

## Drone Wars

The UPF has seen a need for a automated space fighter to reduce manpower and increase the size of the fleets. The UPF has put out a contract for a “drone” fighter to the public for all individuals and corporations. The requirement is for a fighter, without a pilot, is able to:

<b>1) Launch from and land on (unassisted):</b>	
a)	A Carrier
b)	A Space Station
c)	Launch from planet (booster rocket is allowed)
<b>2) Navigate to several waypoints and return to base.</b>	
<b>3) Able to navigate through an asteroid belt.</b>	
<b>4) Provide a minimum of a 50% hit ratio against a reflective surface.</b>	
<b>5) Able to engage in combat:</b>	
a)	One on One
b)	Two on Two, as part of a flight
<b>6) Able read and react to radar contacts in an appropriate fashion:</b>	
a)	UPF Frigate
b)	Unknown Freighter
c)	SAV Fighter
<b>7) Able to receive and send radio communications.</b>	
a)	Receive orders
b)	Report contact to UPF Chain of Command.
c)	Able to query unknown Freighter.
d)	Able to receive transmission from unknown Freighter and react to information. (example: if attacked - ?)
<b>8) Must be able to conduct minor, report repairs to ship due to damage from combat, asteroids, etc.</b>	
<b>9) May be no larger than Hull Size: 1.</b>	
<b>10) Have a price tag under 1,000,000 credits per ship.</b>	
<b>11) Limit three submissions per company.</b>	

Ten corporations submitted fourteen prototypes for the contract. Below is a list of the corporations and their drones. The competition for this contract was so intense, that it was nicknamed – The Drone Wars.

Merco:	DH-02C “Brigand”
Streel Corporation:	S-11CE “Piranha”
	S-2CE “Manta”
	S-3CE “Barracuda”
Pan Galactic Corporation:	PF-5 “Shadow Star”
	P-4 “Ranger”
WarTech:	F-42C “Eliminator”
	F-20 “Bolt”
Rayax Transport:	RT-100 “Black Phoenix”
Trans-Travel:	TRE-11 “Trident”
Tachton Industries:	KZ-3D “Kaydlitz”
Nesmith Enterprises of Triad (NET):	NIT-7R “Mauler”
Interplanetary Industries:	IID-MK3 “Vik’t-ziiir”
Malco Enterprises:	ME-6 “Axe”

## **Testing – Part 1**

The drones will launch from a UPFS Archroost, an Assault Carrier, in Truane's Star on the inner system side of the asteroid belt. They are to navigate through the asteroid belt. Upon reaching the other side, the drone is to stop an unknown freighter, query it, report it to the Assault Carrier and receive instructions. The drone will then act accordingly.

*Most of the drones passed this phase of the competition. The "Manta" unfortunately collided with an asteroid and severely damaged. The "Trident" was able to navigate through the asteroid belt but, received and sent degraded communication from the other side. The Mauler was able to proceed through the asteroid belt but, then suffered a computer failure. The back-up program then engaged and it was able to proceed with the mission.*

## **Testing – Part 2**

The second phase of trials will be conducted in the Theseus system. The drones will launch from the Athena FSS. The drones will then navigate to the planet Daedalus. The drones will then rendezvous with an UPF Frigate and escort it to the Athena FSS. The drones will then navigate to the asteroid belt and intercept an unknown craft. This will be a Sather fighter, with a robot pilot. The drones are to engage the Sather fighter and return to the Athena FSS.

