

STAR WARS[®] EDGE OF THE[™] EMPIRE

OPERATIONAL COSTS



A Guide for Ship Operators

STAR WARS[®]
ROLEPLAYING

TABLE OF CONTENTS

Inspiration.....	3	Hyperdrive Maintenance.....	8
Introduction.....	3	Hyperdrive Failure.....	9
Breakdown of Consumables.....	4	Crew Consumables.....	10
Fuel.....	4	Starports.....	11
Power.....	4	Ship Modifications.....	13
Consumables.....	5	Example.....	14
Ship Maintenance.....	6	Record Sheet.....	15
System Failures.....	7		

CREDITS

WRITING AND DEVELOPMENT

Dave 'RebelDave' Brown
Shay 'RusakRakesh' Blechman.

BASED ON AND INSPIRED BY

West End Games; *Tramp Freighters*
Starship Mundane Costs by GM Hooly.

PROOFREADING

Ian 'GM Hooly' Houlihan
Drew 'Kainrath' Kay

COVER AND INTERIOR ART

Sourced from Google. Artists Unknown.

ACKNOWLEDGEMENTS

My Thanks to FangGrip for his Style Guide

A special Thank You to Shay Blechman.
This supplement started off as a few house
rules for my own group.
When I then sat down to flesh it out, it took
on a life of its own.

Without his help, ideas and editing, this
would never have come as far as it has.

-Dave

This is a fan made supplement for the Star Wars Roleplaying Game series published by
Fantasy Flight Games. No Copyright Infringement is intended.

This is a Free Publication and not intended for sale.

WHAT INSPIRED THIS GUIDE

While Fantasy Flight Games Star Wars Roleplaying Game is designed for a narrative environment, where the story takes precedence over the mechanics of the game, the small details of ship operating costs can easily be ignored in the grander adventure our players are involved with.

While this is fine, some groups may want to look into the smaller details of the costs involved in running a vessel. For some it will add depth, for others greater immersion, and for those who want to try actually running a shipping game, they could

well become important details that need to be taken into account

This supplement is aimed at giving a framework on the costs of running a ship. The costs involved in actually trading goods can be found in the Speculative Trading supplement by GM Hooly.

Much of the basis of this information has been pulled from the West End Games supplement, and expanded upon and tweaked by myself.

INTRODUCTION

Running a ship is not simply a case of buying one and flying into the sunset. They all require certain things; Fuel, Power and Maintenance in order to function, and running a ship requires certain factors to be taken into account, like the mass of the cargo load, the strain on the system's, number of passengers and the consumables each vessel needs to support its crew.

FUEL

This is the heart blood for most ships, without this the engines cannot run, and without those, smaller ships will have no power.

While capital scale vessels, and the bigger freighters are sufficiently large enough to carry their own fusion reactors for power, smaller vessels are reliant on their primary engines to provide the power to run their navigational, flight and life support systems.

POWER

Power is required to run everything on a vessel, except the engines which burn fuel. On smaller freighters this power is generated by the primary sublight engines, but this burns fuel. Meaning a ship at standby needs to have its engines idling, using fuel, but allowing for a fast pre-flight start-up and departure.

While docked for any significant length of time, at any reasonably equipped spaceport, ships can be hooked up to the local power grid to power their systems, allowing the engines to be shut down to save fuel. For extended periods, captains may elect to do just this, it does mean a longer pre-flight start-up time before they can launch, but it can be a credit saving exercise, and when credits are tight, every one counts.

CREW CONSUMABLES

While ships themselves require fuel and power to operate, they also require a crew. And a crew comes with its own requirements, while life support systems are critical, food, water and similar are necessities in order to survive the long trips across the galaxy.

MAINTENANCE

While the Core Rulebooks cover repairs and their basic costs, general maintenance is a regular and ongoing cost. For example, Hyperdrives are delicate pieces of equipment, but essential to traverse the vast distances between worlds. However, a captain's worst nightmare can be a malfunctioning hyperdrive that can, at best, leave them stranded on a far flung world, or at worst stranded out in deep space with little chance of rescue.

Hyperdrives require certain parts to be replaced regularly to ensure reliable operation, drives that go too long without an overhaul at regular intervals risk the chance of failure, and it's a foolhardy or desperate captain who takes that risk. While the parts are readily available, the work is delicate and precise and mistakes are certainly something to avoid.

BREAKDOWN OF CONSUMABLES

FUEL

Ships burn fuel all the time their sublight engines are running. Each ship uses fuel for all activities it undertakes, from basic flight, to combat operations, to standby idling, keeping the crew alive and basic operations.

