

**PLAYERS' MANUAL**

**Page 13**, Homeworld Description Codes (omission): Add to the bottom of the Tech Code column: Starport X, -2.

**Page 13**, World Profile Code Equivalents Table (correction):

WORLD PROFILE CODE EQUIVALENTS

Value	Size	Atmos	Hydro	Pop	Law	Tech Code
0	Asteroid	Vacuum	Desert	Low	Low	Pre-Industrial
1	Small	Vacuum	Dry	Low	Low	Pre-Industrial
2	Small	Vacuum	Dry	Low	Low	Pre-Industrial
3	Small	Vacuum	Wet	Low	Low	Pre-Industrial
4	Small	Thin	Wet	Mod	Mod	Industrial
5	Medium	Thin	Wet	Mod	Mod	Industrial
6	Medium	Standard	Wet	Mod	Mod	Pre-Stellar
7	Medium	Standard	Wet	Mod	Mod	Pre-Stellar
8	Large	Dense	Wet	Mod	High	Pre-Stellar
9	Large	Dense	Wet	High	High	Early Stellar
10	Large	Exotic	Water	High	High	Early Stellar
11		Exotic			Ext	Avg Stellar
12		Exotic			Ext	Avg Stellar
13		Exotic			Ext	Avg Stellar
14		Exotic			Ext	High Stellar
15		Exotic			Ext	High Stellar

**Page 15**, Aging (clarification): The aging rules used when a character reaches age 34 and beyond apply during play as well as during character generation. This is hinted at on page 16 in the paragraph on disability, but never explicitly stated in the rules. If any character has a birthday during an adventure session and reaches one of the ages shown on an Aging Table row (page 47), that character must immediately make the indicated saving throws to avoid losing UPP points.

**Pages 20, 22, 24**, Mustering Out Benefit Rolls (correction): The Mustering Out Benefits tables shown do not match the text on page 17. The correct table, which matches the text, is shown below:

MUSTERING OUT BENEFITS

Per term of service.....	1
Rank 1 or 2.....	1
Rank 3 or 4.....	2
Rank 5 or 6.....	3

Notice the rank bonus rolls are mutually exclusive. In other words, a character who is rank 5 or 6 gets 3 extra rolls; he does not count as rank 1, 2, 3 or 4.

**Page 25**, Mustering Out Benefit Objects, Corsair (correction): When a pirate character receives a Corsair as a benefit, it is wholly owned upon the first receipt of the benefit-no payments are ever made. No matter how many times the Corsair is received as a benefit, only one ship is received. This is consistent with the statement made on page 19, second column, under Starships.

**Page 28**, middle column, Economic skill (correction): Economic (cascade): Admin, Broker, Legal, Trader.

**Page 29**, middle column, Rifleman skill (addition): Rifleman (includes): Autorifle, Carbine, Rifle, Shotgun.

**Page 38**, left column, Rifleman skill (addition): Rifleman (includes): Autorifle, Carbine, Rifle, Shotgun.

**Page 53**, left column, Assignment Resolution, Survival (correction): Combat missions are battle, siege and strike - not police action, counterinsurgency or raid.

**Page 54**, Assignment Table (correction): Change die roll 3 from Shore Duty to Frozen Watch. This makes the table consistent with the Frozen Watch paragraph under Special Rules on page 53.

**Page 54**, Advanced Naval Characters (omission): The Technical branch assignment resolution table was inadvertently left out:

Trng	Shr Duty	Patrol	Siege	Strike	Battle
------	----------	--------	-------	--------	--------

Survival	auto	3+	3+	3+	3+	3+
Decoration	none	none	none	none	9+	8+
Promotion	7+	8+	9+	8+	7+	7+
Skills	7+	8+	9+	7+	7+	7+

**Page 55, Engineering School (addition):** Under the Special Assignments column, add Naval Architect to the list of skills available at Engineering School. This way, naval characters can acquire Naval Architect skill.

**Page 60, Initial Activities (correction):** Change Combat Arm Selection to Department Assignment.

**Page 60, left column, Initial Activities, Draft (correction):** Delete the reference to the draft. In MegaTraveller, Merchant characters never enlist via the draft. Flyers (a military career) have replaced Merchants (a non-military career) in this regard.

**Page 63, Skill Tables, Free Trader, Business column (correction):** Change the die roll 5 entry from Steward to Pilot. With this change, a Free Trader can now acquire Pilot skill.

**Page 63, Skill Table Notes (omission):** Merchant Life available to all characters. Shipboard Life available to all (including Free Traders) except Sales and Admin Departments. Officer skills available to rank 00+. Mercantile skills available to all (including Free Traders) except Engineering Department. Master Skills open to Deck Department rank 04+.

**Page 63, Special Duty (omission):** The information on Special Duty resolution was inadvertently omitted:

#### SPECIAL DUTY

Die	Deck Hands	Officers
1	Security Trng	Trade School
2	Trade Station	Command School
3	Helm Trng	Deck School
4	Drive Trng	Engineer School
5	Steward Trng	Purser School
6	Commission	Business School
7	Commission	Department Test

DMs: If Edu 9+, DM +1.

If rank 04+ and not in Deck Department, DM +1.

#### SPECIAL DUTY RESOLUTION (1D)

**Business School:** Throw 5+ for: Admin, Computer, Legal, Liaison. Confers DM +1 on the exam (when taken) for Senior Line Captain and Line Commodore. Transfer to Sales Department.

**Command School:** Throw 5+ for: Admin, Leader, Legal, Ship Tactics. Transfer to Deck Department.

**Commission:** Receive rank 00 (rank 01 in the Free Traders) and Department Assignment (determine specific assignment and resolve normally). Must pass an examination for 4th officer within 4 years or revert to enlisted rank.

**Deck School:** Throw 5+ for: Communication, Computer, Gunnery. Transfer to Deck Department.

**Department Test:** Individual may take a Department Test for promotion without regard for skill requirements.

**Drive Training:** Throw 5+ for: Electronics, Engineering, Gravitics, Mechanical. Transfer to Engineering Department.

**Engineering School:** Throw 5+ for: Admin, Computer, Electronics, Engineering, Gravitics, Mechanical. Transfer to Engineering Department.

**Helm Training:** Throw 5+ for: Navigation, Pilot, Sensor Ops, Ship's Boat. Transfer to Deck Department.

**Purser School:** Throw 4+ for: Admin, Computer, Liaison. Transfer to Purser's Department.

**Security Training:** Throw 4+ for: Zero-G Environ, Vacc Suit, Brawling, Computer.

**Steward Training:** Throw 4+ for: Admin, Liaison, and Steward. Transfer to Purser's Department.

**Trade Station:** Receive Trader Skill. Throw 4+ for: Broker, Liaison. Transfer to Administration Department.

**Page 66, Tactical Points Pool (addition):** Some referees have reported that their players are abusing the tactical points pool. The intent of tactical points is to simulate the effect of tactics skill being shared among the group before and during the fight. This leads to some suggestions to avoid abusive use of the tactical points pool:

- o The single highest tactical skill level from among the group represents the maximum possible draw from the pool available at any one time. Thus, if the highest tactics skill possessed by any one character in the group is Tactics-3, the maximum draw at any one time is 3.
- o If the referee feels a questionable use of tactics points is occurring (such as a character with Handgun-0 getting 8 points from the tactics pool to get a good chance of getting a hit), force the player to roll a special communications task (using whatever is appropriate: radio, shouting, and so on) with another character who has tactics skill. If the task is successful, the Handgun-0 character may only draw as many tactical points from the pool as the character he communicated with has as a tactics skill level. However, the referee should only use this task as a last resort to keep abuses in line: the questionable situation has to be really "stretching it" before this rule should be used.
- o Characters do not have to contribute all their tactics skill as points to the pool. They may hoard some of their tactics skill for themselves, creating their own private tactics pool. This may sometimes be out of character, however.

**Page 67, left column, Surprise (correction):** In the referee's paragraph of the task for determining surprise, change "If any mishap occurs..." to "If exceptional failure occurs...". Thus if the attacking party gets exceptional failure on the surprise task roll, the defending party has surprise instead.

**Page 67, definitions sidebar, Distance Scale (correction):**  
The last line of the Distance Scale definition should read:  
"Therefore this weapon's danger space is one square in the 15m scale."

**Page 68, left column, Interrupts (correction and clarification):** The sentence should read: Unintelligent animals never perform an intelligent interrupt. An animal that by nature leaps at its prey will interrupt by jumping at a man, even though that man is fully protected by combat armor. An animal that by nature flees at loud noises will interrupt to run away from a defenseless human who is yelling at the top of his lungs.