*The "Brigand" and "Piranha" were able to dispatch the SAV fighters. The "Barracuda" missed with its laser and the SAV fighter was able to close and dispatch it with an assault rocket. The "Bolt" had the main computer lock up. The SAV fighter then closed with it and destroyed it. The "Kaydlitz" missed its target and in return was destroyed. The "Vik't-ziir" was also unable to engage its target and was destroyed. The "Axe" was able to engage its target but, had its drive damaged. A distress call was then sent from the drone. It was later determined that the "Axe" was not a drone but, a space fighter and Malco Enterprises was then summarily disqualified from the competition.*

## **Testing – Part 3**

The third phase of the competition will take place in the Cassidine system on Dingo. This will require two of each prototype. The drones will launch from the planet's surface. They will then engage a series of reflective, satellite targets. Each drone must hit three out of the five targets. The drones will then receive orders to intercept unknown inbound craft. These will be two shuttles armed with laser pistons and piloted by robots. The drones are to report back to the base and then will receive orders to engage. After completion, the drones are to return to orbit of Dingo. A satellite armed with a laser piston will then shoot each drone. The drone is then to make repairs.

*The “Brigand” completed the tasks and engaged the shuttles. Each drone was damaged. One received structural damage and the other drone had one of its maneuvering thrusters damaged. Neither drone could repair the damage.*

*The “Piranha” completed the tasks and engaged the shuttles. Each drone received structural damage and one drone was able to make limited repairs.*

*The “Shadow Star” drones were able to complete their targeting and engage the shuttles without receiving any damage. The drones were unable to conduct self-repair.*

*The “Ranger” drones failed the marksmanship task. They were able to engage and destroy both shuttles.*

*During the repair test, one drone was accidentally destroyed (lucky shot) and the remaining drone had its pod laser damage, which it was able to repair.*

*The “Eliminator” drones completed all tasks – marksmanship, destroying the shuttles and effecting repairs.*

*One received a hit that inflicted 75% damage to the hull. The other drone lost all maneuverability. Repairs were conducted to both to allow them to return to base. (It was later discovered that the cost of the craft were in excess of one million credits and WarTech was then ...eliminated)*

*The “Black Phoenix” drones completed the trial but, one was destroyed by the shuttles and the remaining drone could not conduct self-repair.*

*The “Trident” drones completed all tasks – marksmanship, destroying the shuttles and effecting repairs.*

*The “Mauler” drones were able to complete marksmanship and still have a striker missile remaining. One shuttle was destroyed and the other was not. As for the self repair, one drone could not repair the structural damage it had received. The other drone lost all maneuverability and was able to make limited repairs.*

## **Conclusion**

The UPF Admiralty is currently reviewing the results from the trials. No decision has been made at this time.

## **Hook, Line and Sinkers**

- 1) The team works for one of the submitting corporations. They are part of the design team or provide security for the drones. Does Streel send a covert team to sabotage their drone? Is the team ordered by their corporation to sabotage another companies’ drone? Maybe the team is tasked with infiltrating one of the UPF bases to sabotage the testing in their corporations favor?
- 2) The UPF hires the team to provide security or as observers. This may lead to breaking up a brawl between the design teams from PGC and Streel. Maybe the team is tasked to following the drones on their trial runs when a Corvette appears and begins to attack one of the drones...(Malco Enterprise?).
- 3) The team notices peculiar things concerning Malco Enterprise’s drone...why the rush to removed the robot? Why is it whisked away to a break room? Does the team investigate? Why is there an oxygen bottle in the craft?
- 4) Does the team hear of the contract and submit their own drone fighter?

## Merco

DH-02C "Brigand" Computerized Corporate Fighter			
HP:	8	ADF:	5
DCR:	30	MR:	4
HS:	1	Crew:	0
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser, 1 Assault Rocket			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 4 FP: 106</b>			
Alarm (1), Analysis (3), Assault Rocket (1), Astrogation-Shuttle (1), Computer Lockout (4), Damage Control (1), Drive (4), Information Storage (1), Maintenance (1), Pilot (1), Laser Cannon (1), Engineering (1), Bureaucracy (4)#			
<b>Cost:</b> 873,500 credits			

*The Brigand is another MerCo design. This production model does not sport the unique "radar decoy" mechanism that the Marauder has. The cockpit has been removed and placed in its place is a neuro-positronic brain. This device enables the different programs and equipment to tie together. # There is 10% per encounter that the neuro-positronic brain becomes overloaded with the programs, radio and radar. In this case, the brain will shutdown.*

