (new)
Atmospheric Speeds:	NoE = 875kph
Cruising = 2625kph	Maximum = 3500kph
Other Equipment: None	



TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL9 DESIGN SPECIFICATIONS

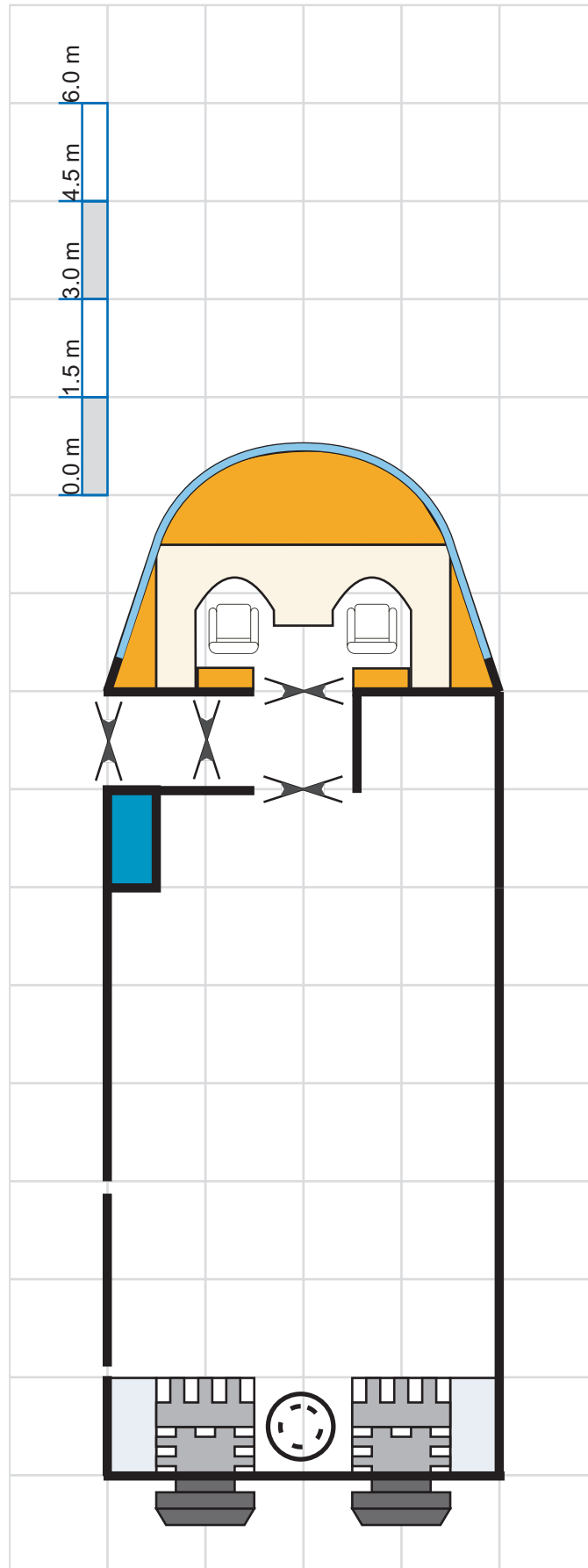
	Size	Cost	EP	Notes
20-ton streamlined cylinder hull	+20	MCr2.1	-	-
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
1-G Acceleration	-0.4	MCr0.6	-0.2 EP	-
TL9 Fusion Power Plant	-0.6	MCr1.8	+0.4 EP	-
Fuel	-0.4	-	-	-
Cargo	-12.6	-	-	-
<i>Totals</i>	<i>+0</i>	<i>MCr12.6 (MCr10.08 with 20% standard design discount)</i>		

20 Ton Garbage Scow

Garbage Scow QL-0201121-000000-00000-0 MCr12.64 20 tons
Crew=2 TL=9

Fuel=1 Cargo=11 EP=1 Agility=1

GARBAGE SCOW



GIG

TL13, MCr18.338, 20 tons. A gig is a high performance, armed and armored 20 ton small craft. Used only by navies, the highly agile gig is usually armed with a single beam laser and is capable of 6-G acceleration. Despite their performance characteristics, gigs are not fighters. They are used for fast transport of important personnel and priority cargo items and are capable of defending themselves. There are 4 acceleration couches for passengers and room for 0.6 tons of cargo.

Gigs require a crew of two, at least one of whom must have a Pilot skill rank of one or higher, and take 5 months to build.