**Page 68, Interrupt Restrictions (revision):** Strike the rule that states a unit cannot interrupt the turn of another on his own side. The idea with this rule was to avoid a complicated chain of interrupts. However, as some players have pointed out, sometimes a character on your own side may do something stupid, and it makes sense to be able to interrupt to either help him out or to try and stop him. The rule of no more than one interrupt per side serves quite well to keep interrupts in check.

**Page 69, right column, Hand-to-Hand Combat Tasks:** If the referee prefers, the two hand-to-hand combat tasks may be combined into this single task:

To hit another unit with a hand-to-hand attack:

Routine, Off=Wpn skill, Str; Def=Wpn skill, Wpn Def (confrontation)

Referee: If the attacker is unskilled, increase the difficulty of this task by one level; if the defender is unskilled, decrease the difficulty of this task by one level.

The defender may use his weapon (whatever weapon he currently has) for defense. Note that the defender may later conduct a hand-to-hand attack with his weapon if he has not yet taken his turn. The defender may attempt to preempt the attack by interrupting the attacker (note: use Dex in place of movement speed as the DM when interrupting a hand-to-hand attack in this manner). The defender may not attempt to interrupt anyone other than the attacker. Failure means defender blocked or avoided the attack.

**Page 70, left column, Hand-to-Hand Interrupts (clarification):** A unit undergoing a hand-to-hand attack can try to interrupt the attacker; in this case, use the

interrupting unit's Dex as the DM in place of movement speed. In effect, two units locked in hand-to-hand combat may interrupt each other, but no other units.

**Page 72, Weapon Enhancements (addition):** A character who remains stationary for the combat round and can brace against something may use the Gyrostable difficulty profile when firing his weapon.

**Page 72, Line of Sight, Obstructions, Cover and Sighting (clarifications and additions):** The following rules more clearly explain line of sight, obstruction, cover and spotting.

#### LINE OF SIGHT: INDOOR COVER

Indoors, three main types of cover are available: corners, consoles (or furniture) and machinery.

**Corners:** Doorways and bends in corridors constitute corners for the purpose of determining cover. It is, of course, possible to use such obstructions to interrupt the line of sight completely, and thus to be considered hidden.

A character behind such a corner may, however, lean out from behind it and fire. For targeting purposes, the character is considered to be under cover, but visible in the square into which he is leaning.

**Consoles (or Furniture):** Units may crouch behind consoles and thus be counted as hidden (unable to fire or be fired upon).

Alternatively, they may partially expose themselves and fire (and be fired at), in which case they are considered to be under cover, but visible for any fire directed at them.

**Machinery:** A unit adjacent to machinery may fire through it and be fired upon through it. The unit adjacent to the machinery square is considered to be under cover but visible unless the firing unit is also adjacent to the same machinery square - in which case, neither is considered to be under cover.

If neither the firing unit nor the target unit are adjacent to the machinery square through which a line of sight would pass, the machinery square becomes an obstruction, and the line of sight may not pass through it.

#### LINE OF SIGHT: ILLUMINATION AND DARKNESS

Combat generally takes place in an indoor or outdoor location that is well-lit. When combat takes place in darkness, vision is impaired.

Characters or robots may turn off inside lights using switches placed on walls or bulkheads near portals. The referee may specify that certain areas are in darkness because of power or system failure.

Combat outdoors at night also takes place in darkness.

Depending on the amount of background light available, the referee must decide whether the darkness is partial or total (partial darkness is more common). When an area is in darkness, use the visibility and spotting rules.

When in darkness, increase the difficulty of all "to hit" and spotting tasks by one level. Darkness does not apply if the weapon, character, robot or vehicle has vision enhancement devices.

#### LINE OF SIGHT, VISIBILITY AND SPOTTING

Basic combat provides some simple visibility and spotting rules in the form of the cover status: under cover, but visible, and hidden. These rules introduce a new type of cover status: under cover, not visible. This cover status means you can see the enemy, but he can't see you.

At the ground scale covered in most outdoor combat sessions, few playing areas cover an area more than several hundred meters, which is well within normal visibility ranges. As a result, the primary limitation on line of sight which provides for an under cover, not visible status is target concealment.

The indoor visibility is generally a problem only when darkness (either partial or total) exists.

The following discussion further defines how light of sight works.

**Units:** Characters, animals, robots and ground vehicles do not block line of sight.

**Hills:** Hills block the line of sight.

**Vegetation:** Trees block the line of sight, with certain modifications. Units on the ground (or flying nap-of-earth) cannot see through dense trees, but can see through up to 50 meters of sparse trees (to medium range).

Observation from above is also affected by tree-covered areas.

In dense trees, the sky is considered entirely blocked by branches, leaves or the equivalent; thus units in dense trees may not see or be seen if the line of sight passes through this canopy.

In sparse tree areas, this canopy is broken; a vehicle in the air may see through the canopy (and be seen) for a radius on the ground equal to 20% of the vehicle's

altitude above the ground; for example, a vehicle at 250 meters altitude can see (and be seen by) a unit on the ground up to 50 meters away from the point directly below the vehicle.

Trees vary in height, but average about 10 to 30 meters; the leaf canopy may begin at varying heights, but should average half the height of the trees.

Undergrowth has no effect on the line of sight.

**Buildings:** Buildings block the line of sight. Units in buildings who are not on the ground floor can see units not adjacent to lower obstacles. Buildings are 4 meters tall per story.

**Smoke Screens:** The line of sight terminates at a smoke screen. Smoke screens are 15 meters high.

**Under Cover, Not Visible (Concealed):** Terrain features which do not block the line of sight may make a unit harder to see. Characters, animals or robots are concealed if they are in an area of trees or undergrowth. Vehicles are concealed in areas which contain both sparse trees and any kind of undergrowth (dense or sparse).

Units may also be deliberately camouflaged. If a unit is concealed at the beginning of the combat session, the referee may allow it to be counted as camouflaged. If so, it remains camouflaged until it moves for the first time.

In partial darkness, all units beyond medium range are considered concealed.

In total darkness, all units beyond short range are considered concealed.

**Hidden Units:** In some terrain, units may choose to be hidden. This choice is possible for characters, animals or robots in buildings, gullies, field fortifications, directly behind walls, or just over the crest of a hill. Vehicles can choose to be hidden if directly behind hill crests or stationary in buildings.

The decision to be hidden is made at the beginning of a unit's turn and applies until the next combat round. Hiding units may not be spotted; if already spotted they remain spotted as long as they do not move - hiding units may not spot, fire or perform any other activities requiring observation of the area; they are "keeping their heads down."

**Spotting Concealed Units:** Units which have not been spotted by the enemy may be kept off the playing surface; their positions (and movements) should be recorded for later verification if a dispute arises. This may be done on a small map of the area, with written descriptions or by using small cards or markers on the playing surface in place of the unit. In the last case, also use several dummy markers to confuse the enemy.

To spot a concealed unit:

Difficult, Recon, absolute: 1 combat round

Referee: Make one roll for each concealed unit, applying the best Recon skill from among any of the opposing units with a potential line of sight to the concealed unit.

Decrease the difficulty of this task by one level if:

- o The concealed unit is moving (a pop-up doesn't count as movement in this case);
- o The concealed unit fired a high-signature weapon. In darkness, this applies to a moderate signature as well.

Increase the difficulty of this task by one level if:

- o The concealed unit is camouflaged;
- o The range from the potential spotting unit(s) to the concealed unit is beyond Very Long range. Decrease this to medium range for partial darkness, and to short range for total darkness.
- o For darkness, increase the difficulty of all spotting tasks by one level.

#### LINE OF SIGHT: SMOKE

Line of sight terminates upon encountering a smoke screen.

Some weapons are listed as having a smoke round available. All such rounds have a specific screen length given in the weapons table.

On the combat round of impact, one marker is placed on the playing surface in the square of impact. On the next combat round, a second marker is placed in a square adjacent to and downwind of the first marker (use the scatter procedure if the wind direction is unknown).

Once the screen has reached its screen length, the round ceases to generate smoke and the screen begins to dissipate. On the next combat round, remove one marker from the upwind end of the screen. On the next combat round, remove another marker, and so on. Continue this procedure until the smoke screen is gone.

**Fire:** Brush fires and structural fires both produce smoke. In both cases, the length of the smoke screen is 50 meters.

As with a smoke round, one smoke marker is added to the screen downwind of the fire

each turn until the maximum length is reached. Unlike a smoke round, the screen is not removed after it reaches its maximum length, but rather remains in place until the fire stops burning.

**Page 72, Line of Fire (addition):** The target closest to the firing unit and in the line of fire is attacked first, ignoring all friendly units. However, if exceptional failure occurs when rolling for a hit, then friendly units are included when determining the closest target. (In other words, don't get exceptional failure or you may hit some of your own guys who happen to be in the line of fire!)

