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1. Best Historical Figure Series, 1988
- 1200 AD Aztec Army, Ral Partha Enterprises
- Biblical Period Chariot Miniatures, Stone Mountain Miniatures, Inc.
- Blandford Warriors, Citadel Line, Games Workshop, Inc.
- Rial’s Rebellion, 25mm, RAFM

2. Best Fantasy or Science Fiction Figure Series, 1988
- Citadel Plastic Kits, Games Workshop, Inc.
- Julie Guthrie’s Fantasy Personalities, Grenadier Models, Inc.
- Renegade Legion - 25mm Circus Imperium Figures, Ral Partha Enterprises
- TSR’s AD&D Series, Ral Partha Enterprises
- Wargame 40,000, Games Workshop, Inc.

3. Best Vehicle or Accessory Series, 1988
- BattleTech Mechs, Ral Partha Enterprises
- Blood Bowl, Games Workshop, Inc.
- Napoleonic Villages, 15mm Hoyle’s Line, Stone Mountain Miniatures
- Rhino Armored Assault Vehicles of the 41st Century, Games Workshop, Inc.
- Siege Equipment, RAFM

4. Best Miniatures Rules, 1988
- Barbarossa/25, Command Decision, Game Designers’ Workshop
- Combined Arms, Game Designers’ Workshop, Inc.
- To the Sound of the Guns, Johnny Reb, Game Designers’ Workshop
- Warhammer 40,000 Chapter Approved, Games Workshop, Inc.
- Warhammer Battle, 3rd Edition, Games Workshop, Inc.

5. Best Role-Playing Rules, 1988
- Ars Magica, Lion Rampant
- Bullwinkle and Rocky Role Playing Game, TSR, Inc.
- Cyberpunk, R. Talsorian Games, Inc.
- GURPS Basic Set, 3rd Edition, Steve Jackson Games Incorporated

6. Best Role-Playing Adventure, 1988
- Battle for the Golden Sun, Star Wars, West End Games
- Castle Greyhawk, AD&D, TSR, Inc.
- Hartwood, GURPS Fantasy, Steve Jackson Games Incorporated
- Kell Hounds, Mech Warrior, FASA Corp.
- Orion Rising, Top Secret/SL, TSR, Inc.

7. Best Role-Playing Supplement, 1988
- Chthulu Now, Call of Cthulhu, Chaosium, Inc.
- Field Guide to Monsters, Chthulu, Chaosium Inc.
- Freelancers, Top Secret/SL, TSR, Inc.
- Gamer’s Handbook of the Marvel Universe, Marvel Super Heroes, TSR, Inc.
- GURPS Space, GURPS, Steve Jackson Games Incorporated

8. Best Graphic Presentation of a Role-Playing Game, Adventure or Supplement, 1988
- Bullwinkle and Rocky Role Playing Game, TSR, Inc.
- Field Guide to Monsters, Chthulu, Chaosium Inc.
- Gazeteer Series, D&D, TSR, Inc.
- Kara-Tur Trail Map, AD&D, TSR, Inc.
- Tattooine Manhunt, Star Wars, West End Games

9. Best Pre-20th Century Boardgame, 1988
- Enemy in Sight, The Avalon Hill Game Company
- Gettysburg, The Avalon Hill Game Company
- Grand Army of the Republic, Task Force Games
- The Horse Soldiers, S&T #110, 3W
- Indian Mutiny, S&T #121, 3W
- Lee vs. Grant, Victory Games
- Manchu, S&T #116, 3W
- Zulu War, Battleplan #7, 3W/DI

10. Best Boardgame Covering the Period 1900-1946 for 1988
- Great Patriotic War, Game Designers’ Workshop, Inc.
- Kremlin, The Avalon Hill Game Company
- Open Fire!, Victory Games
- Raid on St. Nazaire, The Avalon Hill Game Company
- Tokyo Express: The Guadalcanal Naval Campaign, 1942, Victory Games, Inc.

11. Best Boardgame Covering the Period 1947-modern day for 1988
- Chieftain, Assault, Game Designers’ Workshop
- Desert Falcons, Air Superiority, Game Designers’ Workshop
- The Hunt For Red October, TSR, Inc.
- Seventh Fleet, Victory Games, Inc.
- Sniper Special Forces, TSR, Inc.
- Test of Arms, First Battle, Game Designers’ Workshop

12. Best Fantasy or Science Fiction Boardgame, 1988
- Assault on Hoth, West End Games, Inc.
- Buck Rodgers Battle for the 25th Century Game, TSR, Inc.
- Dragonlance game, TSR, Inc.
- Mertweig’s Maze, TSR, Inc.
- Sky Gallions of Mars, Game Designers’ Workshop, Inc.

13. Best Graphic Presentation of a Boardgame, 1988
- Assault on Hoth, West End Games, Inc.
- Blood Bowl, Games Workshop, Inc.
- Buck Rodgers Battle for the 25th Century Game, TSR, Inc.
- The Hunt For Red October, TSR, Inc.
- Sky Gallions of Mars, Game Designers’ Workshop, Inc.

- Continental Rails, Graaf Simulations
- Feudal Lords, Graf Simulations/Flying Buffalo, Inc.
- Heroic Fantasy, Flying Buffalo, Inc.
- Kings & Things, Androm Games
- Mobius I, Flying Buffalo, Inc.
- World Wide Battle Plan, Flying Buffalo, Inc.

15. Best Fantasy or Science Fiction Computer Game, 1988
- Bard’s Tale III: The Thief of Fate, Electronic Arts
- BattleTech, Infocom
- Heroes of the lance, Strategic Simulations, Inc.
- Neuronancer, Interplay Productions
- Pool of Radiance, Strategic Simulations, Inc.

- Battletech 4242, Lucas Films
- Battles of Napoleon, Strategic Simulations, Inc.
- Decisive Battles of the American civil war, Volumes 2 & 3, Strategic Studies Group, LTD.
- F-19 Stealth Fighter, Microprose, Software, Inc.
- Red Storm Rising, Microprose Software, Inc.
- Universal Military Simulator, Firebird

- Battletech 4242, Lucas Films
- BattleTech, Infocom
- F-19 Stealth Fighter, Microprose, Software, Inc.
- Heroes of the lance, Strategic Simulations, Inc.
- Pool of Radiance, Strategic Simulations, Inc.

- Challenge, Game Designers’ Workshop, Inc.
- Dungeon Magazine, TSR, Inc.
- Gateways, Jaf Publications
- Polychedron, TSR, Inc.
- Strategy & Tactics, 3W

- ETO, Bill Stone
- Midwest Wargame’s Association Newsletter, Hal Thinglum
- Savage & Soldier, Lynn Bodin
- Sorercer’s Scroll, Tori Berquist
- Volunteers, The Newsletter of Civil War Gaming

The deadline for return of the ballot is June 10, 1989. Ballots postmarked after the deadline will not be counted. The Origins Awards will be presented at Origins ’89 in Los Angeles, June 28-July 2, 1989. The awards ceremony will be Saturday, July 1st at 8pm.

Signature:

Address:

These are the final nominees for the Origins Awards for 1988. Vote for only one nominee per category by checking or marking the line preceding your choice. Fill in your address and sign your ballot.

Mail the completed ballot to: Origins Awards, 950-A 56th ST., Oakland, CA 94608.
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**Features**

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O
ne question commonly asked in gaming magazines is: What must I do to be a good umpire?

In my opinion, the answer is “anything you like, providing your players want to come back for more.” The key to this is to try to give your group members more of what they want, but not to give them everything too soon or they won’t know what to do next.

For example, your group, having been creamed with the 5th Mechanized Division in Poland, decides the only fit course of action is to obtain an intact aircraft (“But surely, umpire, there must be at least one plane in Poland in a bunker or hard shelter, fully equipped with a couple of nukes on it...”) and plaster the nearest Soviet city in revenge.

You could arrange for it to happen (after all, one of the supreme satisfactions of umpiring is to be able to create these little miracles), but consider the consequences:

- The selected target might just be the location for GDW’s next published adventure.
- Having been given such a powerful toy, the players will expect similar miracles to occur on a regular basis.
- Having had a high-charged, adrenalin-packed game session culminating in the target of their choice slowly rising into the stratosphere as radioactive particles, what do you offer them next? Anything short of global devastation would be an anti-climax. So...

LESSON 1

Feed them slowly with easily digestible lumps that will satisfy but not choke.

Another principle I’ve tried to follow is to keep the game moving as quickly as possible, even at the expense of (wait for the screams of agony from the purists!) not always following the rules book.

Think about it. You are in the middle of a firefight, AK rounds impacting only inches from your unarmored head (what wimp would be less than gung-ho and wear a helmet?), and the Bradley you are lying under gets wasted by an RPG-7. Do you find yourself blasted into meatloaf, boiled by oil, or (miraculously) relatively unharmed and escaping?

Or are you sitting there, M-16 in hand, waiting for the Supreme Being (often referred to by disgruntled players as the S.B.) to roll some phantasmal dice and eventually let you know what happened?

Which situation will give you the flavor of really being there—the instant result, or the slow working-out from the rules book after the event?

LESSON 2

Keep events flowing as close as possible to real-time. I use two systems to get the “quick result.”

1. Prepare a few vehicle encounters in advance. Generate some common vehicles and their condition and contents, and also generate what happens to them if they are hit by different sorts of antiarmor weapons. By having these instant “brew-ups” ready at hand, you can avoid those tedious pauses in the game which let the players come down from their adrenalin high and lose the feeling of being there. A similar technique can be used for people encounters; use the encounter tables by all means, but do all the rolling-up before your game sessions, and store the results on index cards. Include possible casualty results on the cards as well.

2. The second quick method is to cheat. From similar events in previous games you should have a rough idea of what could happen. Roll some dice behind a screen, make a pretense of consulting a g.r. sheet, and tell the players what happened (as you’ve just decided).

This method is not recommended for every occasion but is justifiable occasionally. This will only work if the players are not allowed access to their rules books. Which brings me to lesson 3.

LESSON 3

Players should not know everything. Nothing interrupts the “reality” of a game more than the umpire calling a decision only to have a sea lawyer query the decision several minutes (and, at least in my group’s games, several bodies) down the track—thus, at best, necessitating a lengthy argument and, at worst, enabling the group to get out of a potentially sticky position it had blundered into.

The answer is simple: Banish the rules book during game sessions. This rule has one vital rider: You, the umpire, must be as expert as possible in your knowledge of the rules book. It will only work if your players trust your knowledge.
LESSON 4

Make players responsible for all their actions. For example, you are describing a delicate situation the players have found themselves in, and some wise guy says, “I’ll drop a frag grenade under the table.”