Fuel is used at certain rates, depending on the activities the ship is undertaking. Most ships, when used for their designed purposes, are quite fuel efficient, they spend little time in the atmosphere of a planet, are not usually expected to undertake much in the way of combat manoeuvres, take the shortest route to their destinations and make as few hyperspace jumps as possible. (See Tables 1 and 2)

However, as soon as you start pushing your ship beyond their original design parameters, fuel usage goes up. Throwing a bulky light freighter around in a dogfight requires the engines to work far harder than simply cruising along, and this burns more fuel. Equally, in the case of Freighters, the larger the cargo load, the greater the mass the ship, and the more fuel it requires for everyday operations. Simply moving that mass off the surface of a planet will burn more fuel, so a canny captain will have to weigh up all the factors when operating their vessel if they want to make a profit at the end of a run.

TABLE 1 - FREIGHTER FUEL CELL USE

Cells Used
½ per Takeoff or Landing and reaching Jump Distance
1 per Hyperspace Jump
1 per 6 hours IN Hyperspace
1 per 12 hours of Realspace Operation
1 per 1 hour of Combat Manoeuvres
1 per 1 hour of Atmospheric flight
1 per 24 hours of Standby
1 per each 2 additional Passengers beyond the ship's maximum per day*
1 additional per maximum cargo load (Realspace and Atmospheric ops)

In addition, every 2 passengers beyond the ship's limit (Crew + Passengers) reduces the ships Strain Threshold by 1 as the life support systems are pushed beyond their normal operating limits.

While ships have fuel tanks, and in some cases more than one, fuel is measured in 'cells', a pre-measured unit of volume. While this conjures up rows of batteries, it is more a method to track how much fuel a ship can carry, and how much it uses during various operations.

Starfighters are designed for heavy combat manoeuvres, and given their smaller mass, and crew requirements, more emphasis can be placed on the activities they are designed for. Starfighters would have **25 Fuel cells**. *There are some exception to this, like the TIE fighter, which have even fewer, but do not need to run any life support systems, or shields. Light Freighters (Sil 4) generally have 50 Fuel Cells, While Heavy Freighters (Sil 5) would have 100 Fuel Cells and above.*

TABLE 2 - STARFIGHTER FUEL CELL USE

Cells Used
1 per Hyperspace Jump
1 per 9 hours IN Hyperspace
1 per 18 hours of Realspace Operation
1 per 1 hour of Combat Manoeuvres
1 per 2 hour of Atmospheric flight
1 per 48 hours of Standby

CAPITAL SHIPS

Capital Ships tend to have far different primary drives to those found on smaller ships due to their size and bulk. While these vessels would have a fuel cost associated, their fuel consumption would vary drastically between models. Ships of this size probably have thousands of fuel cells, possibly even on a different scale of volume making their fuel capacity several hundred times greater than any smaller vessels.

Its also likely that the large engines of these vessels work in entirely different ways given their size, making it impossible to fit to smaller ships, and therefore falling outside the realms of this supplement.

POWER

While all ships require Fuel for their Sublight engines, Power is equally important. For the smaller ships that are too small to have their own power generation systems, they draw power from the sublight engines while they are running (and burning fuel).

No fuel - no engines.

No engines - no power.

No power - no life support, flight control systems, navigation, etc.

Even when landed, the sublight engines must 'idle' in order to keep these systems up and running. Captains can elect to shut down all systems to conserve fuel, but restarting the engines and powering up all the required systems for flight can take time.

While this is fine for extended stays in one location, it can cost precious time when you need to make a quick getaway, so captains must make a judgement call; to keep the engines running at the cost of fuel, or save fuel at the cost of time.

Starfighters have much less strain placed on life support systems, typically because they only need to support a very small crew in a very small space, for much shorter periods of time. Most of their power is therefore pushed towards the weapon and manoeuvring systems. This naturally makes them fare more fuel efficient in their operation (See Table 2).

Heavy Freighters and Capital ships are large enough to carry the massive Power Generators to provide their operational power. These ships can, (but generally don't need to), draw their power from the sublight drives, so fuel considerations only becomes a factor for actual flight, and thus can ignore any fuel consumption numbers for everything except actual operation, which should be doubled to account for their much greater mass.

However, as any independent contractor knows, a ship of this size is outside their operating budget, and they tend to be found only in the ownership of the established shipping companies or government use.

Some crews elect to fit industrial power stores to their ships, that allow them to shut down the sublight engines to save fuel, while keeping the systems online. This can mean they do not need to hook up to local power, and thus save money. In some ports, it's the only choice...