**Page 72, Vehicle Hit Value (addition):** For purposes of personal combat only, multiply a vehicle's hit value by 10 before starting the combat session. For example, a ground car lists hull hits of 2/5. Its actual hit value in personal combat is 20/50 (multiplied by 10). In a similar manner, its locomotion and power plant hits are each 10/20 (1/2 multiplied by 10). Use the unmodified values for starship combat rather than personal combat (see the errata entry for REFEREE'S MANUAL page 94, Power Plant-n).

**Pages 72 and 73, Danger Space (omission):** The danger space for flechette rounds applies only along the line of fire and is not circular like the danger space for all other rounds.

**Page 73, Pinpoint Location (suggestion):** Some players have reported abuses with the pinpoint hit location rule as written, since specifying such a shot reduces the target's armor rating by one-half. An easy fix is to change the rule to increase the task in difficulty one level when a pinpoint location is specified, rather than requiring exceptional success. This makes a pinpoint location shot work the same as a shot at a small target (page 69). Increasing the difficulty for a pinpoint location hit also works nicely because if the player wants to take great care in making the shot, he can try for a cautious attempt. Many players will feel the increase in difficulty is not worth the lowered armor rating, which ends the abuse problem.

**Page 74, Personal Armor table (correction):** The Reflec armor value should be [10], indicating that the armor value applies only against laser fire.

**Page 74, Large Blades table (omission):** The block missing values are: Sword 3, Cutlass 2, Broadsword 2.

**Page 76, Slug Throwers (correction):** The following table is corrected (corrections are underlined):

	Ammo	Pen/	Max	Auto	Dng		Diff
	Notes	Rnd	Att	Dmg	Range	Tgts	Sp Sig Recoil As
Rifle, Bolt Action (7mm)		6	3/2	3	V. Long		M M/R Rifle
Rifle (7mm)		20	<u>3/2</u>	3	V. Long		M M/R Rifle
Rifle (9mm)		20	<u>4/2</u>	3	V. Long		M M/R Rifle
Hunting Rifle (13mm)	tranq	20	1/-	1	V. Long		M M/R Rifle
		2	<u>5/2</u>	4	Long		H H Rifle
Shotgun	tranq	2	3/-	2	Long		H H Rifle
	pellets	10	1/1	4	Medium	1.5	H M Rifle
Auto Shotgun	bullets	10	3/1	4	Medium	1.5	H M Rifle
	tranq	10	1/-	1	Medium	1.5	H M Rifle
	gas	10	-	1	Medium	<u>3</u>	H M Rifle
	pellets	20	1/1	4	Medium	2 1.5	H M Rifle
	bullets	10	3/1	4	Medium	2 1.5	H M Rifle
	tranq	10	1/-	1	Medium	2 1.5	H M Rifle
	gas	10	-	1	Medium	<u>2 3</u>	H M Rifle
Assault Rifle (5mm)		30	2/2	3	V. Long	2	M M Rifle
Assault Rifle (7mm)		30	2/2	3	V. Long	2	M M Rifle
Accelerator Rifle (6mm)		15	3/*	3	Medium	2	M/R L Rifle
Adv Combat Rifle (7mm)		20	3/3	3	V. Long	2	M M Rifle**
	DS	20	4/3	3	V. Long	2 1.5	M M Rifle**
	tranq	20	2/-	1	V. Long	2	M M Rifle**
		20	4/3	3	V. Long	2	M M Rifle**
Adv Combat Rifle (9mm)	DS	20	6/3	3	V. Long	2 1.5	M M Rifle**
	HE	20	3/3	3	V. Long	2 1.5	M M Rifle**
	tranq	20	3/-	1	V. Long	<u>2</u>	M M Rifle**
Lt Assault Gun	HE	5	3/1	4	V. Long	1.5	M H Rifle
	KEAP	5	8/3	4	V. Long	1.5	M H Rifle
	flech	5	2/3	2	Long	30	M H Rifle
	tranq	5	2/-	1	Long	<u>30</u>	M H Rifle

**Page 76, Gauss Rifle (correction):** Dmg column for the Gauss Rifle (4mm) should be 4, not 3.

**Page 76, Assault Rifle and Advanced Combat Rifle (correction):** The Assault Rifle (5mm

and 7mm) as well as the Advanced Combat Rifle (7mm and 9mm) should both be given 2 autofire targets. Both of these weapon types are capable of automatic fire.

**Page 78, Grenade Launchers (correction):** The HE and HEAP pen/ atten values were accidentally switched on all the grenade launchers. HEAP rounds are designed to pierce armor and thus have a greater penetration than HE rounds.

**Page 87, Corridor Sidebar (correction):** Varian is incorrectly identified as the acting Emperor. Varian's younger brother Lucan is in fact the acting Emperor; Varian lost his life in the ensuing struggle following Emperor Strephon's assassination.

**Page 93, Armor Values (correction):** The values for starships are incorrect. The correct values are: Starship Interior Bulkhead, 30; Starship Exterior Hull, 40.

**TAS FORM 2, Homeworld Summary, Starport column (correction):** Starport D/F should be C/F.

**TAS FORM 2, Homeworld Summary, Law Level column (correction):** Add a block below "High" labeled "Extreme."

**REFEREE'S MANUAL**

**Page 16,** Universal World Profile Diagram (correction): The Gas Giants and Planetoid Belts labels have been switched. Planetoid Belts should be first, then Gas Giants. In the example shown, Roup has 2 Planetoid Belts and 3 Gas Giants.

**Page 22,** World Size (correction): Column headings should be: General Description, Min Diameter, Max Diameter.

**Page 22,** World Atmosphere (correction): Column headings should be: General Description, Min Pressure, Max Pressure.

**Page 23,** World Physical Data, Code Hydrographics (correction): Second entry Desert (code 1) should be Dry World.

**Page 26,** Step 9 (correction): Rather than determining the companion star's orbit distance in AU, roll 1D+13 to determine the companion star's orbit number (see the Orbital Distances Table, below).

**Page 26,** Step 10 (addition): When returning to step 3 from step 10, apply DM -1 to the die roll on the System Nature Table.

**Page 28,** Step 22 (correction): Should be labeled Gas Giants, not Empty Orbits.

**Page 29** (omission): The Orbital Distances Table (for reference only, converts an orbital number to an actual orbit distance) was inadvertently omitted:

**ORBITAL DISTANCES**

Orbit	AUs	Million Kilometers
0	0.2	29.9
1	0.4	59.8
2	0.7	104.7
3	1.0	149.6
4	1.6	239.3
5	2.8	418.9
6	5.2	777.9
7	10.0	1495
8	19.6	2932
9	38.8	5804
10	77.2	11548
11	154.0	23038
12	307.6	46016
13	614.8	91972
14	1229.2	183885
15	2548.0	367711
16	4915.6	735363
17	9830.8	1470666
18	19661.2	2941274
19	39322.0	5882488

**Page 34,** Step 1 (correction): The Basic World Data Atmosphere column is incorrect. Correct values for this column are:

UWP	Atmosphere
0	Vacuum
1	Vacuum
2	Vacuum
3	Vacuum
4	Thin
5	Thin
6	Standard
7	Standard
8	Dense
9	Dense
A+	Exotic

**Page 35,** Step 10 (correction): Animal Behaviors, Omnivore column headings should be To Attack, To Flee, Typical Speed. These apply to Omnivores, Carnivores, and Scavengers.

**Page 42,** Step 8 (addition): If legal encounter, go to step 10d.

**Page 42,** Step 9 (addition): If random, go to step 10d.

**Page 43,** Step 10d (addition): After determining encounter range, if the Encounter includes an NPC, go to step 11.

**Page 45,** left column, Interpersonal Bribery (correction): Soc 2 should be Soc x Soc (that is, Social Standing squared).



**Page 50**, Step 5 (clarification): Lot size is in displacement tons. To convert to kiloliters, multiply by 13.5. Or, for lot size into kiloliters directly: Major Cargos: 150+(1Dx10). Minor Cargos: 80+(1Dx10). Incidental Cargos: 1Dx10.

**Page 50**, Step 5 (correction): The sentence "If the goods are cargo (carried for a fee of Cr 1,000 per ton..." should read "If the goods are freight (carried for a fee of Cr 1,000 per ton..."

**Page 50**, Step 6 (correction): Trade Classifications. Fl line should be Atmos A+, Hydro 1+, Size entry should be "-".

**Page 53**, Step 5 (addition): Add to Negotiation: Passive Uncooperation, +1000; Active Uncooperation, goods withdrawn from sale. This adds some detrimental effects to negotiation (the cargo purchaser's inability to drive a hard bargain).