He will then say, “No, only joking, umpire! Only joking!”

In my campaigns, what they say is what they get! In that example I made the group accept the consequences of one member’s foolish act. (The results were actually quite hilarious!)

The point is, it makes players think before they act.

Obviously, if we are talking about an established rule that is in the book, and you don’t know it, own up and look it up.

But if the information is on a town the players are interested in (and you haven’t pre-prepared an encounter card—see lesson 2) or a procedure not covered in the rules book, fake it! Invent something!

As long as you write it down quickly (so you will be consistent later on if it happens again), no one will ever know. Thus domestize it with the hit location chart.

This continues until he fails against his coolness rating, thus telling all he knows, or lapses into unconsciousness.

The system is especially useful when an NPC is questioning a player character. Ordinarily, feeling no pain, a player might let his character be tortured to death before revealing the “big secret.” In real life, this seldom happens, and with this system it is interesting to note that a “brave” character may actually crack after suffering only one point of damage!

The main thing for a referee to remember (and I’m certainly not the first or last person to quote this one!) is that your players are playing the game for enjoyment, not to feed your ego.

Applying the above principles can help you enhance player satisfaction—I know it has in my group. We ran a continuous Traveller campaign that spanned five actual years (15 years on campaign time) every second Friday night from 1982 to 1986, and we ran a Twilight: 2000 campaign that ran for 18 months. The aim is to keep them coming back for more. Don’t forget it!

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"Grand Alliance" is a fully computer moderated play-by-mail game which involves the battle of survival between human and alien races. Players represent either a member of the human race or of the alien race with the universe as a setting. The game is played on a map of three parallel levels where each level is composed of 240 planetary systems. Each player must solve military and political problems within their own camp before war can be waged effectively against the opposing race. Each side is faced with the same situations and problems to overcome.

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Military Electronics in Twilight

Paul T. Riegel

Players and gamemasters often use a greater variety of weapons and vehicles at the expense of other types of equipment. This article highlights military electronic, radio, mine detection, and other equipment—items which are in service or are natural extensions of equipment in service.

AN/PRI-7A MINE DETECTION UNIT (NONMETALLIC)

The AN/PRI-7A is a backpack-mounted, manportable, battery-operated, mine detection unit. It consists of a headset, a backpack unit, and a telescoping mine detection wand (one meter in length, fully extended). In the hands of an experienced combat engineer, this unit is effective in detecting all kinds of mines, both metallic and nonmetallic. Detecting normally emplaced mines is a CBE:ESY task for metallic mines and a CBE:AVG task for nonmetallic ones. Each battery lasts for 60 hours of operation. A man can use this unit and walk at one-half his normal rate. Wt: 15 kg Cost: $2500 (RIR); Battery, $50 (SIR)

AN/PRI-3 MINE DETECTING UNIT (METALLIC)

The AN/PRI-3 is virtually identical to the AN/PRI-7A except that it is effective in finding metallic mines only—a CBE:AVG task. Wt: 13 kg Cost: $1500 (SIR)

Mines can still be detected through the old probing method. This is done by a character crawling at up to one-third his normal rate and probing around himself with a knife or similar object. It is a RAN:AVG task to do successfully; failure may result in missing a mine.

The removal of detected mines may take anywhere from five to 30 minutes per mine, depending upon any anti-handling devices and how well the character passes a BE:EASY task check. Task check failure may result in missing a mine.

WD-1 TELEPHONE LINE

This line is highly useful for a wide variety of purposes, including, but not limited to, the laying of telephone lines. It is also used in wiring remote electronic detonators, claymore mines, or trip wires—or simply stringing something up. The cost of the wire includes a linesman set—a leather belt pouch containing a set of wire cutters/strippers, a roll of electrical tape, and a pocket knife. The WD-1 comes in three size reels—one mile, one-half mile, and one-quarter mile. For information on the reel unit, see page 7. Wt: (1 mile) 22 kg (1/2 mile) 10 kg (1/4 mile) 5 kg Cost: (1 mile) $200 (1/2 mile) $75 (1/4 mile) $35 (all) (VIC)

TA-312/PT FIELD TELEPHONE

This small, rugged, battery-operated, field telephone is quite common in U.S. Army field organizations. It is used, for the most part, in areas where units are planning to stay for an extended period of time. The field telephone unit consists of a handset, as well as a box-like base which has a hand crank.

To set the unit up requires WD-1 telephone line, run to a switchboard or destination phone, and an ELC:ESY task completion. Wt: 2.5 kg Cost: $250 (C/S)

SB-22/PT FIELD SWITCHBOARD

This switchboard is designed to be a compact, rugged, battery-operated, self-contained unit capable of handling up to 22 separate telephone lines. Setting up the unit requires WD-1 to be run to serviced telephones and a successful ELC:ESY task completion. A COM:ESY task is necessary each period to successfully operate this unit. Wt: 7.5 kg Cost: $600 (SIR)

AN/GRA-39A RADIO SET CONTROL GROUP

A normal radio transmitter must be located within a few meters of its antenna; the antenna, the actual source of the broadcasts, is easily located. Thus develops a major problem for radio operators—keep moving, requiring a short antenna and reduced range, or take the chance of having an enemy artillery barrage sent your way, ruining your whole day. The U.S. Army came up with a solution—the AN/GRA-39A.

This unit consists of two pieces: one is attached to the antenna and the other to the radio, connected by WD-1. This system allows both the radio and its human operator to be up to one mile from the antenna, thus removing them from danger.

To set up the AN/GRA-39A requires WD-1 along with a successful ELC:ESY task completion. Use of this device is a COM:ESY task. Wt: 7.5 kg Cost: $1000 (R/R)
AN/TLG-17B RADIO JAMMING SYSTEM
The AN/TLG-17B is a high-powered radio and radar jamming system. It is capable of jamming multiple frequencies of radio waves. In order to successfully use this equipment, the operator is required to pass a COM:AVG task check. The operator of the jammed radio or radar must then pass a COM:DIF task in order to continue operating on the same frequency. This unit requires 550 watts of power to operate and has the effective range of 50 kilometers. Wt: 100 kg (including generator) Cost: $25,000 (R/R)

AN/GRC-17-2 GROUND RADAR SURVEILLANCE SYSTEM
The AN/GRC-17-2 is a very advanced, ground-based, surveillance radar system. This unit consists of three pieces: the antenna, the power unit, and the radar receiver-transmitter.

The unit is capable of picking up the motion of a ground vehicle at 10 kilometers, an aircraft at 25 kilometers, or a man at four kilometers.

It requires the successful passing of an ELC:ESY task check to set up the unit and a COM:AVG task to operate it. Wt: total, 32 kg; antenna, 10 kg; power unit, 12 kg; radar unit, 10 kg Cost: $20,000 (RIR)

PRD-303/SV SURVEILLANCE SYSTEM
The PRD-303/SV is a small motion sensor with 120 degrees of covered arc. It detects the motion of solid objects between one and two meters off the ground. Several PRD-303/SVs are usually tied into a single PRD-303/V. Effective range of the sensor is about 250 meters in open terrain.

The PRD-303/V can receive signals from up to 10 different PRD-303/SVs, tell which one has been tripped, and inform the operator of the motion. The PRD-303/V can be located up to two kilometers away from the sensors, as long as it has an unobstructed line of sight.

Setting up the PRD-303/V is a COM:ESY task. Implanting the PRD-303/SVs is an ELC:AVG task. Operation of the unit is a COM:AVG task. Wt: sensor, .75 kg; receiver, 3.3 kg Cost: sensor, $700; receiver, $1800; both, (R/R)

MARK 31 TRIP FLARE
Another item I have elected to include in this article is not a piece of electronics but a piece of equipment, the Mark 31 Trip Flare.

The Mark 31 consists of a small metal tube with a two-meter-long trip line. When the trip line is broken, the tube launches a magnesium flare, which flies 200 feet high and takes 90 seconds to two minutes to descend, illuminating an area the size of a football field. This piece of equipment is invaluable in setting up defensive perimeters. Wt: .5 kg Cost: $30 (V/C)

RC-292 ANTENNA SYSTEM
The RC-292 is a 10-meter-tall radio antenna. The radio attached to this antenna has its broadcast range tripled in normal mode or multiplied by six in high-power—thus highly detectable—mode. The antenna is nonmobile and takes one man-hour to assemble (i.e., one man takes one hour, two men take one-half hour, four men take one-quarter hour, etc). In addition, it takes one-half man-hour to disassemble. Both assembly and disassembly require a successful COM:ESY task completion. This antenna broadcasts in 360 degrees for purposes of reception and detection. Wt: 10 kg Cost: $1000 (SIR)

RC-585 ANTENNA SYSTEM
The RC-585 is identical to the RC-292 except the RC-585 only broadcasts on a 90-degree arc—thus making it harder to detect. It takes an additional one-half man-hour to erect. Wt: 13 kg Cost: $1500 (R/R) Ω
The primary focus of this installment of "Equipment List" is Canada. The Grizzly, Cougar, and Lynx are all in Canadian service, and any of these vehicles might be seen during an encounter with a Canadian Forces unit either in Canada or in Europe. Canadian forces also use M113 APCs and the ADATS combination AT/AA vehicle, as well as others. It is not an unreasonable assumption that they will acquire a few M2 Bradley APCs by 1995, as well. Also included here are a couple of other interesting vehicles which are not in Canadian service.