CREW CONSUMABLES

All Ships have a Crew, Passenger and Consumables rating. These generally indicate the amount of supplies the ship is designed to carry, for the length of time listed, for a ship carrying its full crew and passenger capacity. (For example- YT-1300, has a crew complement of 2, a passenger capacity of 6, and consumables for two months. Enough to feed 8 beings for 2 months).

The Crew plus Passenger limit is the maximum the ship's life support system is designed to accommodate. While most systems can stretch beyond this, it would start to have a detrimental effect on the ship over extended periods of time, depending on how far the life support systems are pushed.

Taking on crew or passengers in excess of the ship's maximum limit will reduce the ship's System Strain Threshold, as the life support system struggles to support the extra beings beyond the number it was designed for. **For every 2 additional beings beyond the ship's limit, the System Strain Threshold is reduced by 1.**

For example- a ship with a maximum capacity of 8 can carry enough supplies (excluding taking on extra at the cost of cargo space) for 16 people, for 1 month. However, those extra 8 beings will reduce the ship's System Strain Threshold by 4 (1 per 2 extra beings) as the life support system is pushed to cope with extra living beings.

The exception to this are droids. For rules purposes droids require parts and power, so they still count towards the Crew Consumables limit, however, since they do not require heat or air, they infer no additional strain on the life support system, so do not affect the ship's System Strain. If however, the droid is shut down for the journey, they would no longer use up consumables, but would be considered cargo, and could be ruled to take up cargo space.

MAINTENANCE

All ships, of all sizes, require regular maintenance to keep them in operating safely and economically. The list of things that need to be maintained on any vessel is long: Hydraulic fluids, coolant, rotational bearings, hatch seals, engine igniters, atmospheric scrubbers life support regulators, landing struts, artificial gravity projectors, inertial damper generators, control thrusters, sublight engine regulators, the list can go on and on of all the little things that can go unnoticed until one goes wrong and turns your world into a deep space nightmare.

As a ship goes through its daily life, all these things need to be taken into consideration. However, for

simplicity's sake, they all come under the heading of *Ship Maintenance* meaning one flat fee at any decent port will get a maintenance crew to do all this work for you.

Of course, if a crew have a decent mechanic on board, they may want to do the work themselves

to save a few credits, but they will still need to buy the parts or fluids required for the work. For the most part, these are plentiful and available at pretty much any port of at least Grade 4.

The costs to have the work done will also vary dependant on location.

REPAIR, REFUEL, RESUPPLY

SHIP MAINTENANCE

Nothing lasts forever, and ships are no exception. They lead a tough life, the stresses of regular operations are one thing, but often ships are pushed beyond their limits.

As such all vessels require on going preventative maintenance in order to prevent catastrophe. This is different to repairing Hull Trauma sustained in combat, these are the easily overlooked things that can give even the best crew a headache if they don't keep on top of them.

The list of things a ship needs checking can become exhaustively long; hatch seals, landing gear and cargo loading hydraulics, engine coolants, ramp lubricants, life support filters, sensor calibration, engine ignites, power motivators, the list can go on and on.

For the sake of simplicity, all these things fall under the heading of *Ship Maintenance*. Maintenance costs can be determined by counting the number of *Maintenance Events* a ship has experienced (See Table 3).

Each *five events* adds up to *one hour* of maintenance work required. While these may not always be the same parts, this represents the replacement and repair of worn equipment on the vessel to maintain good operation.

This does not necessarily mean parts need replacing, it may simply be that they need checking. A Mechanics check will determine if something needs to be repaired or replaced, and thus how much it will cost.

However, when a ship reaches 10 hours of required Maintenance, its up to the GM to decide if things start going wrong, and how to apply this to the players narrative. It could be Setback dice to flight operations, or a reduction in System Strain. Things might start to fail or break down; weapon turret bearings can start to seize up, hatch seals can start to leak etc. At this point, repair costs may start going up.

A good crew can keep on top of these things to keep costs down, but they need to remember to either take the time to do these checks, or pay for it to be done when they reach a port with suitable services available.

The costs for this maintenance can be found in Table 6. These costs represent only basic maintenance, and do not include additional costs incurred by faults found based on a Mechanics dice roll. It's left to the GM to decide how much of that cost is for the parts and supplies themselves, and the savings in labour fees if the crew wish to do the work themselves.

HULL TRAUMA

Remember: Hull Trauma is separate from Ship Maintenance.

Hull Trauma is damage sustained during combat, and is repaired as per the rules in the Core Rule Book.