**Page 60**, Panel Add-ons (clarification): Panel add-ons can be installed to augment a craft's control panel needs. The power and volume requirements of an add-on is usually superior to that of straight control panel units for a given CP value. In all cases, a control panel add-on can act as a direct replacement for weaker control panel units. However, as a rule of thumb, do not install any more control panel add-ons than you expect to have crew members. It is a bit ridiculous to install 10 large holodisplays when you only expect to have one crew member. Also, holodynamic linked and holographic linked panel units refer to the same type of panel unit.

**Page 62**, Step 2 (correction): UCP 0.050 should be 0.500; UCP 0.075 should be 0.750.

**Page 62**, Hull Design (clarification): To determine the values for a non-standard hull size, just extrapolate the values from the closest hull size using the following formula to determine the modification factor:

$F = N / B$ , where:

F = the factor to apply to the base hull value, and

N = the desired non-standard hull size, and

B = the closest standard hull size to use as a base.

For example, if a 400 UCP hull size is desired, simply multiply the values for a 400 UCP hull by a factor of 1.1 (440/ 400). If, on the other hand, a 460 UCP hull is desired, then multiply the values for a 500 UCP hull by a factor of 0.92 (460/ 500).

**Page 62**, Step 3 (correction): The Vehicle Chassis Table weight entry for UCP 0.037 is incorrect. It should be 0.050, not 0.075. The price column is in thousands of credits on the Small Craft Hull Table.

**Page 63**, Step 5 (correction): Configuration 1 should be labeled Needle/Wedge. The Airframe column for Configuration 6, Dome/Disk should be x3.0, not x0.5. The Price Mod column for Configuration should be x0.5, not x0.05. Here are the definitions for the various streamlined configurations:

**Unstreamlined:** No attempt has been made to streamline the hull. Many protrusions and irregularities exist which significantly increase the vessel's drag, making it difficult or impossible to operate the craft in an atmosphere at any high rate of speed.

**Streamlined:** Various cowlings and farings have been added to the hull to streamline it for operation in an atmosphere, although the streamlining is less than that provided by an airframe. This configuration is equivalent to the "partially streamlined" configuration found in High Guard.

**Airframe:** The hull has been designed for high performance in an atmosphere. In order to achieve such performance, exterior design has been a priority. This configuration is equivalent to the "streamlined" configuration found in High Guard.

**Page 63**, Step 6 (clarification): The armor value mass factor is in fact the armor value mod (refers to the Mod column on the Armor Table in Step 9).

**Page 63**, Step 11 (correction): The second and third sentences should read: If the vehicle has a chassis UCP of 0.2 or less, it cannot be enclosed; occupants must ride on its outside. If the chassis UCP is more than 0.2, the vehicle is enclosed unless selected otherwise.

**Page 64**, Step 1 (corrections and clarifications): The table heading is misleading. Power Out, Weight and Price are per kiloliter of volume; Power Out, Weight and Price of each table entry is for 1 kiloliter of power plant volume. Volume column should be labeled Minimum Volume, the smallest volume to which the power plant may be built.

**Page 64**, Step 11 (correction): The second and third sentences should read: If the vehicle has a chassis UCP of 0.2 or less, it cannot be enclosed; occupants must ride on its outside. If the chassis UCP is more than 0.2, the vehicle is enclosed unless selected otherwise.

TL 12 Fusion Power Plant Kl/Hour entry should be 0.003, not 0.005.

TL 17 Antimatter Power Plant Kl/Year entry should be 250.0, not 25.0.

Further testing of vehicle designs using the hydrocarbon fueled power plants has

revealed that they are too inefficient as given. More acceptable values are given below:

TL	Description	----Per Kiloliter---				
		Pwr Out	Wt	Price	Min Vol	Kl/Hr
5	Intl Comb	0.25	1	1000	0.005	0.030
6	Impr IC	0.40	1	2000	0.001	0.025
7	Gas Turb	0.60	1	5000	0.005	0.040
8	MHD Turb	0.80	1	10000	0.001	0.035

Antimatter power plants use fuel pods: a special self-contained fuel package that contains a measured quantity of antimatter enclosed in a strong artificial gravity "bottle." The bottle's gravity fields are maintained by an array of superbatteries. Fuel pods are the heart of an antimatter power plant, and they typically provide fuel for up to a year before needing replaced. Fuel pods also have a minimum size to which they may be built:

TL	Min Vol (Kl)
17	2.000
18	0.800
19	0.200
20	0.050
21	0.005

Antimatter power plant output increases dramatically as the ability to safely contain a progressively larger annihilation mass occurs. This means that a given fuel pod is "burned up" at a progressively faster rate, however.

**On the Fuel Cells table**, the headings for the two rightmost columns should be: Price and Fuel Liters/Hour.

**Page 64**, Step 2 (correction): On the Small Plants Efficiency Decrease table, the Volume column entry for Turbines is missing. It should be 0.10-.

**Page 65**, Step 3 (correction): The Jump-4 entry for a size of 75,000 is incorrect; it should be 3750, not 2750.

**Page 65**, Step 5 (clarification): An anti-grav unit requires a gravity well to push against, so an anti-grav maneuver drive is less efficient at 10 diameters and beyond. The effective maneuver number of the craft drops by 50% at 10 diameters and beyond; for example, a maneuver-2 drive drops to a maneuver-1, and a maneuver-1 drops to a maneuver-0.5. Thruster units do not suffer these effects.

**Page 66**, Step 7 (correction): Minimum volume percentages should be: Wheels: 1.5%, Tracks: 2.0%. Greater volume reduces ground pressure, which in turn increases off-road speed.

**Page 66**, Step 9 (correction): Avionics table headings should be: Volume, Weight and Power - not Power, Volume and Weight.

**Page 67**, Step 2, Meson Communicators (correction): Meson communicator, planetary range, TL 20, is given a weight of 0.2; it should be 2.0.

**Page 67**, Step 4 & 5 (correction): Price note: If TL8, x2. The TL 16 column for a Laser Communicator should read: -, -, 0.001, 0.002, 0.004, 0.006, 0.010. The TL 17 column for a Laser Communicator should read: -, -, 0.001, 0.001, 0.003, 0.005, 0.010. The entry for a TL 8 V. Distant Maser Communicator should be 0.032, not 0.32. The TL 16 column for a Maser Communicator should read: -, 0.002, 0.003, 0.004, 0.007, 0.010, 0.040.

**Page 68**, Step 2 (correction): The entry for a TL 9 Continental Radio Jammer should be 0.0026, not 0.002. The TL 10 entry on the same line (next column over) should be 0.002, not 0.0026.

**Page 68**, Step 3 (correction): The prices for Radar should be: Weight x MCr1. All-weather Radar is Weight x MCr1.5.

**Page 68**, Step 5 (clarification): An EMM package does not mask the craft's emissions when it uses active EMS. An EMM package does not mask the craft from active EMS scans conducted by other craft.

**Page 68**, Step 7 (correction): Weights for TL 10 and 11 regional Ladars should be TL 10, 0.016 and TL 11, 0.008.

**Page 70**, Step 15 (correction): The power requirement for the EMS Active Array should be: Weight in tons x 10.

**Page 71**, Step 3 (correction): Price column and hardpoints column for the Meson Guns

table are incorrect. They are:

MESON GUNS (SPINAL MOUNT)

UCP	MCr	Hardpoints
A	10000	50
B	12000	80
C	3000	20
D	5000	50
E	800	10
F	1000	20
G	400	10
H	600	20
J	400	10
K	10000	80 (volume should be 110000, not 11000)
L	3000	50
M	800	40
N	600	20
P	5000	80
Q	1000	70
R	800	50
S	2000	80
T	1000	70
U	2000	80
V	1200	70
W	1000	50
X	2000	80
Y	1200	70
Z	800	50

**Page 72, Step 6 (correction):** Bay hardpoints are 10.

**Page 72, Step 7, 100-ton Missile Bays (addition):** The 100-ton missile bays stop at UCP factor 9, while 50-ton missile bays go all the way to UCP factor C. The correctly extended 100-ton missile bay entry is:

100-Ton Bay Weaponry				-----TL of the weapon-----																
TL Type	Pwr	Wgt	MCr	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
8 Misle	5	50	20	7	7	8	8	9	9	A	A	B	B	C	C	D	D			

**Page 72, Step 8 (correction):** TL 9 should be empty for the Plasma Gun, Fusion Gun, and Repulsor. Prices are missing: Plasma Gun, MCr5; Fusion Gun, MCr8; and Repulsor, MCr6. The Plasma and Fusion Gun bays are incorrect. They should be listed as:

50-Ton Bay Weaponry				-----TL of the weapon-----																
TL Type	Power	Wt	MCr	10	11	12	13	14	15	16	17	18	19	20	21					
10 Plasma Gun	2,500	35	5	4	5	6	-	-	-	-	-	-	-	-	-					
12 Fusion Gun	5,000	35	8	-	-	7	8	9	A	B	C	D	E	F	-					

**Page 73, Step 13 (correction):** Each Plasma Gun turret can have up to 2 weapons.

**Page 74, Step 14 (correction):** Each Fusion Gun turret can have up to 2 weapons. Also, the Fusion Gun Turrets table is incorrect; a corrected version is presented below:

Fusion Gun Turrets				-----UCP Factor-----										
TL Type	Power	Wt	Price	1	2	3	4	5	6	7	8	9	A	
12 Fusion Turret	500	5	2000000	-	-	-	-	1	4	10	16	20	-	
14 Fusion Turret	500	5	2000000	-	-	-	-	1	4	10	16	20	-	
17 Fusion Turret	500	5	2000000	-	-	-	-	-	1	4	10	16	20	

**Page 74, Step 16, Disintegrator Turrets (correction):** The disintegrator turret example is confusing. A better example is 5 turrets with 10 disintegrators (TL 18) produces a UCP disintegrator factor of 3.