**Grizzly APC**

The Grizzly APC is based on the six-wheeled MOWAG Piranha amphibious armored vehicle. It has a driver's hatch on the left front hull deck and a commander's hatch on the turret deck. The main entrance to the passenger compartment is via two hinged doors at the rear; secondary access is provided by two hinged doors on the rear hull deck. It has two firing ports on either side and two at the rear. **Price:** $50,000 (R/R) **RF:** none **Armament:** M2HB MG **Ammo:** as cargo **Tr Move:** 180/70 **Com Move:** 60/25 **Fuel Cap:** 250 liters **Fuel Cons:** 60 **Fuel Type:** D, A **Load:** 1.5 tons **Veh Wt:** 9.5 tons **Mnt:** 6 **Crew:** 3 + 8

**Cougar**

The Cougar is an armored car, and, like the Grizzly, it is based on the MOWAG Piranha amphibious chassis. The vehicle has a driver's hatch located on the left front hull deck, and commander's and loader's hatches on the turret deck. Access to the Cougar is via two hinged doors which are at the rear of the vehicle. The armored car has two firing ports located on either side and two at the rear. **Price:** $70,000 (R/R) **RF:** -20 **Armament:** 76mm gun, MAG MG **Ammo:** 30 x 76mm **Tr Move:** 180/70 **Com Move:** 60/25 **Fuel Cap:** 250 liters **Fuel Cons:** 60 **Fuel Type:** D, A **Load:** 1 ton **Veh Wt:** 9.6 tons **Mnt:** 6 **Crew:** 3

**EE 11 Urutu**

This Brazilian-built 6 x 6 amphibious APC is marketed primarily in Latin America but is in service in other armies as well (Iraq, among others). It has a driver's hatch on the front hull deck and a commander's hatch on top of the turret. The rectangular hatches on the rear hull deck, a door on each side of the vehicle, and a pair of hinged doors in the rear allow passenger compartment access. **Price:** $50,000 (R/R) **RF:** none **Armament:** MAG MG **Ammo:** as cargo **Tr Move:** 180/70 **Com Move:** 60/30 **Fuel Cap:** 360 liters **Fuel Cons:** 100 **Fuel Type:** D, A **Load:** 700 kg **Veh Wt:** 10 tons **Mnt:** 8 **Crew:** 3 + 6

**Lynx**

An amphibious, fully tracked scout vehicle based on the American M113 APC chassis, it has a driver's hatch on the front hull deck, and gunner's and commander's hatches on the turret deck. The latter has a weapon mount (NHT equivalent), but no standard weapon is provided. **Price:** $75,000 (R/R) **RF:** -20 **Armament:** 25mm autocannon **Ammo:** 200 x 25mm **Tr Move:** 120/70 **Com Move:** 40/30 **Fuel Cap:** 360 liters **Fuel Cons:** 120 **Fuel Type:** D, A **Load:** 500 kg **Veh Wt:** 9.8 tons **Mnt:** 6 **Crew:** 3
Commando V-300 APC

A private venture by Cadillac Gage of Michigan, the series is a 6 x 6 amphibious chassis capable of many armaments. The APC variant has a driver’s hatch on the right side, a large hatch on the upper rear deck, and a rear ramp. A second MAG MG can be fitted to a pintle mount on the rear deck. Price: $50,000 (RIR) RF: none Armament: MAG MG Ammo: as cargo Tr Move: 170/80 Com Move: 55/30 Fuel Cap: 265 liters Fuel Cons: 120 Fuel Type: D, A Load: 800 kg Veh Wt: 14.5 tons Mnt: 6 Crew: 3 + 8

Commando V-300 90mm Armored Car

The V-300 90mm armored car is as described previously, but a turret containing the British-made 90mm Cockerill gun (the same one that was used on the Cadillac Gage Stingray) has been installed, at the expense of the passenger seats. Price: $60,000 (R/R) RF: -20 Armanent: 90mm gun, MAG MG coaxial, MAG MG Ammo: 40 x 90mm Tr Move: 170/80 Com Move: 55/30 Fuel Cap: 265 liters Fuel Cons: 120 Fuel Type: D, A Load: 800 kg Veh Wt: 14.5 tons Mnt: 6 Crew: 3

Commando V-300 Mortar Carrier

The V-300 Mortar variant is as described above, except that the rear portion of the upper deck has been removed and replaced with a folding cover. An 81mm mortar and its attendant sighting fixtures and ammunition storage racks have been installed. Price: $55,000 (R/R) RF: none Armanent: 81mm mortar, MAG MG (P) Ammo: 142 x 81mm HE, 14 x 81mm WP Tr Move: 170/80 Com Move: 55/30 Fuel Cap: 265 liters Fuel Cons: 120 Fuel Type: D, A Load: 800 kg Veh Wt: 14.5 tons Mnt: 6 Crew: 4

Commando V-300 76mm Armored Car

The V-300 76mm armored car is as described above, but a turret containing a 76mm gun similar to the D-56TM 76.2mm gun (described in The RDF Sourcebook) has been installed, at the expense of the passenger compartment. Price: $57,000 (R/R) RF: -20 Armanent: 76mm gun, MAG mg coaxial, MAG MG (C) Ammo: 75 x 76mm Tr Move: 170/80 Com Move: 55/30 Fuel Cap: 265 liters Fuel Cons: 120 Fuel Type: D, A Load: 800 kg Veh Wt: 14.5 tons Mnt: 6 Crew: 3

VEHICLE DAMAGE LOCATION CHARTS

Grizzly APC


Cougar


Lynx


Commando V-300 Series


Abbreviations from the basic game. Ω
A Journey to Oblivion

Timothy B. Brown

Dead he is, stone dead, and laid out on a slab of rock in a recessed chamber of his family’s estate buildings in Avenel. His still features and the leathery coloration of his Martian skin make it all the more difficult to believe that he was, until recently, alive, totally animated, and totally committed to extending British influence on his native planet. Three days ago, in a skirmish in the southern badlands, an Oenotrian spear pierced his breast. Yesterday his final wishes, recorded on a stone tablet which was locked carefully away in a ceremonial urn some years before, were broken into and submitted to both your eyes and his family’s scrutiny for the first time.

The life of your friend Shistwa had been one to write home about, and you had, often. He was the son of an outcast Hill Martian and was considered a veritable foreigner from birth among the Canal Martians of Avenel. Shistwa managed to claw out a mercantile business of his own by trading with local craftsmen and the newcomers from a faraway world, the representatives of the British Empire. His business never grew to mammoth proportions, but he did create a stable, prosperous existence for himself in Avenel.

Shistwa had always been fascinated by Earth and humans. He sought them out at first as business associates: He identified with their alien nature and felt more of a kinship with them than he did with his Canal Martian cousins. British affairs on Mars captivated him and even drew him into their service. Shistwa volunteered to accompany the British expedition against Shastapsh in 1887. It was on that successful campaign that you met him.

The two of you saw a dozen battles together and became closer than many brothers. His spirit was pure, his direction true, and his honesty irreproachable. His keen interest in Earth put him onto his greatest adventure.

It will be a day long remembered when you both walked through the gate of your family home. Never before had Martian feet walked the meadows and fens of Solway Firth. Your brother John’s dogs went into a frenzy, tearing for the safety of the hills as the giant Martian came up the walk. The look of astonishment that swept across your father’s face as he shook the alien hand of a creature you introduced as a friend. The initial repugnance of your young sister is gradually growing into affection for Shistwa’s exoticism; John’s efforts to learn some of the Martian tongue as the two of them spent long evenings warming in front of the fire. Shistwa was as taken with your family and the people of the village as they were with him. Prejudices against his alien form soon bent to the welcome acceptance of this intelligent, erudite, and articulate man from another world. His departure was a sad one, and Shistwa’s promises of a return visit have been shattered by an Oenotrian warrior whose blood is now on your hands.

He is dead, a Martian whose life touched many others. His family was already in the process of making the final arrangements for his corpse when the urn was shattered and his last wishes were revealed. Shistwa wished to make his final departure from this world in the traditional funeral ritual of his Hill Martian kinfolk.

“Preposterous!” bellowed Shistwa’s son at the reading of the will. “His father, my grandfather, was an outcast, as are all his descendants through time.” The young Martian flailed his arms in the air. “We are canal dwellers now, and the tribes would cut us down as if we’d never been of their blood!”

“You are right, my son,” said Shistwa’s widow, her face
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THE STORY OF SPACE: 1889
It was as a result of intense intellectual conversations between Professor B. Etesme Moreau of the Sorbonne and American inventor Thomas A. Edison that the latter devised a practical use for the luminiferous ether. Its nature suggested to Edison a device which could “sail at speeds heretofore undreamed of through the luminiferous ether.” It was, in fact, aquit of fate which forced his first such invention to fail—his prototype could not overcome the atmosphere—forcing Edison to set his sights toward the airless heavens. The space age had begun.
Edison himself made the first manned voyage in aerofly of his own invention, accompanied by Jack Armstrong, a Scottish soldier of fortune. The two managed to pilot their way through hydrogen balloon high enough to allow their ether propeller to take hold. Unfortunately, their landing on Mars was not as smooth, and the balloon was damaged. The expedition would have been stranded forever were it not for the fact that the planet was inhabited.
Edison and Armstrong were taken prisoner by a local Martian potentate, Amraamtaba IX. Armstrong learned the language, and Edison impressed the ruler with his tremendous knowledge. The pair were soon freed, and Edison was provided with the materials necessary to repair his balloon. Within months the repaired flyer was ready to carry Edison, Armstrong, and a curious Martian back to Earth. The expedition landed safely outside Cincinnati on the 7th of August, 1870.
Earth was electrified. Edison and Armstrong received international accolades. Within a year, dozens of companies were manufacturing Edison Flyers, and flyers of several nationalities were soon making regular trips to Mars. The British established a permanent quarter in the Martian city of Parhome. Belgians and French quickly followed suit, establishing themselves as colonial powers. The Germans turned their attentions to Venus, a world covered with harsh swamps and inhabited by ferocious dinosaurs. Edison had opened a new era of worlds and markets for the colonial powers of the Earth, the backdrop for the adventures of a lifetime—Space: 1889!

Cloudships of Mars
With liftwood for power, and enormous sails or air screws for propulsion, the Martian sky galleons have become an important part of Mars’ worldwide civilization. But these magnificent ships are a fairly recent addition to the rich Martian culture—a culture originated by beings who had no need for flying machines.

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behind a veil (a practice borrowed from humans). She slowly rose to embrace her frustrated child. "I am afraid we will have to disregard that particular wish of your father's. His romantic nature would have demanded it, but the reality of the situation prevents it. We will continue with the funeral here, as we originally planned."

**REFeree's SynOpSY**

As gentlemen, as former companions in arms, and as friends, your players cannot leave the last wishes of Shistwa unfulfilled. At the onset of this adventure, there are three major obstacles to overcome. First, since the players are humans (or, at the very least, not Hill Martians—see Characters, below), they have no idea what is involved in the Hill Martian funeral ritual. They don't know where it takes place for his tribe, what must be performed, etc. They will need to get this information before proceeding. Second, Shistwa's family has already set into motion a Canal Martian funeral, which will take place in three days. The family does not wish to attempt to take his body for an odyssey into the Aerian Hills and most likely cannot be persuaded to do so. Finally, getting the expedition with its late cargo out of Avenel and into the hill country will require planning. This is a time when skirmishes with Oenotrian raiders are common, and Hill Martian bands are afoot. A trek either through the air or across the ground will have to be undertaken carefully.