## Streel Corporation SE-Series Fighters

S-11CE "Piranha" Computerized Electronic Light Fighter			
HP:	5	ADF:	5
DCR:	25	MR:	5
HS:	1	Crew:	0
<b>Engines:</b> twin sub-solar/Ion Drives, Class A			
<b>Weapons:</b> Ion Cannon, 1 Assault Rocket			
<b>Defenses:</b> Reflective Hull			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 4 FP: 84</b> Alarm (2), Analysis (2), Astrogation - System (2), Computer Lockout (4), Damage Control (2), Drive (3), Information Storage (2), Laser Cannon (1), Maintenance (2), Assault Rocket (1), Pilot (1), Engineering (1), Bureaucracy (4) #			
<b>Cost:</b> 414,500 credits			

The basic fighter craft is a rather potent machine in battle when used properly. Unable to take much damage, the craft instead relies on its enhanced maneuvering system. And groups of SF-11ce fighters can be quite effective but for solo missions they are somewhat lacking. A robotic brain has been inserted where previously the pilot sat. # There is 15% per encounter that the robotic brain becomes overloaded with the programs, radio and radar. In this case, the brain will shutdown.

\*Piranha design adapted from the craft of the same name from the "Shatterzone" game, all rights reserved

S-2CE "Manta" Computerized Electronic Heavy Assault Fighter			
HP:	8	ADF:	3
DCR:	30	MR:	4
HS:	1	Crew:	0
<b>Engines:</b> twin sub-solar/Ion Drives, Class A			
<b>Weapons:</b> Pod Laser, 4 Assault Rockets			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar, Streamlined			
<b>Computer – Level 4 FP: 87</b> Alarm (2), Analysis (2), Astrogation – System (2), Computer Lockout (4), Damage Control (2), Drive (3), Information Storage (1), Laser Cannon (1), Maintenance (2), Assault Rocket (1), Pilot (1), Engineering (1), Bureaucracy (4) #			
<b>Cost:</b> 829,500 credits			

The Manta is geared for heavy assault, in-system role. Additional payloads are made possible with a trade off in performance. These craft are slow and sloppy by star fighter standards, but the heavy damage they can inflict more than makes up for the lackluster speed and agility. They mount one pod laser and have two warhead bays for each wing. Each warhead bay mounts one assault rocket. A robotic brain has been inserted where previously the pilot sat. # There is 25% per encounter that the robotic brain becomes overloaded with the programs, radio and radar. In this case, the brain will shutdown.

S-3CE "Barracuda" Computerized Electronic Advanced Recon/Fighter			
HP:	6	ADF:	5
DCR:	30	MR:	5
HS:	1	Crew:	1 robot
<b>Engines:</b> twin sub-solar/Ion Drives, Class A			
<b>Weapons:</b> PL(x2, linked)			
<b>Defenses:</b> Reflective Hull, Armor (light)			
<b>Other Equipment:</b> Subspace Radio, Radar, Streamlined; Energy Sensor, ½ camera system			
<b>Computer – Level 4 FP: 83</b> Alarm (2), Analysis (2), Astrogation - System (2), Computer Lockout (4), Damage Control (2), Drive (3), Information Storage (1), Laser Cannon (1) x2, Maintenance (2), Weapons Link (1), Pilot (1), Engineering (1), Skin Sensor (1), Bureaucracy (4) #			
<b>Cost:</b> 817,500 credits			

The Barracuda is a racier version of the Piranha. Also added is an extra set of cannons, which can be linked to fire in tandem for more damage or separately for additional attacks. An energy sensor array and camera system is easily affixed for recon missions. A robotic brain has been inserted where previously the pilot sat. # There is 25% per encounter that the robotic brain becomes overloaded with the programs, radio and radar. In this case, the brain will shutdown.