**Page 74, Step 17 (clarification):** Rate of fire applies in personal combat, not in space combat. Each space combat round represents 20 minutes of elapsed time - ROF is inconsequential.

**Page 74, Step 18 (clarification):** 100-ton bays hold 100 missiles; 50-ton bays hold 50 missiles. Battery-round for one 100-ton missile bay is 50 missiles (100 missiles / ROF 2); Battery-round for one 50-ton missile bay is 25 missiles (50 missiles / ROF 2).

2).

**Page 75, Step 20 (clarification):** Indirect Fire range lists a range band and a number in parentheses. The number in parentheses is the actual range in kilometers. Where the range band indicates a general range band for "effect", the exact range in kilometers is much more accurate. We recommend you use either the range band or the exact range in kilometers in a given combat session - don't use both. Missing and matching range methods can be confusing.

**Pages 76 and 77, Flechette Penetration (correction):** The "Pen" column for flechette rounds should be labeled "Dgr" (for danger space) instead. The penetration for flechette rounds is equal to the HE penetration for the same sized round.

**Page 77, HIVEL Gun Ammunition (correction):** TL 8 ammunition volume and weight should be 0.014, not 0.14.

**Page 77, Step 22 (correction):** Indirect fire range in km for a 10cm bore is 20, not 22. Indirect fire range in km for a 24cm bore is 60, not 90.

**Page 77, Step 23b, Heavy Slugthrowers Table (addition):** The following table presents more slugthrower weapon options for craft designs:

HEAVY SLUGTHROWERS (CREW-SERVED)					
TL	Type	Power	Vol	Wt	Price
5	Medium Machinegun-5	Q	0.010	0.010	1,500
	100 round ammo belt	Q	0.003	0.003	120
	ground tripod/pintel mount	Q	0.025	0.025	300
	water cooling jacket	Q	0.019	0.019	400
6	Heavy Machinegun-6	Q	0.015	0.015	3,000
	100 round ammo belt	Q	0.010	0.010	250
	ground tripod/pintel mount	Q	0.040	0.040	400
7	Light Machinegun-7	Q	0.006	0.006	1,200
	100 round ammo belt	Q	0.003	0.003	120
	ground tripod/pintel mount	Q	0.010	0.010	250
7	5.5mm Gatling Gun-7	0.001	0.070	0.070	12,350
	2,500 round ammo hopper	Q	0.031	0.031	2,250
	ground tripod/pintel mount	Q	0.200	0.200	1,250
7	7mm Gatling Gun-7	0.002	0.100	0.100	15,500
	2,500 round ammo hopper	Q	0.062	0.062	3,000
	ground tripod/pintel mount	Q	0.300	0.300	1,500
8	5.5mm Gatling Gun-8	0.001	0.080	0.080	19,500
	5,000 round ammo hopper	Q	0.062	0.062	4,500
	ground tripod/pintel mount	Q	0.250	0.250	1,350
8	7mm Gatling Gun-8	0.002	0.100	0.100	23,500
	5,000 round ammo hopper	Q	0.125	0.125	6,000
	ground tripod/pintel mount	Q	0.300	0.300	1,750
10	VRF Gauss Gun-10	0.004	2.000	2.000	200,000
	1,000 round ammo hopper	Q	0.300	0.300	6,000
	ground tripod/pintel mount	Q	4.000	4.000	4,500

**Page 77, Step 23c, 3cm Autocannon Table (addition):** The following table presents an autocannon as a weapon option for craft designs:

TL	Type	Ammo	Pen/ Attn	Dmg	Max Range	Auto	Dngr	Tgts	Spc	Sig	ROF
8	3cm Autocannon	HE	2	6	Vlong(3.5)	4	3	M	200		
		HEAP	5	4	Vlong(3.5)	4	-	M	200		
		KEAP	4	4	Vlong(3.5)	4	-	M	200		

Tech Level Modifications:

HE Pen/Attn: +1 for ever 2 tech levels over 8.

HE Dngr Spc: +10 meters for every 3 tech levels over 8.

HEAP Pen/Attn: TL 9-10, +5; TL 11-12, +7; TL 13+, +9.

KEAP Pen/Attn: +1 for every 3 tech levels over 8.

**Page 77**, Step 23d, Miscellaneous Slugthrowers (addition): The following table presents still more slugthrower weapon options for craft designs:

MISCELLANEOUS SLUGTHROWERS TABLE

TL	Type	Pwr	Vol	Wt	Price	Range	Sig	ROF
6	18cm MRL-6 tube	0.010	3.600	3.600	5000	-		1
	Short range rocket*	-	0.003	0.001	170	Dist(9)	H	
	Medium range rocket*	-	0.004	0.002	340	Dist(18)	H	
	Long range rocket*	-	0.005	0.003	510	Dist(32)	H	
8	3cm Autocannon-8	0.002	0.350	0.350	11000	VLng(3.5)M		200
	200 round ammo hopper	-	0.100	0.100	1000	-		
	ground tripod/pintel mount	-	0.050	0.050	250	-		
10	12cm Remote MRL-10 tube	0.020	2.000	2.000	5000	-		1
	Short range rocket*	-	0.002	0.001	75	Dist(7)	H	
	Medium range rocket*	-	0.003	0.002	150	Dist(13)	H	
	Long range rocket*	-	0.004	0.003	225	Dist(22)	H	
11	6cm Light MRL-11 tube	0.004	0.120	0.006	500	-		1
	Short range rocket*	-	0.001	0.001	11	VLong(4)	M	
	Medium range rocket*	-	0.002	0.002	22	Dist(6)	M	
	Long range rocket*	-	0.003	0.003	33	Dist(10)	M	

\* Select HE, HEAP or KEAPER warhead. Treat as a mortar round for determining penetration, damage and danger space.

**Page 78**, Step 25, Beam Laser Table (addition): The following table presents additional information about craft-mounted beam laser weapons:

TL	Type	Pwr	Pen/Atten	Dmg	Max Range	Auto Tqts	Dngr Spc	Sig	ROF
8	Beam Laser	0.5	5/2	4	Dist(2.5)	2	1.5	H	40
		1.0	10/2	5	Dist(5.0)	2	3.0	H	40
		5.0	28/3	10	VDist(25)	2	4.5	H	40
		10.0	36/3	20	VDist(50)	2	15	H	40
		25.0	47/4	50	Rgnl(125)	2	30	H	40
		50.0	55/4	100	Rgnl(250)	2	45	H	40
10	Beam Laser	0.5	6/2	5	Dist(2.5)	2	1.5	L	40
		5.0	30/3	12	VDist(25)	2	4.5	L	40
		25.0	49/4	60	Rgnl(125)	2	30	L	40

**Page 78**, Step 26, Pulse Laser Table (addition): The following table presents additional information about craft-mounted laser weapons:

TL	Type	Pwr	Pen/Atten	Dmg	Max Range	Auto Tqts	Dngr Spc	Sig	ROF
8	Pulse Laser	0.5	6/2	4	Dist(2.5)	2	1.5	H	80
		1.0	13/2	5	Dist(5.0)	2	3.0	H	80
		5.0	30/3	10	VDist(25)	2	4.5	H	80
		10.0	38/3	20	VDist(50)	2	15	H	80
		25.0	49/4	50	Rgnl(125)	2	30	H	80
		50.0	57/4	100	Rgnl(250)	2	45	H	80
13	Pulse Laser	0.5	7/2	5	Dist(2.5)	2	1.5	L	80
		5.0	33/3	12	VDist(25)	2	4.5	L	80
		25.0	51/4	60	Rgnl(125)	2	30	L	80

**Page 78**, Step 27, Standard Plasma Gun Table (addition): The following table presents additional information about craft-mounted standard plasma weapons:

TL	Type	Pen/Atten	Dmg	Max Range	Auto Tqts	Dngr Spc	Sig	ROF
10	Standard Plasma PA-10	44/5	20	VDist(5.1)	2	15	H	40
11	Standard Plasma PA-11	44/5	20	VDist(5.1)	2	15	H	40
11	Standard Plasma PB-11	54/5	20	VDist(7.8)	2	30	H	40
12	Standard Plasma PB-12	54/5	20	VDist(7.8)	2	30	H	40
12	Standard Plasma PC-12	64/5	20	VDist(12)	2	45	H	40
13	Standard Plasma PC-13	64/5	20	VDist(12)	2	45	H	40

**Page 78**, Step 28, Rapid-Pulse Plasma Gun Table (addition): The following table

presents additional information about craft-mounted rapid-pulse plasma weapons:

TL	Type	Pen/	Max	Auto Dngr	Atten	Dmg	Range	Tgts	Spc	Sig	ROF
12	Rapid Pulse Plasma RPA-12	44/5	20	VDist(5.1)	3	15	H	80			
13	Rapid Pulse Plasma RPA-13	44/5	20	VDist(5.1)	4	15	H	160			
13	Rapid Pulse Plasma RPB-13	54/5	20	VDist(7.8)	3	30	H	80			
14	Rapid Pulse Plasma RPA-14	44/5	20	VDist(5.1)	5	15	H	320			
14	Rapid Pulse Plasma RPB-14	54/5	20	VDist(7.8)	4	30	H	160			
14	Rapid Pulse Plasma RPC-14	64/5	20	VDist(12)	3	45	H	80			
15	Rapid Pulse Plasma RPA-15	44/5	20	VDist(5.1)	6	15	H	640			
15	Rapid Pulse Plasma RPB-15	54/5	20	VDist(7.8)	5	30	H	320			
15	Rapid Pulse Plasma RPC-16	64/5	20	VDist(12)	4	45	H	160			

**Page 78, Step 29, Standard Fusion Gun Table (addition):** The following table presents additional information about craft-mounted standard fusion weapons:

TL	Type	Pen/	Max	Auto Dngr	Atten	Dmg	Range	Tgts	Spc	Sig	ROF
12	Standard Fusion FX-12	67/5	30	VDist(18)	2	45	H	40			
13	Standard Fusion FX-13	67/5	30	VDist(18)	2	45	H	40			
13	Standard Fusion FY-13	71/5	30	VDist(21)	2	45	H	40			
14	Standard Fusion FY-14	71/5	30	VDist(21)	2	45	H	40			
14	Standard Fusion FZ-14	79/5	30	VDist(30)	2	45	H	40			
15	Standard Fusion FZ-15	79/5	30	VDist(30)	2	45	H	40			

**Page 78, Step 30, Rapid-Pulse Fusion Gun Table (addition):** The following table presents additional information about craft-mounted rapid-pulse fusion weapons:

TL	Type	Pen/	Max	Auto Dngr	Atten	Dmg	Range	Tgts	Spc	Sig	ROF
14	Rapid Pulse Fusion RFX-12	67/5	30	VDist(18)	3	45	H	80			
15	Rapid Pulse Fusion RFX-13	67/5	30	VDist(18)	4	45	H	160			
15	Rapid Pulse Fusion RFY-13	71/5	30	VDist(21)	3	45	H	80			
16	Rapid Pulse Fusion RFX-14	67/5	30	VDist(18)	5	45	H	320			
16	Rapid Pulse Fusion RFY-14	71/5	30	VDist(21)	4	45	H	160			
16	Rapid Pulse Fusion RFZ-14	79/5	30	VDist(30)	3	45	H	80			

**Page 78, Step 26, Pulse Laser Guns (correction):** The TL 13 laser that uses power of 1.0 has an incorrect volume and weight; the correct value is 0.03, not the 0.30 shown.

**Page 79, Step 33 (correction):** Change the last sentence to read: If a vehicle is open-topped or smaller than a UCP of 0.2, the weapon mount must be Fixed or Open; Turrets or Cupolas are not allowed.

**Page 80, Step 2 (clarification):** Nuclear Damper price in MCr.

**Page 80, Step 3 Meson Screens (correction):** The entry for a factor 9 screen duplicates the factor 8 line, which is incorrect. The correct entry is:

UCP	TL	Power	Volume	Wt	MCr
9	15	0.135	540	490	60

Power column entries for Meson Screens are: UCP 1, 0.015; UCP 2, 0.030; UCP 3, 0.045; UCP 4, 0.060; UCP 5, 0.075; UCP 6, 0.090; UCP 7, 0.105; UCP 8, 0.120; UCP 9, 0.135; UCP A, 0.150; UCP B, 0.165; UCP C, 0.180; UCP D, 0.195; UCP E, 0.210; UCP F, 0.225.

Power column entries for optimized Meson Screen Packs are: TL16, 0.135; TL17, 0.100; TL18, 0.065; TL19, 0.035; TL20, 0.015; TL21, 0.010.

**Page 80, Step 6 (clarification):** White Globes price is in MCr.

**Page 81, Step 1 (correction):** Basic Life Support volume and weight is 0.005, not 0.050.

**Page 81, Step 3, Computers (clarification and correction):** Computer prices are in MCr. 9/bis computer should be 9/fib. Max CP input for a 9/fib computer should be 100 million.

**Page 81, Step 4, Control Panel Units (clarification):** The first sentence "Select and install enough control panel units..." should instead read "Select and install enough control panel units and control panel add-ons..."

**Page 82, Step 3, Reduced Vehicle Gunners (revision):** The formula for reducing vehicle gunners penalizes a design that has increased sensors, which was not what was intended. The following formula fixes this problem:  $X=(C+S)/W$ .

**Page 82, Extended Accommodations Table (clarification):** A low berth holds one individual, and is essentially a specialized bunk. An emergency low berth holds 4 individuals on a short-term emergency basis only. The volume of all accommodations was doubled from the original volumes given in High Guard to allow for access - what

good does it do to put in a bunk if you can't get to it?

**Page 82**, Step 7 (corrections and clarifications): On the Engineering Crew formula (Ce):  $L = \text{Locomotion CP}$ . On the Maintenance Crew formula (Cm):  $A = \text{Hull displacement divided by 100}$ ,  $H = \text{Hull CP}$ . On the Gunnery Crew formula (Cg): If Cg as computed above exceeds 50, then recompute Cg instead as  $Cg = 50 + (Cg/50)$ , rounding fractions up.

**Page 82**, Step 8 (correction): Divide the crew into one even segment per 13,500 kiloliters of hull; treat a fractional hull segment as a full segment. For example, the 46-person crew of a 16,200 kiloliter ship divides into 23-person segments.

**Page 83**, Step 3 (clarification): The listed price of the fuel purification plants is in credits (Cr).

**Page 87**, Agility (clarification): In the old High Guard system, agility was defined as an attribute of maneuver drive; that is, "how effectively can my drive out-manuever yours." In the new MegaTraveller rules, separating out weight and volume into unique craft attributes made it clear that agility needed to be more precisely defined as its own unique attribute, related to ship mass, not to ship speed.

Under the new rules, agility is defined as the "ability to change your craft's orientation over time," which is more a function of ship mass than of ship speed. Under this new definition, it becomes immediately obvious that smaller vessels will tend to have a greater agility than larger vessels. Consider: which is faster, the Queen Mary, or a rowboat? Which can change its heading more quickly? The rowboat has the greater agility, even though its "maneuver drive" speed rating is far less than the Queen Mary's.

**Page 88**, Passive Energy Pinpoint Table (correction): The table at the top of the second column on the page is mistakenly labeled as "Passive Energy Scan Ability", and should instead be labeled "Passive Energy Pinpoint Ability."

**Page 91**, left column, Surprise (correction): In the referee's paragraph of the task for determining surprise, change "If any mishap occurs..." to "If exceptional failure occurs...". Thus if the attacker gets exceptional failure on the surprise task roll, the defender has surprise instead.

**Page 92**, Sensor Operation Tasks (correction): The word "Difficult" is incorrectly used in the sensor task for locating a target (on the bottom of the left column). The word should be "(Difficulty)", meaning a variable difficulty is used on this task. The referee notes for this task explain how to arrive at the proper difficulty level by using the starship's UCP.

**Page 92**, right column, Sensor Lock (clarification): Each new combat round, as long as the target unit does not move out of its square, the sensor lock stays in effect.

If the sensing unit uses active sensors for the scan and the enemy has any functioning sensors, the sensing unit must reveal itself to the enemy (just as if the enemy had performed an exceptional success sensor scan on the sensing unit).

**Page 93**, left column, Range Modifiers (clarification): Change all references from "beyond planetary range" to "at far range."