SYSTEM FAILURES

When a ship reaches 10 hours of required maintenance the GM may choose to penalise crews who do not keep on top of maintenance by rolling on the Systems Failure Table (Table 4) to see what goes wrong.

This works in much the same manner as the Critical Hit table. Roll once at 21 hours, and for each hour beyond that add 10 to the result.



TABLE 3 - MAINTENANCE EVENTS

Landing on a Planet Twice if carrying a Heavy Cargo (50% or more of total Encumbrance Value) Twice if it's a heavy landing (Three times if a heavy landing with heavy load)
Taking off from a Planet Twice if carrying a heavy cargo
A Combat Encounter
Any Collision that <i>doesn't</i> result in Hull Trauma
One, <i>per day, per every 2 beings</i> the life support system is required to support beyond its limit
1 Week of Flight/Continuous Engine Running

A Heavy Cargo is a narrative description for any cargo that is particularly heavy in its mass. The GM decides if a cargo is classed as 'heavy'
A Heavy Landing is a narrative event that the GM could use on the result of Threat during a Piloting check when landing the vessel.

HYPERDRIVE MAINTENANCE

Hyperdrives are generally fairly reliable, if they are kept well maintained. Manufacturers recommend overhaul and replacement of certain parts every 20 or so jumps. For a group this can count every jump made, alternatively, a GM can enforce this on every plot relevant jump.

When players need to travel from Point A to point B, its more likely they will make a number of smaller jumps, depending on the departure and arrival locations. This can be counted as a single jump for the purposes of maintenance costs. Of course a GM or party who really want to get into the nitty gritty of the fine details, they can track every minor jump to this total, but they may want to increase the number of jumps before they are required to do any maintenance on the Hyperdrive.

This work can be completed at any decent space port, the parts are common, and the demand is such that anywhere with any reasonable docking facilities will be have stock on hand for this work.

The cost to perform basic maintenance on a hyperdrive usually comes in at 1000 credits, this covers all required checks for power running, replacement tibanna gas and carbonite inserts, maintenance on hyper matter reaction igniters and replacement of motivators and coolants.

DIY MAINTENANCE

If PCs may want to do the work themselves, the GM may ask for Mechanics Roll.

On a ✨, the PC completes the maintenance without any significant difficulty. 🕒 can reduce the time and costs involved, and 🛠️ can indicate the PC has performed all require maintenance without having to pay out for parts at all, having jury rigged, or tweaked parts to eek out extra life from them.

⚠️ indicates the PC has missed something in their checks, applying (or not removing) Maintenance Events or Hours, or missing something that is about to fail. 🛠️ indicates more problems cropping up, requiring more work at a cost, or further parts that need replacing. 🚨 can be used to find a major defect in a significant system or part that needs immediate attention, or if a GM feels like it a major issue has gone unnoticed.

Crews who undertake this work themselves can usually get the costs down, but they will still need to buy the supplies. This cost can vary depending on location and the port they are at, but the parts are so critical to operation, and so prevalent, the cost doesn't vary a vast amount.

HYPERDRIVE FAILURES

As with other systems, without maintenance hyperdrives can go wrong. However, such a critical component for interstellar travel, the results of a failure can be far more dangerous and problematic than other systems.

A hyperdrive failure in the middle of a jump, can leave a crew stranded far from any help, and almost certainly doomed to a cold and lonely fate at worst, or a long and slow flight if they have a backup drive in working order.

A Hyperdrive can be expected to work normally for 20 jumps. Every subsequent jump runs the risk of something going wrong as it is pushed past its normal operating limits.

On the drives 21st jump without Maintenance, the GM may roll on Table 5 - Hyperdrive Failures, to see if something goes wrong. Every subsequent jump without maintenance, add 10 to the result.