These three obstacles will have to be overcome one at a time. Each is given its own section below. In the case of preparing an expedition, two separate possibilities are given. The first examines the problems of travelling overland. The second involves securing a cloudship and making the journey by air. What information is to be presented to the players is left entirely up to you. Once these three obstacles are overcome, the adventure will break down into the final two phases, which are described later in this article, in the sections covering the journey to the traditional ritual site and the encounters with its keepers. Following that encounter, escape back to human-dominated territories is assumed to be automatic.

**Characters:** This adventure calls for any number of players with human or Martian characters. Since the adventure itself requires a certain amount of mystery regarding the ways of the Hill Martian tribes and clans, don't allow any of the Martian characters to be Hill Martians. Ample time will be built into the scenario to allow the characters to purchase appropriate equipment, so the players need not make such purchases prior to play.

**A guide But Not a Friend**

"Shistwa deserves better." The words fall from your tongue as you nurse a draft at a local pub. Your friends are with you, and they all nod and grumble in agreement. "How can they just let 'im go like that? I mean, without so much as checking into this Hill Martian thing."

"'E's got a point, ya know." You can almost hear the wheels turning. "Course, I bet we can find out a thing-er-two roundabouts that herb garden place toward the south gate. That's run by a Hill Martian woman. What do you say, lads? Shall we take this matter into our own hands?"

The herb garden referred to is the place of business of one Mrikh Ghon, a mystic and chemist specializing in local plants and medicines. She is reputed to be very knowledgeable, and she is most definitely of Hill Martian decent. The players can easily visit her establishment any day they wish, but since time is an issue (the funeral is planned for just three days hence), they will no doubt wish to go there today. They can reach her shop in about an hour.

Mrikh Ghon is merely a source of information, so statistics for her are not given here. She is an elderly Hill Martian woman who will be found resting comfortably on the cushions of her back room, burning a fragrant spice branch. Humans are infrequent visitors here, so the players will immediately gain her attention.

Many questions can be put to Mrikh Ghon, and she will answer them truthfully.

- **Did you know a Martian named Shistwa?** Yes, she did. Mrikh Ghon knows all the Hill Martians in Avenel, and she keeps track of them. She is saddened by his death, especially
a useless death in a war involving humans.

- What does a Hill Martian burial entail? Mrikh explains that practically every tribe or village of Hill Martians has its own burial ceremonies. She knows that Shistwa was of the Khchu clan, and that their dead are taken to the peak of a sacred mound and burnt as an offering to their god.
- Where is this mound? Mrikh can draw the players a map like the one given here. It shows the tenuous path through the hill country to the burial mound of the Khchu clan. She also adds that she doubts a group of humans would survive in that country.
- Is there anyone who can help us get there?
  "I can get you there." A tall figure—a customer previously unnoticed—looms out from behind a tapestry and bead wall in the shop. He is a huge, savage-looking Hill Martian, wearing a warrior’s headdress and sporting multiple weapons at his side. How such a warrior got into the city is a mystery. His cruel eyes stare down at you, and he repeats, "I can get you there."
  "This is Chukchi, a, uh, customer of mine. There isn’t a better fighter among all the cities of the Canal People." Mrikh looks admiringly up at him. "If he says he can get you there, you’d best believe, humans, that he can do it!"

In brief, Mrikh Ghon does not care for humans, but she feels the players are out to perform a worthwhile mission. She has no intention of sabotaging that mission, but she has no intention of changing her opinion of humans, either. As for Chukchi’s opinion of humans, it appears that, for a price, he is willing to do just about anything.

Mrikh will explain that she is happy to help fulfill Shistwa’s wishes, and she graciously accepts the players’ gratitude. But since she cannot eat gratitude, she will insist on a payment of no less than £15.

CHUKCHI (ELITE NPC)

Chukchi is a wanderer, a mercenary, and an adventurer. His particular clan of Hill Martians is unknown to all but himself—and possibly Mrikh Ghon—but it is certain that his roots are far, far away. Among outsiders, who cannot fathom the complexities of Hill Martian society, Chukchi is what is known as a free-lance.

In any event, at some time he will no doubt return to his original clan and probably achieve some position of power. However, that time is not now. Chukchi tolerates humans and has worked with them before. However, he is far removed from the Oenotrian conflict, and he has no particular loyalty to either the Germans or British involved in that struggle.

If the humans accept him, he will gladly lead them to the exact site of the burial mound that they are looking for. He will also fight to protect the humans, if necessary. After that mission is accomplished, however, he will disappear.

<table>
<thead>
<tr>
<th>Att.</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Str: 4</td>
<td>Fisticuffs 5, Throwing 3, Close Combat 3 (edged weapon)</td>
</tr>
<tr>
<td>Agl: 4</td>
<td>Stealth 3, Marksmanship 1 (bow)</td>
</tr>
<tr>
<td>End: 5</td>
<td>Wilderness Travel 5 (foraging), Tracking 2</td>
</tr>
<tr>
<td>Int: 4</td>
<td>Observation 4</td>
</tr>
<tr>
<td>Chr: 3</td>
<td>Eloquence 2</td>
</tr>
<tr>
<td>Soc: 1</td>
<td>Riding 2 (gashant)</td>
</tr>
</tbody>
</table>

Motives: Adventuresome, Proud.

Appearance: Chukchi is a fearsome-looking Hill Martian, standing nearly seven feet tall and scarred from countless encounters. He wears rags and relics collected from one end of Mars to the other; they are symbols of his many travels. He has reddish-brown hair and a particularly dark coloration to his skin.

Chukchi always carries with him his great sword, a bow, and a dagger strapped to his leg.

A DIFFICULTUndERTAKING

The modest estate of Shistwa consists of five buildings in a protected residential district of Avenel. The buildings are of the typical clay and stone construction of the canal cities, built on a platform of stone adjoining the narrow stone-paved streets. Located on the property are the main house, the servants’ quarters, the gashant stables, a storehouse, and a small masonry shed. Water for the estate is drawn directly from the main aquifer.

There are at least two ways to enter the estate compound in an attempt to secure Shistwa’s corpse: through stealth or through the sewers.

Stealth: Climbing the walls will be no particular problem for characters in the cloak of darkness. The adjacent streets are generally very quiet during the late night hours, and they are rarely patrolled by the constables. That is why most residents here employ their own protection.

The map of the estate grounds shows the location of the three night sentries with their semi-domesticated cissawaan servants. If the guards raise the alarm, the city’s constabulary will arrive with two dice worth of trained warriors.

Getting the body out over the walls might prove to be a bigger problem, but the characters will have to deal with it at the time.

Sewers: The water from the main aquifer in Avenel moves through the sewers—an extensive array of passages and waterways crisscrossing the subsurface of the city. Even when the canals are at their lowest, the aquifer and sewers are operational—Avenel has not suffered a severe shortage of water in generations.

The sewer connections to the surface within the estate compound are shown on the map. Due to the confusing nature of the sewers, randomize which sewer entrance the characters use first. You may even wish to further complicate things by making the characters come up out of the sewers into the wrong estate the first time. Any characters who were friends of Shistwa will know when they are in the correct estate.

Other Possibilities: The players may come up with other means for retrieving the body.

For instance, they might smuggle the body out in a supply wagon, or they might attempt to make a switch at the funeral itself. They might even wish to perform a grave robbing where they conceal the evidence—Shistwa’s family could remain none the wiser, and everyone concerned in the matter could be happy.

In any event, the referee should let the players come up with their own means for getting the body and preparing it for the impending journey into the forbidding wastelands of the Aerian hill country.
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2300 AD includes: Earth and its colonies 300 years after World War III. In a world where nations still clash, the world is dominated by the Third French Empire. Earth's 100 nations have colonies among the stars. First contact with aliens was made long ago, and commerce with them is commonplace.

Civilization has flowered, but wars are at the blossom's core. One alien race, the Kapers, is bent on eradicating humanity. Anarchists labor to bring Earth's rule crashing down. Smugglers are transporting alien products to other worlds, thoughtless of ecological effects. Pirates prey on merchant and coloniza- tion vessels.


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The screw galley is tied to the ground at four places. It is presently floating 15' above the surface.
THE HIGH COUNTRY AWAITS

No law forbids travel outside the city, but any aerial or ground expedition leaving in the direction of the highlands will draw quite an audience. Such an expedition would best be initiated at night.

One if by Land: Any journey into the hill country by land will have to be carefully organized. Animals will have to be secured, probably gashants for those capable of riding them and ruumet breehr for the baggage (including Shistwa’s body). Obtaining the animals will not be difficult in Avenel—while land travel is infrequent, it is far from unheard of. Gashants, ruumet breehr, and wagons can be purchased for the prices shown in “Land and Water Transportation,” page 73 of the Space: 1889 rules.

It is fairly common knowledge that travel into the realm of the Hill Martians is a dangerous proposition. The characters will be well aware of this and should arm themselves accordingly. They may wish to consider hiring on additional guards or scouts for the journey, but these will be difficult to find and, considering the danger, rather high-priced. Consult the following table once per day that the players are attempting to locate mercenary guards in Avenel.

<table>
<thead>
<tr>
<th>Die</th>
<th>No.</th>
<th>Experience</th>
<th>Cost per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Green</td>
<td>6d</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Trained</td>
<td>12d</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Green</td>
<td>1/6</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Trained</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Trained</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Experienced</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Veteran</td>
<td>3/—</td>
</tr>
</tbody>
</table>

The table shows how many non-player character mercenaries respond to the offer, and how much each of them will require in payment. They may be turned down, of course, or they may be bargained with. Also, roll one die for each—on a 5+ he has his own gashant; otherwise one must be provided for him. All applicants are Canal Martians, have a marksmanship 2, are physically oriented, and have muskets.

Two if by Air: The alternate method of travel is, of course, by air. If one of the player characters owns a sky galleon or if one is an inventor, they have the ideal solution to the problem. Chukchi, though unsure about air travel, will go along with their solution in order not to lose face.

If no aerial boat is immediately available to the players, you can present this to them: A small screw galley is used by a prosperous merchant in Avenel, and it is tied up near his home. The mooring and the guards placed there are shown on a map. They are all soldiers (consult Martian stock NPCs on the Mars Encounter Charts in the back of the Space: 1889 book). It would be unethical to kill these guards just to assist in getting another Martian to his burial site, but if they can be subdued, the screw galley could be taken.

Under the cover of darkness, the stolen screw galley would be difficult to retrieve. However, the authorities will attempt to retrieve it anyway. When flying the stolen ship, you should roll twice as often as usual for encounters. Any warships which are encountered will be from Avenel.

THE FINAL JOURNEY

Once transportation is secured, travelling to the burial mound will be a simple matter of consulting the Travel Rules (pages 114 and 115) of the Space: 1889 book and the separate Mars Encounter Charts. Though simple from the point of view of this adventure, the impending encounters with bandits and nomad hunters or aerial pirates can be a difficult part of the expedition. Here are suggestions for some of the encounters.