## Pan Galactic Corporation

PF-5D "Shadow Star" Star Fighter Drone			
<b>HP:</b>	8	<b>ADF:</b>	5
<b>DCR:</b>	25	<b>MR:</b>	5
<b>HS:</b>	1	<b>Crew:</b>	1 robot
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser-Long Range			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 3 FP: 54</b>			
Alarm (1), Analysis (2), Astrogation - System (2), Computer Lockout (4), Damage Control (1), Drive (4), Information Storage (1), Laser Cannon (1), Maintenance (1)			
<b>Cost:</b> 797,500 credits			

The PF-5 Shadow Star is a relic of a design, dating back to before the first Sathar War. Very few militias or government subsidies incorporate the PF-5, for the most part it will be in the service of private operations such as civilian businesses and occasionally used by pirates as well. Due to its widespread use, this was the platform PGC elected to test its Pilot Robot on.

PF-5D Shadow Star



P-4D Ranger



P-4D "Ranger" Tactical Fighter Drone			
<b>HP:</b>	8	<b>ADF:</b>	5 (6)
<b>DCR:</b>	30	<b>MR:</b>	5
<b>HS:</b>	1	<b>Crew:</b>	1 robot
<b>Engines:</b> twin sub-super charged Ion Drives, Class A			
<b>Weapons:</b> Pod Laser, 1 Assault Rocket			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar, Streamlined			
<b>Computer – Level 3 FP: 47</b>			
Alarm (2), Analysis (2), Assault Rocket (1), Astrogation (2), Computer Lockout (4), Damage Control (2), Drive (3), Information Storage (1), Laser Cannon (1), Maintenance (2)			
<b>Cost:</b> 711,500 credits			

The Pan Galactic P-4D Ranger was the company's first major success in the Star Fighter field and filled that role well. An anomaly was soon discovered following the first few armed test flights. \*Once the rocket payload was delivered the ship's drives were able to boast some extra power, a trait the pilots got a good kick out of that suited the "need for speed". This anomaly allows the P-4D to deliver its payload against larger targets and get out quickly, should said targets survive.

## WarTech

F-42R "Eliminator" F40C Redevelopment			
HP:	8	ADF:	5
DCR:	30	MR:	5
HS:	1	Crew:	0
<b>Engines:</b> 2 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser, 2 Assault Rockets			
<b>Defenses:</b> Reflective Hull, Armor (heavy), Streamlined			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 4 FP: 119</b>			
Alarm (2), Analysis (3), Assault Rocket (1), Astrogation - Shuttle (1), Computer Lockout (4), Damage Control (2), Drive (4), Information Storage (1), Laser Cannon (1), Maintenance (2), Pilot (1), Engineering (1), Bureaucracy (4)			
<b>Cost:</b> 999,999 credits (actual cost - 1,210,500 credits)			

The F-42R Eliminator is based on the wildly successful F-40C standard fighter. Offensively, the craft boasts a standard pod laser system along with a convertible assault rocket launcher that supports two rockets. The launcher/magazine can be swapped out for a second pod laser system, which can be alternatively linked to the fixed system (firing once for 2d10 damage) or discharged individually (two shots at 1d10 each). The main computer is an electronic silicon central processing unit. The main computer occupies the space for the pilot.

**F-42R Eliminator**



**F-20R Bolt**



F-20 "Bolt" Remote Tactical Light Fighter			
HP:	7	ADF:	6
DCR:	30	MR:	5
HS:	1	Crew:	0
<b>Engines:</b> 2 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser, 2 Assault Rockets			
<b>Defenses:</b> Reflective Hull, Armor (Medium), Streamlined			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 4 FP: 122</b>			
Alarm (2), Analysis (3), Assault Rocket (1), Astrogation - Shuttle (1), Computer Lockout (4), Damage Control (2), Drive (4), Information Storage (1), Laser Cannon (1) x2, Maintenance (2), Pilot (1), Engineering (1), Bureaucracy (4)			
#			
<b>Cost:</b> 999,999 credits (actual cost - 1,019,500 credits)			

WarTech's latest entry in the light fighter arena will be the Arrow, a well armed and snappy accelerator. WarTech expects the Bolt to replace the F-40C. The main computer is an electronic silicon central processing unit. The main computer occupies the space for the pilot. # There is 15% per encounter that the robotic brain becomes overloaded with the programs, radio and radar. In this case, the brain will shutdown.