TABLE 4 - SYSTEM FAILURES

d100	Result
01-40	No Faults become apparent.
41-50	Hydraulic Fluid is leaking. Hatches or Boarding Ramps do not operate smoothly, or jam.
51-60	The Landing Gear does not extend or retract properly, meaning the ship sits lopsidedly while landed, making cargo loading problematic.
61-70	An air lock or hatch seal has failed, and is leaking. Meaning the airlock cannot be used, or the ship vents small amounts of atmosphere.
71-80	Life Support air scrubbers are nearing saturation. The crew limit on the life support system is reduced by 2
81-90	Life Support air scrubbers are worn out, and need replacing. The crew limit on the life support system is reduced by 4
91-100	The Sublight engines start running badly, increasing their fuel use by 50% until relevant parts have been replaced.
101-110	The Sublight engines have deteriorated significantly in their running, doubling their basic fuel cost.
111-120	The Hyperdrive is in need of significant maintenance, it costs double the fuel cost to jump into hyperspace.
121-130	The Hyperdrive is in a very bad shape, it counts as 0.5 slower than is standard rating, as well as costing double the fuel to make any jumps.
131-140	The speed of the vessel is reduced by 1 as the engines are not running efficiently.
141-150	The Sublight engines need significant maintenance, as such they are not outputting as much power as they should. The ship cannot run all its systems at once, the GM may decide if this means the ship cannot run all its weapons, or if the weapons are reduced in their damage output. (Or roll on Table 7-10 or 7-11 as applicable in the CRB)
151-160*	Rotational Bearings have started to wear, meaning turreted weapons do not respond as quickly, or jam entirely.
161-170*	The manoeuvring jets on the vessel are misfiring, reducing the Handling of the ship by 1
171-180*	The shields need retuning or the emitters need replacing, the ship counts as have 1 less point of defence.

*These options are interchangeable. The GM May choose which option.



TABLE 5 - HYPERDRIVE FAILURES

d100	Result
1-40	The drive performs as expected this time.
41-50	The drive is not performing as expected, and the jump takes longer than expected. Count this jump as .5 class slower than rated.
51-60	The drive is not running efficiently, it requires twice the fuel to make any jumps.
61-70	The Hypermatter Igniter takes longer to initiate the reaction. The ship jumps to hyperspace 2 rounds after the jump is ordered.
71-80	The hypermatter reaction is unstable, the drive performs as if 1 class slower.
81-90	A power transfer conduit overloads. the drive needs an average mechanics check to repair it before the ship can make a jump.
91-100	A power regulator blows, sending a surge back into the ship's systems. Randomly determine what system is damaged by the surge (Communications, Transponder, A Weapon System, Life Support or Deflectors OR refer to tables 7-10 or 7-11 as applicable on page 245 of the Edge CRB).
101-110	The power regulation systems fail, and the hyperdrive shunts its energy into the ship's primary systems, destroying one system (Randomly determine: Communications, One Weapon, Life Support or Deflectors OR refer to tables 7-10 or 7-11 as applicable on page 245 of the Edge CRB) The ship does not jump.
111-120	The drive overloads on arrival at the destination, it is significantly damaged.
121-130	The drives coolant system ruptures mid transit, and the ship drops to real space. Parts need replacing and its tibanna coolant needs refilling before it can be used again.
131-140	The hyperdrive blows and is destroyed. This ship does not jump.
141-150	The hyperdrive blows just after the ship makes the jump, forcing the ship back into realspace an undetermined distance from the departure point. The drive is destroyed.
151 +	The hyperdrive blows and is destroyed, causing significant damage to the ship, and possibly breaching the hull.

CONSUMABLES

All ships have two critical fuels. One feeds the sub-light engines and facilitates flight, the other feeds the crew.

All ships have a Crew Complement, Passenger Capacity and Consumables rating. The Consumables rating is the number of days, weeks or months of food and fresh water the ship can carry, to feed the crew + passengers at its limit.

For example, a YT-1300 has a crew complement of 2, a Passenger Capacity of 6, and a Consumables rating of two months.

This means the ship, when fully stocked can support 8 beings for 2 months before they run out of supplies. 8 is also the limit of the ships Life Support system design.

While life support systems are designed with a buffer in mind, for every 2 beings beyond its limit, the ship will burn more fuel as the system draws

more power, and the ships System Strain is reduced by one until the strain on the system is removed.

Refuelling the ship is simply a case of landing at a port where fuel is available and buying some more, at whatever cost it is being sold for at that locale.

The same applies to crew consumables.

A crew wishing to restock their larder, or recharge the basic proteins in their auto-chefs will need to first determine the basic cost at that port, and they but as many days food and water then desire.

The cost of replenishing crew consumables can come down to a simple formula; The number of days consumables the crew wishes to replenish (up to the ships limit), multiplied by the total number of crew and passengers on board, multiplied by a base cost.

The base cost will vary depending on where in the galaxy they are trying to find supplies. (See Table 6)

On a reasonably civilised world, where supplies are abundant and common, a base fee of 10 credits is appropriate. However, on worlds where demand is higher, such as the outer rim, this cost can rise significantly, while agricultural worlds closer to the rim with an abundance of supplies the cost could be lower.

Worlds like Coruscant, while incredibly civilised and on major trade routes, costs could easily be higher, as Coruscant needs to import almost everything from off world. Corellia on the other hand probably has much lower costs, and Tatooine higher costs given its remoteness and harsh environment.

Equally important are the facilities available to dock at, which is covered later in this supplement.