Bandits: A particularly large group of bandits (60 or more warriors) attacks the player characters and, after killing a few of the non-player characters, simply overwhelms the party. The bandit leader, a loathsome, one-eyed Hill Martian named Thurd, is at first seeking plunder, but will forget about it when he discovers he has captured his old rival, Chukchi. The two had some falling out a few years back, as near as the players can gather. In his jubilation, Thurd will release the humans and the others, relieving them of any money first, of course, and simply keep Chukchi in chains for his future entertainment.

Obviously, the players need Chukchi to complete their mission. Also, they are honor-bound to help the Martian adventurer: “He’s one of us, after all.” They may have to set up a daring night raid into the bandit camp to free Chukchi. If the raid is successful, the bandits will be hot on their trail for the duration of the adventure.

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Under the cover of darkness, the stolen screw galley would be difficult to retrieve. However, the authorities will attempt to retrieve it anyway. When flying the stolen ship, you should roll twice as often as usual for encounters. Any warships which are encountered will be from Avenel.
It will take five combat turns, or two and a half minutes, to set Shistwa’s body on the pyre and get it burning. At least two people must be tending to this for the full five turns. After two turns, however, the roogies will begin their attack on the escape the mound, The map has six entry areas marked. For each turn, roll one they will be home free.

They’ve been impossible to control, and the ship’s been losing altitude for two days.

Cramer will be grateful if the players will do two things. First, they must accompany him to the surface where he will land his ship, camouflage it, and leave a portion of its crew behind to watch over it until he can return. Second, if the players take him and his cargo of hides eventually to Haatt, his company will most likely give them a reward in the hundreds of pounds.

If THE characters escape the mound, they will be home free.

KEEPERS OF THE FLAME

The conclusion of this adventure will be the approach to the burial mound of the Khchu clan, lost in the recesses of the hills and valleys of this rocky land. The mound is removed from the clan site—the burial ritual usually entails a ceremonial final journey from the village to the mound, something that will have to be skipped in the case of Shistwa. Honor will be served if Shistwa’s corpse is simply burnt on the funeral pyre.

Chukchi will be able to warn the players, in advance, of the Keepers. The Keepers are a small group of priests charged with seeing the dead off this world. They are always at the burial mound, and in their minds they alone can initiate the sacred rights of that holy place. They will do no attempt to stop the characters from disposing of Shistwa—he is not of the clan.

What Chukchi doesn’t know is that the Keepers are also masters of animal handling and that they keep hundreds of roogies foraging in the surrounding hills to protect the mound. These will be the real obstacle to burning Shistwa.

On approaching the mound, the characters will notice several of the Keepers, in their ceremonial robes, making a sacrifice or assembling wood for an upcoming cremation. Once the priests notice them, they will let out shrill cries into the night. The cries are so loud that it hurts the humans’ ears and sends shivers down their spines. The Keepers will then disperse, knowing they have sounded the alarm.

It will take five combat turns, or two and a half minutes, to set Shistwa’s body on the pyre and get it burning. At least two people must be tending to this for the full five turns. After two turns, however, the roogies will begin their attack on the characters.

The map has six entry areas marked. For each turn, roll one die and subtract 2 from the result (for a number from 0 to 4) for each entry area. That is the number of roogies which will enter and attack from that entry area that turn. As you can see, the roogies will swarm the mound very quickly once the alarm has been raised.

The referee should keep a tally of the roogies as they appear. Once 100 roogies have appeared, no more will be forthcoming. If the characters can escape safely off the mound, the roogies will disperse, and they will not follow.

The Keepers themselves will not initiate combat with the characters, and no clan members will be close enough at this point to begin a fight. If the characters escape the mound, they will be home free.

CONCLUDING THE ADVENTURE

By his very nature, Chukchi will not become a close friend of the player characters, and he will quickly disappear at the conclusion of the adventure. However, he may be encountered at a later date. If the small screw galley was stolen, the players will now have to deal with the consequences, which may involve some jail time. However, Shistwa’s family, at first reluctant but now grateful, might intervene to lessen the severity of the punishment.

If the characters decide to continue on to Haatt with Captain Cramer, they might be able to find gainful employment there.
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May 26-28, Normal, Illinois. Little Wars, one of the midwest's major wargame conventions, will be held at the Bone Student Center on the campus of Illinois State University. Hosted by HMGS-Midwest and the Central Illinois Tabletop Warriors, it will feature over 100 open games, the NASAMW National Team Championships, and the National Pike and Shot Championship. Contact Todd Fisher, 6010 N. Marmora, Chicago, IL 60646.

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Feedback Results
For Challenge 36

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We look forward to hearing your opinions on issue 38.

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**INFRAPOLIS/ANTARES**

Date: 177-1118

Archduke Bzrk’s fleets have gained another major victory over Lucan’s ships in this subsector over the last two weeks.

Choosing mainly single ship operations, Lucan’s squadrons were finally found in larger groups gathering for a thrust into the sector.

Before they could all assemble, many of the formations were engaged and again dispersed over the course of the campaign.

More than 30 enemy ships were destroyed in the operation—most of them in the Infrapolis system itself.

**CAPITAL/CORE**

Date: 180-1118

It was reported today that Admiral Count Markron Morone will be placed on charges for misconduct once her squadron comes out of action along the Zarushagar frontier.

It is alleged that the admiral placed her squadron in jeopardy by disobeying direct orders and attacking elements of the rebel 102nd Fleet. The fleet was led by her personal enemy, Admiral Roberta Sword, with intentions of taking the world of limii.

In 1113, Sword humiliated Count Morone by winning the hand of her husband. Having remarried, the two make their home on limii, and Count Morone obviously had in mind some sort of personal revenge by abusing her position as admiral of an Imperial fleet.

**PHALN/GUSHEMEGE**

Date: 181-1118

Strephon, head of his own fleet, has made his first advances into Dulinor’s domain with ships assembled from squadron elements which were retained from service with Lucan.

The several-hundred-ship-strong fleet is bound for worlds which are seeking assistance against Dulinor and are willing to accept the fact that Strephon is still alive and is emperor.

At a battle in the Phaln system, two of Dulinor’s squadrons exchanged shots with Strephon’s ships, causing minor damage on both sides.

Whatever the outcome, this incident marks the beginning of a new scenario with a new contender for control of the Imperium.

**TEPHANY/LISHUN**

Date: 186-1118

The newly established Vargr governor has issued warrants for the arrest of thousands of nobles and agitators to the new administration.

Gtweng, who is in charge of the Vargr on Tephany (as best as can be ascertained), is a former world emperor deposed 30 years ago in Meshan sector. He has a reputation for being ruthless and violent, although he has no particular hatred of humans.

In the absence of a sector fleet, the Vargr have run rampant, pillaging the coreward half of the sector.

Vargr cooperation in this takeover has been almost nonexistent, as might be expected from Vargr.

Local reservist ships and system defense boats are still putting up resistance in the rimward areas, but the Vargr advance seems to have been halted by their own bickering—not by any concerted human effort to stop them.

**DURIMA/CORRIDOR**

Date: 199-1118

Local elements of the 58th and 56th reserve fleets today smashed disorganized Vargr corsairs.

The Vargr refuelling and supply bases on a gas giant moon in the outer system were also located and destroyed, according to the Defense Coordination Office on Durima.

“Unfortunately, a marine raid on the Vargr base prior to the bombardment failed to locate or procure valuable cargoes believed to have been stored there at one time.”

Examination of the wreckage indicates that the complex could accommodate no more than five Vargr ships at a time, and that conditions were primitive.

**DLAN/ILELISH**

Date: 200-1118

The so-called Strephon’s lack of a front-line fighting craft has forced him to resort to extensive commerce raiding on the frontier between his core of worlds and Dulinor’s.

The slower, less sophisticated warships he has managed to lay ahold of are generally a poor match for front-line vessels; however, they can do considerable damage to unprotected cargo ships.

The merchant community is crying out to Dulinor for assistance, but with nearly every able ship fighting in Zarushagar sector there is little hope that Dulinor’s help will come soon.
DACHNIS/OLD EXPANSES

In a surprise attack on Solomani fleets in the Dachnis system, Lucan's Old Expanses Fleet engaged and destroyed a considerable number of enemy ships.

In all, some 70 major Solomani warships were destroyed, and considerable ground forces were captured or cut off from their fleet. Imperial losses totaled less than 20 ships.

"With so much of their strength lost, the Solomani must withdraw toward the rim and their homes," stated Admiral Gytanyo for the fleet.

"Dispersed and weakened, the Solomani cannot hope to hold off our ships, which can now move in to begin retaking worlds lost to the Solomani last year."

BACKMAN/DIASPORA

Privateer Black Ralph has successfully raided the orbital Imperial Naval Base at Backman, with support of rebels who had infiltrated the facility.

The privateer's ships emerged from hyperspace dangerously close to the gravity well of Backman, deep within Imperial patrol perimeters.

This bold stroke allowed him time to disable many of the bases' facilities, seize three additional merchant vessels docked there, and effectively limit the Imperial Navy's ability to deal with him in the future.

CAPITAL/CORE

Word has reached Core concerning the world of Alekvadin/Core. According to reports, the world has been sacked by deep penetration raiders from Dulinor's fleets.

The great riches of the ancient Vadin civilization, from the spired towers of Twunchel to the endless art treasures of the period, have all been seized by the piratical rebels, members of the 166th Fleet.

The estimated worth of these treasures is in excess of MCr50,000.

The raiders have escaped without a trace, and the dearth of ships in the area suggests that the capture of the raiders is quite unlikely.

LIBERT/DIASPORA

Support for the Solomani cause and invasion in Solomani Rim and rimward Diaspora sectors is apparently widespread, despite assurances from the nobility that this is not the case.

Efforts on many worlds are being hampered by Solomani security elements, largely with public support.

Pervasive unrest is apparent, and a large number of troops are being pulled out of the front lines in order to secure some rear areas.

Particular trouble spots seem to be in Mudge, Easter, Frey, and St. Denis, where uprisings have seen considerable destruction of life and property.

DACHNIS/OLD EXPANSES

Today, a counterattack by Solomani raiders destroyed five patrol vessels of the Old Expanses Fleet.

The admiralty had no comment, but unofficial sources claim that the attack was very well planned and executed on the part of the Solomani.

They also denied that SolSec has penetrated the fleet at very high levels.

WARINIR/DAIBEI

Government offices are buzzing with activity, but they are reluctant to comment on what has become known as the Orvon Incident.