**Page 94**, left column, Modifiers for Ship Damage Tables, second entry (correction): Replace "If the weapon inflicting the hit has a UCP factor of 9 or less..." with "If the weapon inflicting the hit has a UCP factor of A or more, apply a DM of +6."

**Page 94**, Power Plant-n (clarification): Reduce the UCP power plant factor of the target vessel by 10% (minimum of 1) for each -n level hit. For example, the Mercenary Cruiser in the Imperial Encyclopedia (800-ton displacement) has a power plant UCP factor of 20/40. A power plant-1 hit reduces this by 2 (10% of 20), to 18/40. Once the UCP factor is reduced to one-half (10/40), spinal mount weapons (if any) no longer work, and the maneuver drive rating drops by one-half. An additional 5 hits on the Mercenary Cruiser would render the ship's power plant inoperative.

Any additional hits once the inoperative level is reached are applied at 10% damage against the right-hand value (for the Mercenary Cruiser, this reduces the 40 on the right by 4 for each level of power plant hit). If the right-hand number reaches zero, the power plant is destroyed beyond repair.

**Page 95**, right column, Special Rules (addition): A space vessel with an antigrav-based maneuver drive has its maneuver drive number halved when 10 or more squares away from a massive astronomical body. A thruster-based maneuver drive does not suffer these effects.

**Page 95**, Black/White Globes (clarification): Treat white globes just like black globes, except a ship mounting a white globe can see out, maneuver and fire. All other effects are the same. A black globe that is totally on shows up on enemy sensors as a "hole" in space. The prudent commander will flicker his black globe to allow enough emissions from his ship to escape so as to blend in with background

levels and effectively be invisible to enemy sensors (roll 1D x 10% to determine the flicker rate needed to currently match local background levels). A shrewd commander will flicker a white globe for exactly the same effect.

**Page 95**, left column, Tractors (clarification): Tractor Pull + Target Weight = Agility and Speed Loss (round fractions up).

**Page 97** (clarification): Change all references from "beyond planetary range" to "at far range."

**Page 97**, Starship Combat Penetration Task (clarification): The task for penetrating a defense in starship combat is confusing. A clearer way to express the task is:

To penetrate a defense in starship combat:

Difficult, Off=computer size, penetration table DM; Def= computer size (confrontation).

Referee: Notice the penetration table DM belongs under the offensive DMs and is added, rather than a defensive DM that is subtracted.

**Page 98**, Table 1, Disintegrators (revision): The current Disintegrator Table makes this a weapon that is not really lethal, and since they are outrageously expensive, not really cost-effective. This was not the intent for these extremely high tech weapons. The following table properly upgrades disintegrators to a much more lethal and cost-effective weapon, as was originally intended:

-----Attacking Disintegrator Factor-----															
	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
To Hit:	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
<u>To Pen: Nuclear Damper</u>															
1	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9
2	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
3	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
4	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
5	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
6	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7
7	-1	0	0	1	1	2	2	3	3	4	4	5	5	6	6
8	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5	6
9	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	5
A	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5
B	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	4
C	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4
D	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3
E	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3
F	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2

**Page 98**, Table 3, Tractors (correction): The Tractor Table is upside down and backwards, and because of this it is easier to penetrate better defenses, which is wrong. The correct table is given below:

Attacking Tractor Factor									
	1	2	3	4	5	6	7	8	9
To Hit:	5	5	6	6	7	7	8	8	9

To Pen: Repulsor

1	9	10	11	11	11	11	11	11	11
2	8	9	10	11	11	11	11	11	11
3	7	8	9	10	11	11	11	11	11
4	6	7	8	9	10	11	11	11	11
5	5	6	7	8	9	10	11	11	11
6	4	5	6	7	8	9	10	11	11
7	3	4	5	6	7	8	9	10	11
8	2	3	4	5	6	7	8	9	10
9	1	2	3	4	5	6	7	8	9
A	0	1	2	3	4	5	6	7	8
B	-1	0	1	2	3	4	5	6	7
C	-2	-1	0	1	2	3	4	5	6
D	-3	-2	-1	0	1	2	3	4	5
E	-4	-3	-2	-1	0	1	2	3	4
F	-5	-4	-3	-2	-1	0	1	2	3

**Page 99**, Attacking Beam Factor table (correction): The To Hit values are incorrect; also, since the 100-ton missile bay has been extended, a "D"



factor column needs to be added to the Missile Tables. The correct values are:

		Attacking Beam Factor												
		1	2	3	4	5	6	7	8	9	A	B	C	D
To Hit:	3	4	4	5	5	6	6	7	7	8	8	9	10	

To Pen: Sand or Beam, "D"

1	11
2	11
3	11
4	11
5	11
6	11
7	11
8	11
9	10
A	9

To Pen: Repulsor or Disintegrator, "D"

1	8
2	7
3	6
4	5
5	4
6	3
7	2
8	1
9	0
A	-1
B	-2
C	-3
D	-4
E	-5
F	-6

To Pen: Nuclear Damper or Proton Screen, "D"

1	11
2	11
3	11
4	10
5	9
6	8
7	7
8	6
9	5
A	4
B	3
C	2
D	1
E	0
F	-1

Also, move disintegrators from the Sand and Beam table to the Repulsor table. The second table should now read "Repulsor or Disintegrator."

**Page 100, Attacking Missile Factor table (correction):** The table headings may be confusing. The correct table is:

		-----Attacking Missile Factor-----											
		1	2	3	4	5	6	7	8	9	A	B	C
To Hit:	4	4	5	5	6	6	7	7	8	8	9	9	

**Page 100**, Particle Accelerator table (omission): The particle accelerator table was inadvertently omitted. Here it is:

		Attacking PA Factor																									
		1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
To Hit:		2	3	4	4	5	5	6	6	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11

(cont'd) T U V W X Y Z  
 To Hit: 11 11 11 12 12 12 12

**Page 101**, Starship Damage Tables (correction): The Die column is incorrect. The corrected table is given below.

SHIP DAMAGE TABLES

Die (2D)	Surface Explosion Damage Table	Radiation Damage Table	Interior Explosion Damage Table
-2	No Effect	No Effect	No Effect
-1	Weapon-1	Weapon-1	Power Plant-1
0	Weapon-1	Weapon-1	Jump-1
1	Fuel-1	Weapon-1	Screens-1
2	Weapon-1	Weapon-1	Sensor-1
3	Weapon-1	Weapon-2	Power Plant-1
4	Fuel-1	Sensor-1	Jump-1
5	Weapon-1	Computer-1	Screens-1
6	Weapon-1	Weapon-2	Computer-1
7	Fuel-1	Sensor-2	Power Plant-1
8	Maneuver-1	Computer-2	Sensor-2
9	Weapon-2	Weapon-4	Computer-1
10	Fuel-2	Sensor-2	Crew-1
11	Maneuver-1	Computer-2	Power Plant-2
12	Weapon-3	Computer-2	Jump-2
13	Fuel-3	Crew-1	Screens-3
14	Maneuver-2	Computer-3	Sensor-3
15	Interior Explosion	Crew-1	Fuel Tanks Shattered
16	Interior Explosion	Computer-4	Critical
17	Interior Explosion	Crew-2	Critical
18+	Critical	Critical	Critical

<u>Use Surface Exp:</u> Fusion, Plasma, Laser, Missiles, Particle Accelerator, and Disintegrators.	<u>Use Radiation:</u> Particle Accelerator, Nuclear and Antimatter Missiles and Meson Guns.	<u>Use Interior Exp:</u> Meson Guns and Disintegrators.
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## IMPERIAL ENCYCLOPEDIA

**Page 20**, Bilstein Yards (clarification): The library data printed in this section is circa late 1120. Most of the Glisten subsector (and thus the Bilstein Yards) was taken by the Aslan in late 1121.

**Page 67**, Drugs (clarification): Here, in tabular form, are all the drug prices:

Drug	Per Dose (Cr)
Single Disease Vaccine	15
Multiple Disease Vaccine	20
Antitoxin	20
Antibiotics	50
Metabolics	1,000
Slow Drug	500
Medical Slow	100
Fast Drug	200
Combat Drug	750
Anagathics	20,000
Truth Drug	5,000
Slow Drug Antidote	600
Fast Drug Antidote	900

**Page 68**, Vacc Suits (addition): There is a TL 7 vacc suit available that acts as mesh armor, has a volume of 3.6 kiloliters, weighs 12 kg, and costs Cr 10,000. The Dexterity encumbrance is also -3.