Example:

A crew of 4 arrive on Corellia, they have been travelling for one standard galactic month (35 days). Corellia has a base fee of 10 credits being a civilised world on a major trade route, and capable of producing foodstuffs on planet. 4 Crew x 35 Days x 10 Base Fee = 1400cr.

However, if the same crew were landed at a basic Landing Field on Tatooine where food and water are far more scarce the cost would be:

4 Crew x 35 Days x 25 Credits = 3500cr.

STAR PORTS

As all captains know, if you want cargo, fuel, food, and repairs, unless you have the parts and the skills, you have to visit a Starport. Of which there are countless across the galaxy, on planets, and space stations alike. Some good, some bad, but any port in an emergency is a port.

Even under the Republic, the Bureau of Ships and Services (BoSS) categorised all significant star ports and docking facilities for the convenience of shipping companies so that they had a better idea of where they can get the services they required.

This classification continued after the Empire rose to power, since BoSS was such an entrenched and mammoth organisation, the Imperial Authorities realised, quite correctly, that taking over BoSS and starting fresh, would be a near impossible task, and so simply allowed them to continue under Imperial Authority.

As such, the Port Classification continued. Any facility can request an inspection to gain a classification, and the facilities they provide are the determining factor for what grade they receive.

GOING HUNGRY

Of course, a crew may choose not to refill their entire stocks at some prices, perhaps they still have half their stocks, or perhaps they choose only to take on the bare minimum to get them to another world where they get a better price, cutting a deal and canny negotiation can play an important part here, if not the basis for a social side adventure in itself.

The alternative is not to take on any supplies. If a crew wants to risk this, then for each day they go without any nourishment, they take 1 point of strain, and cannot recover strain from natural rest. They may still recover strain through use of Stimpacks or other stimulants, which of course, comes with it's own risks.

Of course, its never as simple as choosing the best port you can find. What you need, who you are, and what you can afford are all factors you need to take into account when deciding where to land your ship in search of work, parts, labour or cargo.

WHICH PORT?

Once a crew have decided on where to go, they need to get clearance to land there. Typically, this starts at a flat fee for simply the privilege of landing, and in the cases of a Grade 5 site, this may be their only income.

Typically, the bigger and busier the port, the higher the fees, but equally, supplies and fuel costs are potentially lower, and it's down to the crew to make a judgement call on where they need to be, and how much they can afford or are prepared to pay out.

Clearly, on Core World cities with a large number of ports, various Grades can be found; most Core Worlds with a significant population will have a variety of ports of various Grade, while smaller settlements such as Mos Eisley may only boast one Grade.

Having paid their fees for landing, yet more decisions lie before the crew. Do they need repairs? Fuel? Power? Consumables?

In some of the larger ports, (particularly those on well developed and civilised worlds) it's assumed that all ships landing will require fuelling and hooking up to the power network, basic maintenance and refilling of freshwater* and essential operating

fluids, and its down to the crew to specify that they *don't* want these services, or find themselves looking at a surprise bill for services when it comes for them to leave.

(Freshwater refill would constitute 50% of the Crew Consumable costs, basic proteins for Auto-chefs can make up the remainder although this is not replenished automatically as they cannot be supplied from the exterior of the vessel)

TABLE 6 - COSTS

Port Grade	Docking Fee	Fuel (per cell)	Power (per day)	Consumables (base fee)	Maintenance (per hour)
Grade 1	150cr	15-25cr	10cr	5cr*	23-30cr
Grade 2	100cr	25cr	10cr	10cr*	30cr
Grade 3	50cr	20-25cr	20cr	15cr*	40cr
Grade 4	25cr	25-30cr	20cr**	20cr*	20-50cr**
Grade 5	15cr	25-40cr	20cr**	25cr*	Variable**

Average costs, variables dependant on location. *variable on location **if available

STARSHIP MODIFICATIONS

EXTRA FUEL TANKS

Simply put, at the cost of sacrificing cargo space, additional fuel tanks can be added to a vessel to increase its range. Typically favoured by long range couriers or private vessels that move individuals or small cargoes long distances. This may be applied to all Freighters, but not to Starfighters.

Models Include: None

Base Modifiers: Increase the fuel cells of the vessel by 15 or 30.

Modification Options: None.

Hard Points Required: 1 or 2.

Price: 1,500 or 3,000 credits.

To fit the additional fuel tanks, the ship does not necessarily need to have free Hard Points. The crew can sacrifice 50 or 100 points of Encumbrance capacity. If the ship does have free hard points, they do not need to sacrifice cargo space.