GIG

Class: Smallcraft	EP Output: 3 (0.8 excess)
Tech Level: 13	Agility: 4 (+0.8 EP)
Size: Small (20 tons)	Initiative: +4 (+4 agility)
Streamlining: Streamlined	AC: 19 (+4 agility, +1 size, +4 armor)
Jump Range: None	Repulsors: None
Acceleration: 6-G	Nuclear Dampers: None
Fuel: 1.5 tons	Meson Screens: None
Duration: 2 weeks	Black Globes: None
Crew: 2	AR: 4
Staterooms: 0	SI: 77
Small Cabins: 0	Main Computer: Model/2
Bunks: 0	Sensor Range: Short (Model/2)
Couches: 4	Comm. Range: Short (Model/2)
Low Berths: 0	
Cargo Space: 0.6 tons	Cost: MCr18.338 (new)
Atmospheric Speeds:	NoE = 1175kph
Cruising = 3525kph	Maximum = 4700kph
Other Equipment: Fresher, fuel scoops	

Single Turret: 1 beam laser, +2 attack bonus (+2 USP); Damage 2d8

TAS Form 3.1 (Condensed)

Ship's Data (Commercial)

TL13 DESIGN SPECIFICATIONS

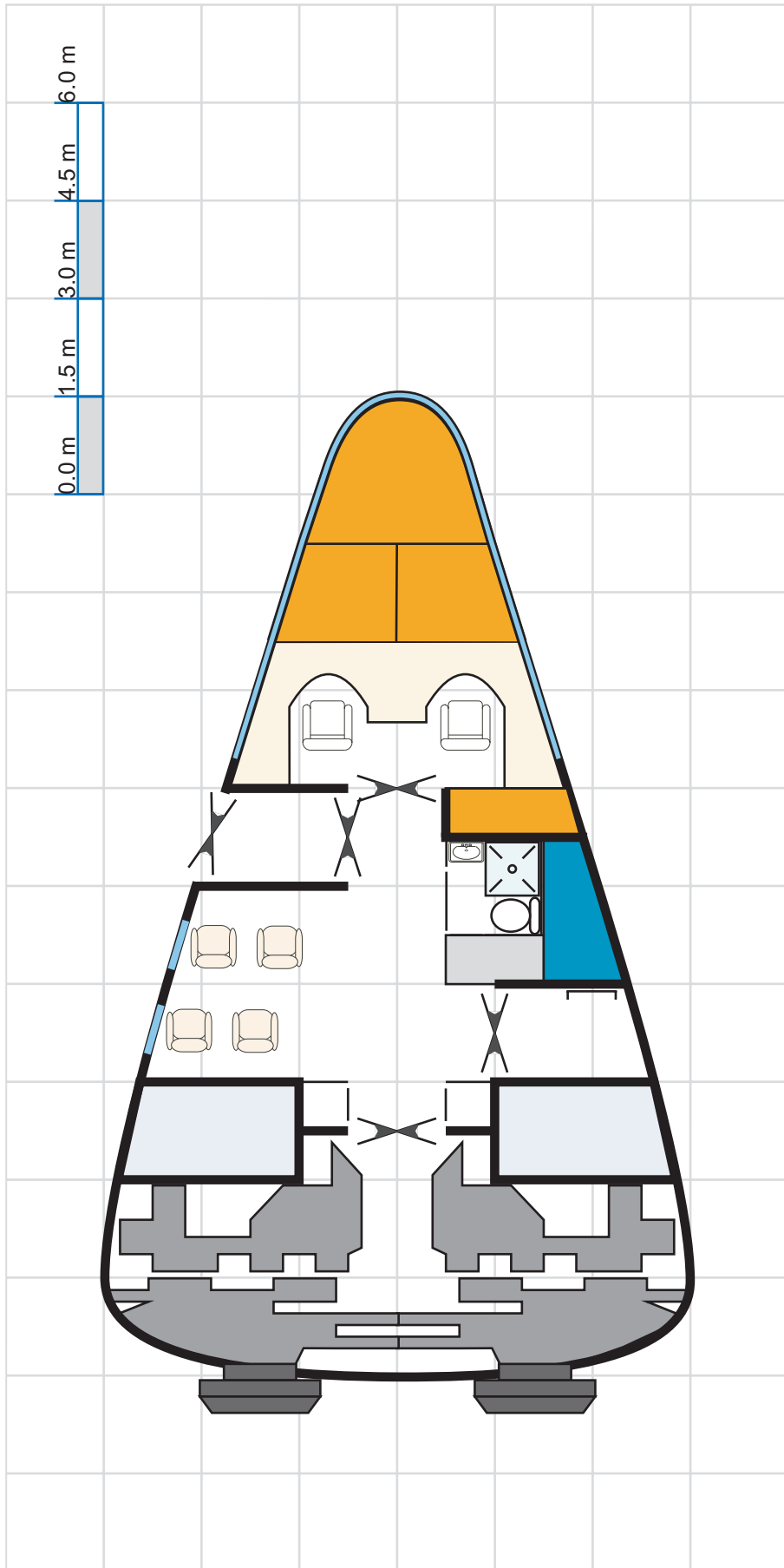
	Size	Cost	EP	Notes
20-ton streamlined wedge hull	+20	MCr2.4	-	-
AR 4 TL 13 Armor	-2	MCr0.2	-	AR 4
Bridge Controls	-4	MCr0.1	-	-
Model/2 Computer	-0.2	MCr8	-	Model/2
Flight Avionics	-0.8	(MCr1.8)	-	Model/2
Short Range Sensors	-0.6	(MCr1.2)	-	Model/2
Short Range Communications	-0.4	(MCr1)	-	Model/2
6-G Acceleration	-3.4	MCr1.7	-1.2 EP	-
TL13 Fusion Power Plant	-3	MCr9	+3 EP	-
Fuel	-1.5	-	-	-
Fuel scoops	-	MCr0.002	-	-
4 Small Craft Couches	-2	MCr0.1	-	-
Fresher	-0.5	MCr0.002	-	-
1 Hardpoint	-	MCr0.1	-	-
Single Turret	-1	MCr0.5	-	-
TL 13 Beam Laser	-	MCr1.0	-1 EP	-
Cargo	-0.6	-	-	-
Totals	+0	MCr22.922		<i>(MCr18.338 with 20% standard design discount)</i>