Three patrol ships from the Daibei Fleet, apparently on routine maneuvers, were approached and fired upon by a squadron from the 239th Fleet, en route to the Solomani front.

With sketchy facts, the Naval Information Office is declining any comment on the incident, stating only that it must be some sort of terrible mistake.

The Orvon Incident is already being portrayed in the press as a symptom of impending confrontation between the Imperium and Daibei sector.

ANAXIAS/DELPHI

Fleets loyal to Lucan carried the war directly to Margaret's stronghold of worlds, spearheading on a frontage three parsecs across into the area of Aarze and Keum in Massilia sector.

The 117th Fleet has done well to hold its own against the invaders, managing to blunt their assault and turn some enemy squadrons back toward their bases.

Further penetration from Lucan's Imperium is unlikely, as reservist fleets have now come to bear. Nonetheless, the fighting is expected to continue in the region during the many months to come.
A grapnel gun is a device which hurls a projectile attached to some sort of rope or line. This line can be used to pull an object closer, to climb a vertical surface in a gravity well, or to move safely and under control toward an object in zero-G. The effectiveness of this device depends on how securely the projectile can be anchored to the target.

The MegaTraveller Imperial Encyclopaedia lists a TL7 indirect fire grapnel gun. At higher tech levels, a direct fire device is available. A sharp, carbon-alloy projectile is used at TL8-13. The head of the projectile imbeds itself in the target and immediately releases four perpendicular barbs to hold it in place. Removing the head is a matter of twisting a locking collar to retract the barbs and pulling the head from the surface. This type of projectile uses either a powder or chemical charge with a rope or cable line.

At TL14, new developments in molecular bonding allow creation of an improved projectile. The projectile head is a polymer/circuitry combination which fastens to any surface. Using a compact, low-voltage power source creates a subatomic electrical bond with the surface it strikes; it, in effect, becomes a part of the target surface. The power level control is at the opposite end of the braided graphite fiber line and must be set to the proper output for the target surface. Subatomic forces vary with the structure of the atom, and thus different materials require different power level settings. Due to the lighter weight of this projectile and line, the gun is a gauss-type ideal for zero-G use. Therefore, it is highly desired by asteroid mining companies.

REFEEEREE’S NOTES

Use of the carbon-alloy head against a relatively soft target (for example, clay or dirt) may cause the entire projectile to be buried.

With a molecular bonding head, a task roll must be made to properly set the power level.

To set the correct power level on molecular bonding head:
Difficult, Belter Terms, Edu, Instant (unskilled OK).

Referee: The task roll should be kept secret, as the player will not know if the setting is correct until the projectile finally strikes the target.

Using the molecular bonding head in securing to bonded armor could be hazardous. If the setting is improper for the armor, a surge voltage from the armor itself will at least throw the circuit breaker on the power supply and may cause it to explode.

If the target is protected with radio or laser detection, then the guidance systems, if they are used, will be detected by the target.

The following tables list important information on direct fire grapnel guns.

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<tr>
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<tr>
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<td>Rope</td>
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<tr>
<td>10</td>
<td>Chemical</td>
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<td>Light cable</td>
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<td>14-15</td>
<td>Gauss</td>
<td>Braided</td>
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<th>Guidance</th>
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<tr>
<td>Graphite</td>
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<th>Volume (l)</th>
<th>Weight (kg)</th>
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<td>60</td>
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<td>12</td>
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<td>8</td>
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<tr>
<td>14-15</td>
<td>200</td>
<td>6</td>
<td>8</td>
<td>Cr2000</td>
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David G. Thompson

Prize Court: A Naval Campaign Variant

T

he following suggestions are intended as a follow-up on the article "Naval Command," by Jeffrey Groteboer, which appeared in Journal 23. It contained guidelines on a Traveller variant which allowed players to adventure as naval characters without having mustered out, and it provided a pay scale. However, many starmen dream of getting rich quick by another means: prize taking. Of course, naval personnel are expected to carry out their duties without regard for personal gain. Nonetheless, many navies have recognized that giving the men some hope of extra reward improves morale and performance.

CAPTURING PRIZES

While the loser in starship combat is often completely destroyed, surrender and capture are also possibilities. In an action between warships, surrender and capture generally occur when a vessel has been disabled and can no longer maneuver or fire. If it is unprotected by other friendly ships, it becomes vulnerable, at this point, to enemy boarding attempts. Faced with the imminent capture of his vessel, a heroic (or fanatical) captain might decide to "scuttle"—which refers to abandoning ship after programming a self-destruct sequence.

Even the most ambitious would-be captors will seldom risk boarding a warship which has just been abandoned by its crew because the chances of the boarders being blown up with the prize far exceeds those of their disarming the charges.

You should note, however, that exceptions are possible—Solomani antiquarians may recall the case of the German submarine, U-505.

A typical self-destruct program will give the crew about 40 minutes to get clear. However, the exact time is determined by the individual referee, or it may be left up to the players who are in trouble.

To disarm a starship self-destruct sequence:

Difficult, Computer, Engineering, 4 min (hazardous). Referee: A mishap indicates that the ship has exploded prematurely, killing everyone aboard. Even if the task succeeds, it must be accomplished before the time runs out. Exceptional success halves the time taken.

A nonmilitary vessel will seldom resort to such heroic defiance, however. In fact, many warship crews will hesitate before abandoning their ship in the face of the enemy.

The open ocean is a daunting enough prospect to a "wet" sailor; to a starmen, leaving the relative safety and comfort of a damaged starship hull for the deadly vacuum of space is, to say the least, unappealing.

A particularly ruthless commander seeking a capture might even inform his victims that, should they abandon ship, he will continue firing. Most dignified officers, however, would look upon this ruthless act as a highly dishonorable one.

In the case of a warship, the decision to scuttle depends on the will of the commander, while the execution or rejection of the order hinges on the morale and training of the crew.

Of necessity, the resolution of this question should be left to the referee's discretion (unless, of course, it is the players themselves who have arrived
at this unenviable choice). Civilian vessels will almost always surrender to superior forces (out of a desire for self-preservation and a recognition of the profit motive). Surrender, however, does not necessarily mean that the ship will be permanently lost to the owners (see below).

**PRIZE CREW**

Having successfully taken possession of an enemy ship, the boarding party becomes known as a prize crew. A subordinate officer of the boarding vessel’s crew is appointed by the captain to act as master of the prize. He becomes a temporary captain in his own right. His elation at the sudden promotion may be short-lived, however, when he is confronted by a number of serious problems.

First and foremost is his shortage of manpower. Even if the prize is undamaged, which it is often not, there is so much to be done that he will have to establish priorities carefully. Among his primary concerns are the prisoners. The nature of this problem depends largely on the type of ship captured; a civilian crew (and possibly passengers) will generally be easier to manage than a naval crew (naval crews are always suspected of plotting to repossess their ship). Although the marines will be of particular value to the prize master in this respect, the captain of the boarding vessel may not always have them to spare. Such situations can clearly provide excellent material for a deck plan B combat scenario, using the 1.5-meter-scale MegaTraveller rules, or one of the older systems such as Snapshot or AHL. Note that the prisoners, while at least temporarily disarmed, will usually be more familiar with the layout of their ship than the boarders are.

Even if the prisoners prove cooperative, working the prize into port may be an arduous task. Ships may be operated by a skeleton crew of considerably less than the normal size, but there are major pitfalls. Among the most likely problems are a misjump (due to insufficient engineering crew or unfamiliarity with navigation systems), a power plant malfunction, or a computer glitch. As a last resort, the prize master might be forced to seek the aid of his prisoners; they should be able to fix things up, but the drawbacks are obvious.

**AMONG THE MOST likely problems are a misjump (due to insufficient engineering crew or unfamiliarity with navigation systems), a power plant malfunction, or a computer glitch.**

**DISPOSAL OF PRIZES**

So much for the challenge of “bringing her in”—what about the reward? In the Imperium, any prize becomes the property of the Emperor, who may theoretically dispose of it in any way he wishes. However, a strongly entrenched custom has evolved: Prizes are almost always sold at auction.

The proceeds are to be divided as in the Proceeds Table which follows.

**PROCEEDS TABLE**

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Percentage</th>
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</thead>
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<tr>
<td>Emperor (Imperial government)</td>
<td>25</td>
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<tr>
<td>Sector duke</td>
<td>12.5</td>
</tr>
<tr>
<td>Subsector duke</td>
<td>12.5</td>
</tr>
<tr>
<td>Fleet commander</td>
<td>10</td>
</tr>
<tr>
<td>Squadron commander</td>
<td>10</td>
</tr>
<tr>
<td>Ship’s captain</td>
<td>10</td>
</tr>
<tr>
<td>Ship’s officers</td>
<td>10</td>
</tr>
<tr>
<td>Ship’s petty officers</td>
<td>5</td>
</tr>
<tr>
<td>Ship’s crew (E1-E3 &amp; marine E1-E9)</td>
<td>5</td>
</tr>
</tbody>
</table>

Despite the major slices taken by the nobility, government, and higher command, there is clearly an opportunity for even the lower decks to collect a major windfall. Suppose, for example, that a Kinunir-class colonial cruiser manages to bag a Zhodani Shivva-class patrol frigate in time of war. Five percent of the frigate’s MCr493.87 construction cost, divided among the cruiser’s approximately 25 junior ratings and 31 marine enlisted men (assuming there were no casualties in the battle), would leave them with more than Cr440,000 each! This is about the extent of a typical starman’s thinking, unless he has been around long enough to become cynical.

In practice there are numerous obstacles to a crew’s getting rich quick, and for good reason; a wealthy man has little reason to reenlist! To begin with, a prize is often damaged, which obviously reduces its value to a potential buyer. Second, the navy itself will sometimes (7+) wish to purchase a captured enemy warship (the potential uses of which also suggest some good adventure material for naval characters!). The hitch here, of course—from the crew’s point of view—is that the navy can set its own price, but its price will seldom be anywhere near the prize’s original cost.

Even in the case of a sale at auction, the naval crew is likely to be disappointed. Shipping firms trying to operate when prizes are also being taken by the enemy must cope with staggering insurance rates, and they attempt to cope by raising their fees and lowering their other costs. Thus, the major parties at an auction will tacitly agree to a low ceiling on their bids. Corruption in the prize courts is also fairly common, and an official will sometimes arrange a private sale at a low price in return for a suitable “gratuity.”

In short, a crew will seldom see all the credits to which it is entitled. However, the captain will usually do his best to see that the prize money is forthcoming, out of concern for morale as well as his own profit motive. The task for collecting prize money is as follows.