LOW OUTPUT ION TURBINE

Originally marketed to small transport companies who wanted to save on running costs, at the cost of speed.

Models Include: Girodyne Lmf50 Low Output Ion Turbine, Incom Long Range Ion Drives, Keonsayr Economy Range Iron Drives

Base Modifiers: Decreases the engines Fuel Consumption by 10% by reducing the ships speed by 1.

Modification Options: 3 reduce fuel consumption by 10% Mods.

Hard Points Required: None, replaces existing drive.

Price: 5,000 credits.

STANDBY POWER RESERVE

Essentially a high capacity battery system that charges up while the ship is running, to allow the crew to power down the sublight drives, while keeping the ships systems powered up.

Models Include: Girodyne Standby Power Reservoir.

Base Modifiers: Allows the ship to remain powered for up to 6 hours of standby time without the sublight engines running.

Modification Options: 3 six additional hour Mods

Hard Points Required: 1 or 2.

Price: 2,500 Credits.

Only 1 HP is required for the base attachment and its first modification, the second HP is required for the final two modifications.

HIGH PERFORMANCE ION TURBINE

Originally marketed towards space race teams, the High Performance Ion Turbine is not fuel efficient, but was designed for high manoeuvrability in racing.

Models Include: Seinara Fleet Systems B15 Ion Drive, Incom Fast Reaction Turbine

Base Modifiers: Increases Handling by 1, while increasing Fuel Consumption by 25%

Modification Options: None

Hard Points Required: None on Starfighters, 1 if fitted to Freighters.

Price: 8,500 credits.

While designed for Starfighters, when used for Freighters, two units as usually required depending on the size of the ship.

TABLE 7 - STARPORT CLASSIFICATIONS

Grade 1 - Imperial Class Star Port

The best are ports that provide the most modern and luxurious of facilities. Providing both landing fields, ship storage and maintenance hangars, with all ship and crew services available on hand. Most merchants will maintain some kind of office or presence on site, along with qualified and competent repair crews, who can complete most repairs quickly and to a high standard, but at a price. Imperial Customs, Imperial or Local Military will usually have a strong presence.

Fuel and Power on hand at all landing sites, cargo moving equipment accessible, as well as recreation facilities, mean crews will rarely have to leave the port, and can easily deal with all business on site.

Any major Core World or highly civilised planet - Coruscant, Corellia, Alderaan

Grade 2 - Stellar Class Star Port

These grade of ports are capable and well equipped, and can deal with most repairs and maintenance needs for just about all types of ships. Repairs crews on hand for any work required, second only to those found at a Grade 1 Port. While there is almost certainly a Customs presence on hand, they may only be a small office with a few inspectors.

Fuel and Power is typically on hand at all landing pads, and other specialist merchant and supply offices to hand. Crews would usually not have to go far to find recreational facilities, but more than likely they would not be within the Port itself.

Mid Rim worlds, reasonably civilized worlds - Naboo, Sleheyron

Grade 3 - Standard Class Port

Probably the most common of ports fall into this grade, and the last to have a fully staffed control tower and guidance transponders. Repair and Maintenance services are limited, usually with little in the way of heavy lifting equipment for major repair work. Technicians are capable of acceptable small scale work, but larger modifications can demand a much higher price due to limitations on the facilities.

Outer Rim but well developed colonies - Mos Eisley, Nar Shadarr

Grade 4 - Limited Services Port

Ports of these grades usually only have basic control towers and a single beacon, relying on the pilot's capabilities and verbal direction to find a designated pad. Most have some kind of limited repair and work sheds with equipment available for rent, although often there are few capable technicians on site.

Little in the way of services and amenities on site, and crews will need to have supplies brought in from outside the port. While they may have limited long term storage for vessels, most will have to make do with landing pads with basic power and fuel hook ups, although that's not a guarantee

Formos and out of the way places that are known, excluding Shadowports

Grade 5 - Landing Field

The most basic of facilities, are simply tightly packed ground or rough pour duracrete. No flight control towers, and no guarantees that fuel or power supplies on site (if any are available, they will probably be fuel haulers that bring limited amounts to the field, rather than piped). All equipment and supplies must be sourced from elsewhere and brought to the ship.

Typically any services on site are not of particularly high quality, and often not sanctioned or regulated by the landing field operator, but are probably very affordable.

Occasionally visited worlds, small colonies, outposts, undeveloped but known worlds

EXAMPLE

Ship: YT-1300

Crew: 4

Consumables: 2 Months (for 8)

Hyperdrive Class: 2

Fuel: 50 Cells

Cargo: Full Load

Using the above we know the ship has enough food to support 8 beings for 2 months. That's 10 Standard Galactic Weeks, or 70 days.