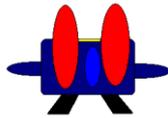


## Rayax Transport

RT-100RO "Black Phoenix" Rayax Transport Tactical Fighter			
<b>HP:</b>	8	<b>ADF:</b>	5
<b>DCR:</b>	30	<b>MR:</b>	5
<b>HS:</b>	1	<b>Crew:</b>	0
<b>Engines:</b> twin sub-super charged Ion Drives, Class A			
<b>Weapons:</b> 2 Pod Lasers-Long Range (weapons link)			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar, Streamlined			
<b>Computer – Level 3 FP: 64</b>			
Alarm (2), Analysis (2), Astrogation – System (2), Computer Lockout (4), Damage Control (2), Drive (3), Laser Cannon (1) x2, Pilot (1), Engineering (1), Bureaucracy (4), Weapons Link (1)			
<b>Cost:</b> 755,500 credits			

Rayax Transport is working on two prototype fighter designs, with the Black Phoenix being a prime candidate to be contracted out to Spacefleet. It has one controversial aspect: a profile that resembles a Sathar Fighter RT feels that this is a bonus. This will lull Sather into complacency or scare pirates enough to rapidly depart. The main central processing unit occupies the space for the pilot.

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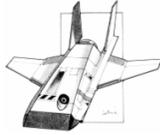


## Trans-Travel

TRE-11 "Trident" Light Remotely Operated System Fighter			
<b>HP:</b>	5	<b>ADF:</b>	1
<b>DCR:</b>	23	<b>MR:</b>	2
<b>HS:</b>	1	<b>Crew:</b>	0
<b>Engines:</b> 1 Chemical Drive, Class A			
<b>Weapons:</b> Pod Laser-Long Range			
<b>Defenses:</b> Reflective Hull			
<b>Other Equipment:</b> Radar, Subspace Radio, Streamlined Hull, Remote Operating System			
<b>Computer – Level 2 FP: 30</b>			
Alarm (1), Astrogation – System (2), Computer Lockout (2), Damage Control (1), Drive (1), Laser Cannon (1), Pilot (1), Engineering (1), Bureaucracy (3)			
<b>Cost:</b> 174,000 credits			

The TRE-11 Trident is based on the outdated Freelance fighter. The Freelance design was bought by Trans-Travel. The company wishes to expand into the military market.

The Trident fighter contains the necessary programming and computers to provide rudimentary flight & patrol functions. The primary operation is the Remotely Operated System. The pilot sits in a cubicle pod and is able to read the instruments and receive all the flight information as if he was in the cockpit. He then is able to actually fly the Trident. The limit and range degradation has not been fully field tested. The initial concept is that the pilot needs to be within 300,000 to 500,000 km of the craft for optimum performance. Any greater distance and there will be a noticeable time lag. (Craft bases its current actions on the actions of the enemy from the previous turn.)



## Tachton Industries

<b>KZ-3D Kaydlitz Fighter (Light Drone Fighter)</b>			
<b>HP:</b>	6	<b>ADF:</b>	5
<b>DCR:</b>	30	<b>MR:</b>	5
<b>HS:</b>	1	<b>Crew:</b>	0
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser			
<b>Defenses:</b> Reflective Hull, Armor (light)			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 3 FP: 78</b>			
Alarm (1), Analysis (3), Astrogation - Shuttle (1), Computer Lockout (4), Damage Control (1), Drive (4), Information Storage (1), Maintenance (1), Pilot (1), Laser Cannon (1), Engineering (1), Bureaucracy (4)			
<b>Cost:</b> 515,500 credits			

The Kaydlitz light fighter is designed as an "anti-fighter" spacecraft intended to fend off craft that are a danger to larger vessels. Their lesser offensive and defensive punch is countered by improved performance. The light fighter may make atmospheric landings. It contains an enlarged central computer in place of the pilot.