To collect prize money:
- Routine, Admin, Int or Soc, 3 weeks.

**Referee:** The roll is made by the captain, but use the highest admin level aboard (presumably a captain’s clerk). The sale price is equal to the number the roll succeeds × 10 percent of the prize’s original value. If the navy is purchasing the prize, Difficulty = Simple, but halve the sale price.
Also note that in many cases, the subsector government (and, to a lesser extent, the fleet and squadron commanders) will be in a better position to promote their own interests. At the referee’s discretion, they may collect a higher proportion of their return (although in most cases, it doesn’t matter to the players). It is also possible, particularly for privateers (see below), to devise a more detailed resolution of the process involving the Economic skills or other attributes.

If a laden merchant is captured, it may be important to determine the nature of its cargo in order to add its auction value to the prize money. The contents of the hold will, of course, be of immediate interest to the prize master, as well. (What? You say the hold was full of Zhodani Marines?!) It is suggested that the trade and commerce procedures be applied for this purpose. If the referee wishes, the cargo auction may be handled separately from the ship auction.

With the Rebellion, several of the factions have revised their specific systems of prize money allocation. Those who have attempted to divert all proceeds to their own coffers, however, have suffered varying but considerable losses in naval morale and efficiency. Certain non-Imperial governments have their own variations, and some have no tradition of prize money at all. The Solomani Confederation, for instance, devotes all proceeds from prizes to the furtherance of “the cause.”

PRIVATEERS

In practice, “privateer” is most often little more than a euphemism for pirate (especially with the decline of Imperial authority). However, recognized governments which are at war will sometimes issue “raiding warrants” (Terrans still like to call them “letters of marque”), which officially authorize private shipowners to seize enemy shipping. The privateers then function as naval auxiliaries, although most governments will treat enemy privateers as common pirates (if they manage to lay hands on them). The main distinction, however, lies in the allocation of prize money. This is generally done as follows.

### PRIZE MONEY ALLOCATION

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government which issues raid warrant</td>
<td>25</td>
</tr>
<tr>
<td>Privateer owner</td>
<td>50</td>
</tr>
<tr>
<td>Privateer crew, including officers</td>
<td>25</td>
</tr>
</tbody>
</table>

Although the portion claimed by the government is fairly standard, the owner will often offer a larger cut to the crew as an added incentive. The division of spoils among the crewmembers is generally handled on a basis of shares, similar to the system used in mercenary military units (see the old Book 4, p.19). The owner is normally able to play an active role in arranging the sale of prizes, and privateer’s prizes will, therefore, tend to bring higher prices than prizes taken by the navy.

One additional circumstance, which frequently disappoints starmen and privateers alike, is the recapture of a friendly vessel. Enemy prizes will often be intercepted while attempting to reach their government’s territory, since lucrative merchant victims are generally found somewhat behind the main area of fighting. In this situation, the prize reverts to the original owner (even though he might have preferred to collect compensation for an over-insured old rust bucket!). Some of the larger shipping firms, however, will offer a bounty to encourage the navy to recover the corporation’s lost vessels. This usually amounts to about one percent of the value of the recovered vessel.
The players begin this MegaTraveller adventure as crewmembers (preferably subordinate officers and NCOs, but not the captain) of the Imperial Navy colonial cruiser Kharkar, which is a member of the Kinunir class (see the statistics which appear to the right). The players in this adventure should feel free to play members of the ship's 35-strong marine contingent, as well. The available weapons and equipment will be lavish (at least by civilian standards), but the players must keep in mind that it belongs to the navy; and if it's lost or damaged, then the person who signed for it is going to be sorry!

The boarding party adventure begins in early 1118 at Wonstar/Five Sisters, which is a remote naval base (Spinward Marches 0538). The player characters' ship has recently been reassigned to the 208th Fleet, which guards the Five Sisters. Rumors suggest that the 208th Fleet may be seriously understrength. Many of its units have been stripped in order to reinforce Staterooms = 1, Armor = 40G, Unloaded = 14,671, Loaded = 15,322

Power: 116/154, Fusion = 20,736Mw, Duration = 20/60
Loco: 186/248, Maneuver = 4, 85/114, Jump = 4, NOE = 190kph, Cruise = 750kph, Top = 1000kph, Agility = 1

Commo: Radio = System, Maser = System
Sensors: PassiveEMS = Interstellar, ActiveEMS = Far Orbit, Densitometer = LowPen/250m, Neutrino = 10kw, ActObjScan = Rout, ActObjPin = Rout, PasObjScan = Rout, PasObjPin = Rout, PasEngScan = Sim, PasEngPin = Rout

Off: Beam Laser = x 05, Missile = x 02, ParticleAccel = 002
Batt = 002 002 002
Bear = 002 002 002

Def: DefDM = 8, Nuclear Damper = 1, Black Globe = 1
Control: Computer = 7fib x 3, Panel = holographic linked x 626, Special = Lg. Holodisplay, Environ = basic env, basic Is, extend Is, grav plates, inertial comp
Accom: Crew = x 34, (Bridge = 4, Eng = 3, Gun = 11, Flight = 3, Troops = 15, Command = 9, Steward = 2), Bunks = 68, Sm. Staterooms = 6, Staterooms = 1, Subcraft = 1 x Pinnacle
Fuel = 9296kl, ObjSize = Average, EMLevel = Faint

The Broadsword class is described on page 83 of the MegaTraveller Imperial Encyclopedia.

The Kharkar has no known weak points, but a portion of it need be treated in detail. The only acceptable option. The referee will want to be certain the Aslan ship's computers (there is no fiber-optic backup system). In any case, the resolution of the engagement should be through the captain assigning the players (or at least some of them) to lead the boarding party in the pinnace and take the Aslan ship as a prize. The players may bring as many of the ship's troops as they wish, subject to the capacity of the pinnace; but they should also consider the need for other specialists.

The Aslan ship is the Dewclaw, originally built in the Imperium. It is armed with four triple beam laser turrets (two batteries of factor 2), and two triple missile turrets (two batteries of factor 4), and two triple sandcaster turrets (two batteries of factor 4). In addition to the crew, 24 troops are aboard. They are equipped with TL12 combat armor, gauss rifles, RAM grenades, and TL13 laser rifles. These were intended to assault the naval base, if necessary. Nonetheless, it is possible (depending largely on the actions of the players) that the Aslan commander may conclude that surrender is the only acceptable option. The referee must determine whether they should

The combat should be resolved according to the rules in the MegaTraveller Referee's Manual, but for the adventure to be played out in full, the referee will want to be certain the Aslan ship is neither destroyed nor damaged beyond repair. (Why wouldn't they just destroy it? See the "Prize Court" article.) A good possibility might be for the Kharkar to score particle accelerator hits which disable the Aslan ship's computers (there is no fiber-optic backup system). In any case, the resolution of the engagement should be through the captain assigning the players (or at least some of them) to lead the boarding party in the pinnace and take the Aslan ship as a prize. The players may bring as many of the ship's troops as they wish, subject to the capacity of the pinnace; but they should also consider the need for other specialists.

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A DECK - AVIONICS
Executive Office

C DECK - BRIDGE
Computer

D DECK - QUARTERS

E DECK - QUARTERS

F DECK - CARGO HOLD

G DECK - QUARTERS

H DECK - MARSHALLING DECK

I DECK - DRIVE DECK

J DECK - LOWER DRIVE DECK

Control Area
Pinnace
800 ton Cruiser

Forward Air Lock
Beam Laser Turrets
Navigation Area

Air/Raft

Elevator
Landing Leg

Drives
Armory
Marshalling Area

Broad Sword
Meters For Use With TRAVELLER.
attempt to abandon the ship; if so, they will almost certainly sabotage it, as described in “Prize Court.”

Assuming the players’ boarding party secures the Dewclaw, they will then be assigned to form the prize crew. They may request additional personnel, including marines, but the captain will allow a total of no more than 12 (including the players themselves). The Kharkar may be able to provide additional help with emergency repairs to get the prize back to the starport, but before any substantial work can be carried out, a courier arrives from the 100th Fleet with new orders. Other Aslan elements have penetrated the Glisten Subsector in strength, and the task force must proceed there at once. The base at Motmos is to be evacuated since the covering force is being withdrawn, and more Aslan could arrive at any time. The last orders from the Kharkar’s captain are to get the prize back to Wonstar and report to the base commander there for further orders.

Depending on the results of the initial combat, the Dewclaw will have suffered some degree of damage (some of which will need to be attended to with field repairs). The naval base will only be of limited help since the main concern now is to “bug out” as quickly as possible. The ideal situation, for optimum suspense, would be to have several systems “on the fritz”—operable but liable to break down at any time. If the ship was disabled by radiation damage to the computer, a spare system will have to be installed; the base can supply one, but the prize crew will have to do the work.

The surviving Aslan crew and troops are still aboard, and part of the players’ mission is to deliver them as prisoners. A further complication is presented by the Motmos base commander; he will assign the Dewclaw as many civilian evacuees as can possibly be carried on the ship (in his opinion, not the players’), and he will provide two modular quarters units to increase capacity by 16. Few, if any, of these will be of much help to the prize crew since they are mostly dependents and administrators. Should the players consider refusing—despite the fact that they are in the navy—they might be reminded of something they still need from the base to make the ship starworthy.

It is up to the players to choose their route of return, which may be influenced by the condition of the ship (particularly the jump drive). It is up to the referee to introduce further events if things seem to go too smoothly. Possibilities include encounters with other Aslan ships (a Corsair might provide a challenging but not impossible opponent), an attempt by the prisoners to regain control (perhaps taking hostages from among the evacuees), or a referee-dictated breakdown which requires outside help to repair. A nonaligned world government in this subsector might be somewhat less than helpful, hoping to gain favor with the advancing ihatei. One of the evacuees might even fall sick and require better attention than the ship’s tiny sickbay can provide. Be creative.

Ultimately, of course, the players will succeed in reaching Wonstar to bring their prize in with colors flying. The navy will wish to purchase the Dewclaw for refitting as an auxiliary; consult “Prize Court.” If the group has performed well (i.e., no civilians were killed through negligence, no Aslan were blatantly massacred, etc.), the senior ranking player will be given official command, and the others will be assigned as a nucleus crew. Ω
Not all scouts are created equal.

The design for the Monitor-class ship was commissioned by the Appropriations Department of the Regina Subsector Navy in 1091. Its primary requirements were a more heavily armored hull and greater acceleration over standard scout craft. The department also required the vessel to include an electromagnetic masking package, increased computer capability, and maser communication.