A series of hostile environment "hard" vacc suits are also available. Their values are given in the table below:

TL	Armor	Volume	Weight	Price	Dex Encumbrance
8	Cloth-2	3.8 kliters	35 kg	Cr 12,000	-3
9	Cloth-1	3.8 kliters	40 kg	16,000	-3
10	Cbt Armor-2	3.0 kliters	40 kg	18,000	-3
11	Cbt Armor-1	2.0 kliters	10 kg	20,000	-3
12	Cbt Armor	2.6 kliters	25 kg	150,000	-2

**Page 75**, 7mm Bolt Action Rifle (addition): The 7mm Bolt Action Rifle listed in the Players' Manual errata is available at TL 4 and costs Cr 100. In all other respects, it is identical to the standard 7mm rifle listed on page 75 of the Imperial Encyclopedia.

**Page 75**, PGMP-13 (correction): The PGMP-13 volume and weight should be 0.9, not 9.0.

**Page 75**, PGMP-14 (correction): The PGMP-14 volume and weight should be 9.0, not 1.0.

**Page 76**, Ground Car, Wheeled ATV, Tracked ATV (correction): With the changes in the hydrocarbon burning power plants, here are the revised UCPs for the ground vehicles:

### GROUND CAR

CraftID: Ground Car, TL 5, Cr 3,100  
Hull: 2/5, Disp=2, Config=4USL, Armor=4B,  
Unloaded=3.8 tons, Loaded=5.0 tons  
Power: 1/2, IntCombust=0.1 Mw, Duration=6 hours  
Loco: 1/2, Wheels, Road=80 kph, OffRoad=25 kph  
Commo: None (some have a radio receiver)  
Sensors: None  
Off/Def: HardPoints=1  
Control: Panel=Mechanical, Environ=basic env  
Accomm: Crew=1 (Operator=1), Seats=crampedx6  
Other: Cargo=1.0 kliters, Fuel=0.072 kliters  
ObjSize=small, EMLevel=moderate

The ground car is an ordinary self-powered vehicle, suitable for use in civilized areas on low tech worlds.

#### WHEELED ATV

CraftID: Wheeled ATV, TL 6, Cr 46,380  
Hull: 9/23, Disp=10, Config=4USL, Armor=6B,  
Unloaded=28 tons, Loaded=55 tons  
Power: 1/2, IntCombust=2.0 Mw, Duration=4/12  
Loco: 1/2, Wheels, Road=100 kph, OffRoad=35 kph  
Commo: Radio=Regional  
Sensors: None  
Off/Def: HardPoints=1  
Control: Panel=Mechanical, Environ=basic env. basic ls  
Accomm: Crew=1 (Operator=1), Seats=roomy x17  
Other: Cargo=25 kliters, Fuel=18 kliters  
ObjSize=small, EMLevel=moderate

The wheeled ATV is a wheeled vehicle used on low tech worlds for exploration.

#### TRACKED ATV

CraftID: Tracked ATV, TL 6, Cr 49,580  
Hull: 9/23, Disp=10, Config=4USL, Armor=6B,  
Unloaded=47 tons, Loaded=74 tons  
Power: 1/2, IntCombust=2.0 Mw, Duration=4/12  
Loco: 1/2, Wheels, Road=80 kph, OffRoad=50 kph  
Commo: Radio=Regional  
Sensors: None  
Off/Def: HardPoints=1  
Control: Panel=Mechanical, Environ=basic env. basic ls  
Accomm: Crew=1 (Operator=1), Seats=roomy x17  
Other: Cargo=25 kliters, Fuel=18 kliters  
ObjSize=small, EMLevel=moderate

The tracked ATV is a tracked vehicle used on low tech worlds for exploration.

**Page 76**, Open-top Air/Raft (correction): The configuration should be 4SL instead of 1USL.

**Page 77**, Enclosed Air/Raft (correction): The configuration should be 4SL instead of 1USL.

**Page 77**, GCarrier (correction): The configuration should be 4SL instead of 1USL.

**Page 80**, Scout/Courier (correction): Fuel=515 kliters.

**Page 80**, Seeker (correction): Fuel=504 kliters.

**Page 83**, Mercenary Cruiser (correction): Maneuver=3, Jump=3.

**Page 86**, Reference to Interplanetary Travel Diagram and Formula (correction): The travel diagram and formula are in the Referee's Companion.

**Page 92**, Step 6 (addition): Double the travel time if the vessel has an antigrav-based maneuver drive.

**Page 92**, Step 9 (correction): Replace "2 to 5=days" with "2 to 5 = 7 days".

**Page 93**, Step 10 (addition): Double the travel time if the vessel has an antigrav-based maneuver drive.

Recording Devices (omission): Recording devices were accidentally omitted from the Imperial Encyclopedia. They are listed here for your convenience.

#### TEXT RECORDERS

At TL 10, text recorders can transcribe: that is, they can produce written text directly from spoken words.

Information is recorded on small tape cassettes costing Cr 3. At TL 13, data is recorded on holographic crystals instead. Tapes can hold approximately 20 million words; crystals can hold ten times that. At TL 10, text recorders can transcribe spoken voice to written text automatically. Memclips for specific languages are also available: each allows transcribing from a specific spoken language.

#### SOUND RECORDERS

Extremely small, pencil-sized recorders appear at TL 10, and can easily record anything detectable by the human ear. Dedicated computer software within the recorder allows the user to instantly playback any part of a recording. By TL 13, sound recorders use holographic crystals as the recording media. Cartridges can hold approximately 10 hours of recordings; crystals can hold ten times that.

## IMAGE RECORDERS

Two-dimensional images remain the most common method of image recording, with the speed and ease of use improving drastically at higher tech levels. Although holography is generally invented around TL 7, inexpensive and practical methods to produce and view still holographic images are not perfected until TL 11. Inexpensive two-dimensional image recordings (snapshots) are still a popular alternative to three-dimensional images beyond TL 11.

**2-D Still Camera:** The TL 10 still camera is inexpensive, easy to use and produces detailed images that can be viewed instantly. The "recording card" used to record images is re-usable (200 images). The recording crystal can hold ten times more than the card.

**3-D Still Camera:** In spite of the awkwardness of using the first marginally portable 3-dimensional still cameras (which require a separate power pack) at TL 11, 3-D image recorders are in public demand, because of their great advantages over the 2-D machines. At TL 13, with the advent of compact batteries providing the necessary sustaining power level, 3-D still cameras reach handheld size. The recording card can hold 40 images, the crystal 400.

## VIDEO RECORDERS

Even though holovision typically becomes available at TL 10, producing holovideos still requires expensive, bulky equipment and high power at that tech level. Often, not until TL 13 are effective techniques devised for producing inexpensive holovideos with simple, lightweight equipment.

**2-D VCR:** Electronic recorder of visual images, either as single frames or sequential motion pictures using integral camera and lens system. Information is recorded on small visual tape cassettes for later viewing. At TL 13, recording is on holographic crystals. Each tape can hold 60,000 distinct images or one hour of motion pictures; crystals can hold ten times that amount.

**3-D VCR:** The three-dimensional video recorder is barely portable at TL 13. More portable units are commonly available by TL 14, with TL 15 bringing forth the handheld 3-D recorder. All of these recorders use holocrystals for image storage. Separate power packs are not needed. Normal crystals hold 1 hour of information, high capacity crystals (TL 15 only) hold five.

Description	TL	Volume	Weight	Price
Text Recorder	10	2 liters	1 kg	Cr 1,200
Linguistics Memclip	10	-	-	150
Recording Tape	10	-	-	3
Recording Crystal	13	-	-	3
Sound Recorder	10	-	-	300
Recording Cartridge	10	-	-	5
Recording Crystal	13	-	-	5
2-D Still Camera	10	0.1 liter	0.1 kg	150
Recording Card	10	-	-	3
Recording Crystal	13	-	-	3
3-D Still Camera	11	14 liters	8 kg	1,500
Power Pack	11	2 liters	2 kg	600
Recording Card	11	-	-	10
3-D Still Camera	13	1 liter	0.5 kg	5,000
Recording Crystal	13	-	-	10
2-D VCR	8	3 liters	1.2 kg	900
Recording Tape	8	-	-	2
Recording Crystal	13	-	-	2
3-D VCR (console)	13	20 liters	15 kg	15,000
3-D VCR (portable)	14	8 liters	6 kg	20,000
3-D VCR (handheld)	15	2 liters	2 kg	30,000
Recording Crystal	13	-	-	15
HC Recording Crystal	15	-	-	50

Starship Examples Note: The starship examples all include the 20% discount.

Weapon/Ammunition Acronyms List:

ACR: Advanced Combat Rifle  
CBM: Cluster Bomblet Munition  
CPR: Chemically Propelled Round  
HE: High Explosive  
HEAP: High Explosive, Armor-Piercing  
KEAP: Kinetic Energy, Armor-Piercing  
KEAPER: Kinetic Energy, Armor-Piercing, Explosive Round  
MRL: Multiple Rocket Launcher  
RAM: Rocket Assisted Munition  
VRF: Very Rapid Fire