## Nesmith Enterprises of Triad

<b>NIT-7R Mauler (Light Drone Fighter)</b>			
<b>HP:</b>	8	<b>ADF:</b>	5
<b>DCR:</b>	30	<b>MR:</b>	5
<b>HS:</b>	1	<b>Crew:</b>	0
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> 2 Launchers with 4 Striker Missiles			
<b>Defenses:</b> Reflective Hull, Armor (heavy)			
<b>Other Equipment:</b> Subspace Radio, Radar, Backup Computer			
<b>Computer – Level 4 FP: 95</b>			
Alarm (1), Analysis (3), Striker Missile (1) x2, Astrogation – Shuttle (1), Computer Lockout (4), Damage Control (1), Drive (4), Information Storage (1), Maintenance (1), Pilot (1), Engineering (1), Bureaucracy (4) x2			
<b>Cost:</b> 851,500 credits			

The Mauler is a light drone developed on a conventional fighter. It contains a central processing unit and a backup. NET named this light drone fighter after the Mauler Hounds on Triad. They are renowned for being excellent guard dogs.

## Interplanetary Industries

IID-MK3 "Vik't-ziir (Light Drone Fighter)			
HP:	5	ADF:	5
DCR:	23	MR:	5
HS:	1	Crew:	0
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> Pod Laser, 2 Forward Firing Rockets			
<b>Defenses:</b> Reflective Hull			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 3 FP: 78</b> Alarm (1), Analysis (3), Assault Rocket (1), Astrogation - Shuttle (1), Computer Lockout (4), Damage Control (1), Drive (4), Pilot (1), Laser Cannon (1), Engineering (1), Bureaucracy (4)			
<b>Cost:</b> 525,500 credits			

*Interplanetary Industries heard of the contract for the UPF's new drone fighter. When it was discovered that NET was submitting a proposal, I.I. could not be outdone and immediately began their project for a drone fighter. The results are the Interplanetary Industries Drone Mark 3. The designers removed the cockpit and main computer and replaced it with an Electronic Guidance system or "Eg". In the event of damage, the Eg is a modular design. The Eg can be unbolted, disconnected and replaced with a functioning Eg. The IID-MK3 is named after a native creature of Triad. The Vik't-ziir is creature that has the makeup of a jellyfish but appears as a ray.*

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## Malco Enterprises

ME-6 Axe (Light Drone Fighter)			
HP:	5	ADF:	6
DCR:	30	MR:	4
HS:	1	Crew:	1 robot
<b>Engines:</b> 1 Atomic Drive, Class A			
<b>Weapons:</b> Laser Piston			
<b>Defenses:</b> Reflective Hull			
<b>Other Equipment:</b> Subspace Radio, Radar			
<b>Computer – Level 3 FP: 54</b> Alarm (1), Analysis (1), Astrogation - Shuttle (1), Computer Lockout (4), Damage Control (1), Drive (4), Information Storage (1), Maintenance (1), Laser Cannon (1)			
<b>Cost:</b> 432,000 credits			

*The MerCo AH-2 Hatchet has seen a lot of service among private corporations around the Frontier but it has become a popular choice amongst the various pirate organizations. Malco Enterprises reversed engineered the AH-2 Hatchet and designed the ME-6 Axe. The contract for the UPF drone was received and Malco executives devised the idea to submit the Axe as their proposal.*

*(The contract stated that the fighter must be automated. Rather than investing in a computer brain or robot, the Development Manager decided to place a pilot in a large robot mock-up. The parabattery for the robot will only last "60 hours". This is actually the pilot's life support. The ME-6 Axe is claimed as a light drone fighter but, it is a light fighter without life support.)*

**Mechanic Note** – The sum of the function points equal to a “suggested” computer level. But, when fighters have minimum programs and an Atomic drive, the Atomic drive is a level 4 program. The sum may equal to a Level 3 computer. In this event, the Computer Lockout program must be a level equal to the highest level of the program used to insure security of the craft; ex: the ME-6 Axe has a level 3 computer but, the Drive program is level 4. Therefore, the Computer Lockout program must be level 4, even though the computer is still listed as level 3.