20 Ton Gig

Gig GG-0106621-400000-20000-0 MCr18.816 20 tons

1 Crew=2 TL=9

Passengers=4 Fuel=1.2 Cargo=2 EP=1.2 Agility=1 Couches=4 Single Beam Laser Turret. Fuel Scoops.



Adventure Seeds

Abandon Ship

A routine mid passage trip on a subsidized merchant ends in a misjump. The subbie disabled, the passengers, characters and crew have to abandon ship in the lifeboat in the middle of an uninhabited system. A barren, hostile desert planet is their only refuge. The characters must help the lifeboat crew find water on the barren world, and somehow survive until rescue comes...

Launch to the Rescue

The characters run a small craft piloting school, teaching people to pilot small craft in orbit. Operating from a quiet C class starport in a mid tech system, there are no shortage of trainees who come through the doors due to the planet's high population. The training Launch *Stellar* is very old but lovingly maintained. The characters are taking two 20 year old Planetary Navy recruits on a piloting excursion in the outer system when a signal GK from a 100 ton mining seeker in the system's asteroid field. The Launch responds to the Signal GK as required by interstellar law, and comes across a crippled seeker drifting in a dense asteroid field, with hull integrity breached and the crew in vac suits desperate for rescue...

Sabotage

1248 (or a Red Zone sometime in the Golden Age): An advanced nation on a TL-7 balkanized world has started launching pathfinder rockets into orbit to explore the solar system. But a highly religious anti-technology nation-state opposed to the space-faring nation's moves into space are attempting to sabotage the space program. The characters are responsible for security on the space program and are tipped off to several major plots to destroy the launch capability of their nation. In the midst of this crisis, a starship from another world arrives to introduce the planet to human (or Vargr, or Aslan or K'kree or Hiver) offworlders, presenting a nightmare security problem for the characters.

Heroes

1248: a planet in the Wilds has rebuilt old technology and is starting to explore the local star system. The characters, having never left the planet, are part of the space program and are chosen for the first interplanetary journey to the nearest moon. Two nuclear powered SEV's and a Lander have been prepared for the mission. Historical records indicate the existence of a star-spanning human Empire which collapsed in a maelstrom of war over a century ago. No-one knows what dangers will be encountered out there, but the characters will return home heroes regardless. That is, if they return.

The possibilities of what they could encounter are endless. Here a few suggestions.

- A benign Virus entity controlling a wrecked Imperial Scout Base on the moon's surface.
- An abandoned space station drifting in orbit around the moon, inhabited by an aggressive viral strain.
- A small domed Scout Base in reasonable working order and no Virus present, with 100 intact Low Berths housing Scout and Imperial Navy personnel in cold sleep.

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