Since we only have 4 crew members, that will last them 140 days, or 4 months.

They have just collected a large consignment of equipment from Kal'seebol to deliver to Bonadon, on the other edge of the galaxy.

The Transit times in *Fly Casual* show us that it will take 10.5 days to make that trip with a class 1 Hyperdrive. Since we only have a class 2 drive, that is doubled to 21 days.

It takes 1/2 a fuel cell to take off from the planet and reach a safe jump distance, plus 1 more because we have a full cargo bay.

1 cell is used making the jump into hyperspace, leaving us with 47.5 cells left.

Assuming we need to keep at least another 2.5 cells in reserve for leaving hyperspace and making

it to a planets surface, that leaves us 45 cells. At 1 cell per 6 hours in hyperspace, we manage to travel for 11.25 days in hyperspace (Presuming no mishaps, or course corrections, and not counting any occasions where we need to drop out of hyperspace to plot the next leg).

That gets us about half way through our journey. At this point, assuming we have landed safely, we are now entirely out of fuel, having run things right to the wire.

Refuel, and repeat, and we reach Bonadon with a little fuel to spare.

Even at the cheapest cost, filling the fuel tanks twice would cost us 1500 credits. Not counting maintenance that needs to be taken into account (Two take offs, two landings, both with a heavy load), and 4 weeks of flight time. That's adds up to 2 hours of maintenance time required, which would add another 40 credits to the bill.

Added to that, the consumables used by the crew. 4 Crew members, consume a total of 90 days of food, another bill of 900 credits to restock to their limit.

That's a total expenditure of 2440 credits for this one job. Where nothing went wrong!

Hope it pays well!

THE RECORD SHEET

The following page has an additional Ship Sheet to make it easy to track the stats detailed in this supplement. It is designed to work in addition to the usual ship sheet.

Its use can be a little confusing. The chevrons are designed to represent a week for an individual, crossing off one chevron in each group up to the number of crew members you are feeding. There are far more boxes than you would expect for a light freighter, so that this sheet can be used to track consumables for larger vessels with crews or passengers up to 60.

Consumables Limit is simply what is listed in any ship details from any book you are using. Below that, you would convert that total into weeks (Divide number of months into week (5) and multiply by the number of crew your ship can accommodate at its limit.

The Life Support threshold is the number of Crew + Passengers the ships system is designed to support. You can exceed this number as detailed earlier.

The Maintenance box has 6 circles for checking of maintenance events. There are 6 to give GMs some flexibility even though the rules earlier have stated 5 Events constitute 1 hour. As you fill 5 circles, clear the circles and cross off one box below.

The Hyperdrive box lists the number of jumps the GM is tracking, as you start checking off Red boxes, start rolling on the Hyperdrive Failures table.

Check off fuel cells as they are used, as per the summary tables at the bottom of the sheet.

SHIP NAME

MAKE / MODEL

CREW CONSUMABLES

WEEKLY CREW CONSUMPTION

Each row represents 1 week of consumables for 1 crew member

CONSUMABLES LIMIT

CURRENT CONSUMABLES

THRESHOLD CURRENT

Total in Weeks for Life Support Limit

LIFE SUPPORT

THRESHOLD CURRENT

MAINTENANCE

○ ○ ○ ○ ○ ○

HYPERSPACE JUMPS

FUEL CELLS

HYPERDRIVE FAULTS

.....

.....

.....

.....

SYSTEM FAULTS

.....

.....

.....

.....

1 Cell Spent Per:	
Each Hyperspace Jump	1 hour of Atmospheric flight
6 hours IN Hyperspace	24 hours of Standby
12 hours of Realspace Operation	Each 2 Passengers beyond Limit
1 hour of Combat Manoeuvres	1 additional per fully loaded.
Galactic Standard Calendar	
24 Hours = 1 Day / 5 Days = 1 Week / 7 Weeks = 1 Month (35 Days)	
1 Year = 10 months + 3 Festival Weeks + 3 Holidays (368 Days)	
Festival Weeks: New Year, Festival of Life, Festival of Stars.	

Maintenance Events *Heavy Load is 50% or more of Ships total Encumbrance
Landing on a planet 2 with a heavy load. 2 if it's a heavy landing. 3 if heavy landing with heavy load
Taking off from a Planet Twice if carrying a heavy load
A Combat Encounter
Any collision that doesn't result in Hull Trauma
One per day, per every 2 beings beyond the life support systems limit.
1 Week of Flight/Continuous Engine Running