**Technology** (Dragon Magazine – Gus Monter) & (Star Frontiersman – Shadow Shack)

Below is a list of weapon and defense technology not in the original books. This is placed here for your ease of use. Some of the equipment is used and some is not.

### Weapons

#### **laser piston**

The laser piston is essentially a miniaturized version of the laser cannon. This weapon is often used on vehicles, from fighters to hovercycles. A fighter using a laser piston must forsake any other weapon except a fusion bomb or assault rocket.

#### **Pod Laser (PL)**

A Pod Laser is a down-scaled laser cannon for smaller craft such as star fighters. Simply put, the design incorporated removing the guns from a laser battery and down-sizing them to fit in the fuselage of fighter craft. The PL has a range of 50K kilometers, MHS: 1, costs 6,000Cr and takes up 20 cubic meters of space. Treat as a laser cannon for hit resolution and damage is 1d10 with no damage table modifiers. A longer range version (90,000km range) is available at 8,000Cr and takes up 25cubic meters, designated PL (LR). Both systems use the same program that a standard laser cannon uses.

#### **Pod Laser Turret (PLT)**

With a MHS: 3 requirement for a laser battery, it became apparent that both smaller craft as well as larger craft that can't accommodate a LB due to other restrictions could benefit from a 360 degree field of fire weapon. Hence, following in the successful footsteps of the Pod Laser, the Pod Laser Turret came to be. The PLT has a range of 40K kilometers, MHS: 1, costs 8,000Cr and requires 20cubic meters of space. Treat as a laser battery to hit with no damage table modifiers and damage is 1d10. The PLT uses the standard Laser Battery program.

#### **Ion Cannon (IC)**

The Ion Cannon is essentially a small scale Disruptor Cannon, but instead of causing damage it is designed to disable various starship systems. Upon successful hits, roll (3d6 -2) to generate random numbers between 1 and 16, and consult the Damage Table. Assign everything between "hull hit: normal damage" and "electrical fire" a number (1-16), any system hit by an Ion Cannon is disabled for (2d10 +5) combat turns. Range is 60,000km, MHS=1, cost is 15,000Cr and 20 cubic meters of space is allocated for an Ion Cannon. Uses the Laser Cannon program.

#### **Ion Battery (IB)**

Same as an Ion Cannon but with a 360 degree field of fire. Range is 50,000km, MHS=2, cost is 18,000Cr and 20 cubic meters of space is required for an IB. Uses the Laser Battery computer program.

#### **Forward Firing Rockets (FFR)**

Essentially the launchers from a rocket battery positioned in a forward firing stance. All RB modifiers apply (range, DTM, damage), a variant of the Assault Rocket program is used to operate the system. MHS:1, cost = 20,000Cr, and requires 20 cubic meters of space

#### **Striker Missile (SM)**

A Striker Missile rack holds two missiles, each rack requires 5 cubic meters. The rack costs 1000Cr and individual missiles cost 5000Cr each. Missiles have a range of 60,000km with a -10 damage table modifier and inflict 1d10+2 damage. MHS:1 and MR:4 or better required, and a LVL:1/fp:4 computer program is needed to operate the system. MPO/LTD weapon

#### **Heavy Bomb/Rocket (HBR)**

These nasty propelled bombs can do some serious damage, especially when considering they can be launched from small craft. The launcher costs 10,000Cr and individual bomb-rockets cost 20,000Cr. Launchers require 10 cubic meters and the range for the bomb/rocket is 30,000km, damage is 3d10 with a -20 modifier. MHS:2 with MPO and LTD restrictions. A LVL:1/fp:3 program is required to operate the system

## Fusion bomb

The fusion bomb is so deadly a weapon that it is “dropped” rather than fired at an enemy. The bomb’s unstable nature is such that reaction drives placed near it could trigger the bomb before it reaches its target. Thus, the range of this weapon is merely the same hex as the launching ship. A popular fighter ship tactic is to make repeated bombing runs along a larger vessel, with the results being a chain of explosions eventually consuming the target.

## Defenses

### Streamlining

Ships up to HS:5 can be streamlined to enable landing on atmospheric worlds, at +10% of the normal cost of the hull. This can only be performed during construction of the ship.

Weapon Cost (Cr)	MHS	Avail.	PL	FP	DTM	HDR	FF	RD	MPO	LTD	RA	
Laser piston	1,500	1*	1,2,3	1	3	0	1-5	FF	RD	-	-	6
Fusion bomb	3,000	1	1	1	2	- 20	5d10	-	-	MPO	LTD	0

Abbreviations at the top of table are: cost in credits, minimum hull size (MHS), availability, program level (PL), function points (FP), damage table modifier (DTM), hull damage rating (HDR), forward firing (FF), range diffusion (RD), moving player only (MPO), limited supply (LTD), and range (RA).

\* Maximum hull size of 2

Weapon	No	Percentage chance to hit against this defense						
		RH	PS	ES	SS	MS	AP	AP, Heavy
Laser piston	60	45	60	60	60	15	-15	-20
Fusion bomb	70	70	70	70	80	70	-	-

Weapon	No	Weapon Percentage chance to hit using gunnery skills				
		RH	PS	ES	SS	MS
Laser piston	55	45	55	55	55	10
Fusion bomb	60	60	60	60	70	60

## Armor plating (Dragon)

This is a relatively common form of protection on warships. The armor is made up of two layers of plasteel beneath tritanium surfacing. It is effective against laser pistons, laser power torches, rocket batteries, and mines, giving these weapons a -15% chance to hit. It adds 200 structural points to the hull. The heavier form of armor is essentially the same as the lighter one, except it has a special ceramic alloy between the two plasteel layers. It adds 300 structural points and is also effective against laser cannons, laser batteries, and electrical beam batteries, giving these weapons a -15% chance to hit and penetrate, -20% against the attack forms affected by the lighter armor plating described above.

## Armor Plating (Star Frontiersman)

Ships can be armored with thicker hull plating and more durable bulkheads and framework. This can only be performed during construction of the ship, and is only available at Class:1 SCCs. Light armor doubles the cost to HS x 100,000Cr and provides 6 hull points per hull size, medium armor doubles again to 200,000Cr per HS and provides 7 hull points per hull size, and heavy armor doubles once more to 400,000Cr per hull size and provides 8 hull points per hull size

Defense	Cost (Cr)*	MHS* *	Availability	Program level	Function points	Notes
Armor plating^	1,500	6	1,2	N/A	N/A	200 SP, -15% hit
Armor plating (heavy)^	3,000	12	1	N/A	N/A	300 SP, -15 or 20% hit
Armor plating, Light%	HSx100,000	-	1	N/A	N/A	HP = HSx6
Armor plating, Medium%	HSx100,000	-	1	N/A	N/A	HP=HSx7
Armor plating, Heavy%	HSx100,000	-	1	N/A	N/A	HP=HSx8

## Reinforced hull (Cost: 800 credits x HS, MHS: 1, Availability: 1, 2, 3)

This additional internal framework of struts and bulkheads adds greatly to the ship’s ability to handle internal stress. When a ship is down to half its hull points, a -15 modifier is added to the ship’s chance to break apart (see Tactical Operations Manual, page 13, .Hull Hits.).

**Mine damper** (Cost: 2,000 credits x HS, MHS: 1, Availability: 1, 2 Program Level: 2, FP: 9)

The mine damper is essentially like an E-shield, except that it is only effective against mines. It must be activated before the player's ship enters a mined hex. For a normal mine, 20 SEU are required to absorb a point of damage. It takes 100 SEU to absorb a screen mine.