By 1093, six vessels were on order for construction of the Efate, which were commissioned into the Regina Subsector Navy by 1096. By 1116, a total of 33 Monitor-class scouts had been constructed; 12 were delivered to the Regina Subsector Navy, 14 to the Sector Navy of the Spinward Marches, and the remaining seven to various corporate concerns. Of the 33, 28 remain in operation. Three were destroyed in combat during the Fifth Frontier War; the other two are listed as missing, presumed lost.

The Deck Plan

The forward section (room 1) is the bridge, containing the ship’s computers and all sensor arrays, communications gear, and controls. The accommodations section includes two staterooms (rooms 2 and 3). In each stateroom are two foldup bunks for the required double occupancy, a fresher, a closet, and a small desk and chair. The remainder of this section (room 4) contains a utility center to be used for food storage and cooking, clothes washing, etc., as well as entertainment console. The ship’s single turret (room 5) contains the fire control and two beam lasers. The engineering section (room 6) contains the jumpluver drive, the power plant, and various environmental generators. The lower deck has the ship’s single air lock (room 7), cargo bay (room 8), and subcraft bay (room 9).

SUBCRAFT—AIR/RAFT

CraftID: Open Top Air/Raft, TL13, Cr589,776
Hull: 1.8/4.5, Disp = 2, Config = 1SL, Armor = 6F, Unloaded = 4.4tons, Loaded = 7.7tons
Power: 1/2, Fusion = 2.4Mw, Duration = 45/135
Loco: 1/2, StdGravThrust = 10tons, NOE = 90kph, Cruise = 270kph, Top = 360kph
Sensors: PassiveEMS = Continental, ActiveEMS = Regional, ActObjScan = Diff, ActObjPin = Diff, PasEngScan = Form
Off/Def: Pen/Attn = 6/2, Dmg = 5, MaxRng = Dist(2.5), AutoTgts = 2, Sig = Low, ROF = 40 BeamLaser
Control: Computer = 0x2, Panel = holographic link11, Environ = basic env
Accom: Crew = 2(Operator = 1, Gunner = 1), Seats = roomy4
Other: Cargo = 3kliters, Fuel = 4.3kliters, Refuel = Cr151, ObjSize = small, EMLevel = faint
The air/raft is used by both military and paramilitary units located within the Spinward Marches sector.

MONITOR-CLASS SCOUT

CraftID: Scout, Type SA, TL13, MCr69.4466
Hull: 90/225, Disp = 100, Config = 1SL, Armor = 50F, Unloaded = 1878tons, Loaded = 2018tons
Power: 10/20, Fusion = 1377Mw, Duration = 24/72
Loco: 10/20, Maneuver = 4, 3/6, Jump = 2, NOE = 170kph, Cruise = 750kph, Top = 1000kph, Agility = 0
Commo: Radio = System, Maser = System
Sensors: EMMask, PassiveEMS = Interstellar, ActiveEMS = FarOrbit, Densitometer = HighPen/100m, Neutrino = 100kw, ActObjScan = Rout, ActObjPin = Rout, PasObjScan = Diff, PasObjPin = Diff, PasEngScan = Rout, PasEngPin = Diff
Off: BeamLaser = x03
Batt 1
Bear 1
Def: DefEM = +4
Control: Computer = 3x3, Panel = holographic linkx256, Special = headsUpx2, Environ = basic env, basic Is, extend Is, grav plates, inertial comp
Accom: Crew = 4(Bridge = 2, Engineer = 1, Gunnery = 1), Staterooms = 2, Subcraft = air/raft
Other: Cargo = 94.5kliters, Fuel = 739kliters, Refuel = Cr25,865, Scoops, ObjSize = average, EMLevel = faint
Used by both naval and corporate fleets (task force operations level), it sacrifices duration for improved performance. See the diagram on the next page.
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Between Norris and Lucan is a swath of stars falling into the depths of barbarism and chaos.

This adventure is set during the time period of the Rebellion. The player characters are in Imperial Interstellar Scout Service stationed at Larmige (Dagudashaag 2709 B7759DD-C A). Their assignment is to complete the delivery of a diplomatic message from Capital to Archduke Norris of Deneb. This means having to travel through Vland-controlled space and beyond the Vargr-blocked Corridor sector. The characters must return with a document signed and sealed by Norris verifying receipt. Also, they will likely be asked to carry back a reply. Success in a mission of such import is customarily rewarded by a promotion in rank, nobility, or by the receipt of a cash bonus.

No courier has yet succeeded in the mission since shortly following the withdrawal of the Corridor Fleet, although several have tried. Two of the six trying to transit Corridor have returned, crippled by Vargr corsairs. The rest are also thought to be lost to corsairs. Nothing was ever heard of the fate of those crossing the rift. Vargr presence in Corridor has since expanded. But there is another message for delivery from Capital and orders to renew the effort.

CHARACTERS

Most characters are expected to be generated from the navy tables, but the characters may also include marines, a diplomat, and a scout. Characters must collectively have skills appropriate to fill the posts aboard a J-6 fleet courier (see below). The ship has accommodations for nine (up to eight of whom may be player characters). Unfilled posts should be occupied by NPCs created by the referee.

If a diplomat is involved, he is technically the mission leader (although not ship commander). He will occupy the passenger cabin. A scout is assumed to be a liaison from the IISS Communications Office. He is tasked to report observations on the fate of the xboat network, scout bases, and way stations in Corridor. Marines should have drawn Gunnery as a shipboard skill through the advanced generation system.

A Vargr expert may be included among the crew and may be a player character (optional). This character is assumed to have extensive knowledge about Vargr and a command of Vargr languages. He can be of any profession, with the ideal being a Vargr alien from the emissary career. If he is not carried as the passenger, he should fill one of the shipboard posts—probably as an engineer or gunner.

The group may also include an expert on the restored Vilani empire. A non-player character is detailed for this role below. However, her actual function is flexible.

Other than the Vargr expert, characters are assumed to still be in active service. If new characters are used, then the referee may require that they have not failed their survival or reenlistment rolls at the end of the generation process.

The characters are assigned to FF-27868, the Petasos. Its universal craft profile follows.

**FLEET COURIER**

**Craft ID:** Fleet Courier, Type FF, TL15, MCr222.771

**Hull:** 360/900, Disp = 400, Config = ISL, Armor = 40G, Unloaded = 3733 tons, Loaded = 7248 tons

**Power:** 2/4, Fusion = 4140 Mw, Duration = 30/90

**Loco:** 18/36, Maneuver = 2, 25/50, Jump = 6, NOE = 190kph, Cruise = 750kph, Top = 1000kph, Agility = 1

**Commo:** Radio = System, Laser = System, Maser = System

**Sensors:** PassiveEMS = Interstellar, ActiveEMS = FarOrbit, Densitometer = HighPen = 1 km, Neutrino = 10kw, ActObjScan = Rout, ActObjPin = Rout, PasObjScan = Rout, PasObjPin = Rout, PasEngScan = Simp, PasEngPin = Rout

**Off:** Missiles = x 03
Batt 2
Bear 2
BeamLaser = x 04
Batt 2
Bear 2

**Def:** DefDM = +8

**Control:** Computer = 6/8, Panel = HoloLink x 391, Special = HeadsUpHolo = 1, Environ = basic env, basic Is, extend Is, grav plates, inertial comp

**Accom:** Crew = 8 (Bridge = 2, Engineer = 2, Gunnery = 3, Command = 1), Small Staterooms = 9

**Other:** Cargo = 135kliters Fuel = 3380kliters, FuelScoops, PurificationPlant (12hr), ObSize = Average, EmLevel = Moderate
EQUIPMENT

The diplomatic message and documents are contained in a specially designed case with an armor value of 15—it can withstand heavy punishment, including free reentry and hard landing. The handcuff and chain have an equivalent armor value of 9. Lock-picking the cuff or the chain is a Formidable task using Mechanics and Intelligence as DMs. The cuff requires an hour, and the case requires 10 hours (since special implements must be fashioned). The case weighs five kilograms.

The characters were given an Imperial warrant, signed by Emperor Lucan, to ensure the cooperation of all “loyal Imperial citizens.” Both the warrant and case will be carried by the diplomat. If no diplomat character is included, then the commander is free to assign a character as custodian.

The characters also have 150 newly minted 50-gram gold coins, each marked with the Imperial sunburst. Worth approximately Cr350, they are not regular currency and are for use as barter where Imperial currency is not accepted.

AGIM SHERUU

The one NPC required for the adventure is Agim Sheruu, who can serve as a gunner or engineer. She can be played as the expert on the Restored Vilani empire. If played as an expert, Agim Sheruu is familiar with the more recent events in Vland sector and can advise the characters in this leg of the journey. She is an officer in Naval Intelligence, and she spent her last assignment in Vland space.

Lt. Cdr. Agim Sheruu (NI)
485AC9 3/3 Age 34 4 terms Cr60,000

Skills: Linguistics (Vilani)-1, Medical-1, Gunnery-1, Engineering-1, Bribery-1, Interrogation-1, Streetwise-1, Intrusion-1, Forgery-1, Vacc Suit-0, Grav Vehicle-0, Handgun-0, Computer-0.

Benefits: Pistol.

Homeworld: Starport A, Small, Dense, Wet World, Hi Pop, Mod Law, Avg Stellar.

Agim Sheruu is a villain, but she doesn’t emerge as such until later. Regardless of her crew position, her covert assignment is to prevent the defection of the crewmembers and to assure they do their utmost to complete the mission. She is unwaveringly loyal to Lucan’s Imperium. Her personal ideals conform well to those of the new regime—she will do almost anything to achieve an objective.

This characteristic is not readily apparent in the beginning. Attractive and pleasant, she will seem to readily fit in with the crew. Yet in interactions with her, it may be noted she is lacking in compassion. Later, the ruthless aspect of her character might become obvious. For instance, of her own volition she might interrogate a prisoner to reveal valuable information. Although she derives no pleasure from being cruel, her methods will show a complete lack of restraint. Agim lets nothing on a personal level impede the good of the Imperium in any way. More information about how to run her is offered under the section about politics.

REFEREE’S INFORMATION

The diplomatic document case contains a demand from Lucan—Norris is to send his fleets to join those engaged in fighting Dulinor. Analysts doubt Norris will actually send any ships. If Norris does respond, analysts believe he will send either a token force or diplomatic excuses. But the chance that he will comply is well worth the effort. Otherwise, the contact will test his degree of loyalty to Lucan.

Player characters need not be given this information; it might better serve to leave their curiosity unsatisfied until later. However, if a character of the diplomat profession is involved, that player may be told privately. The character will further be charged to make every effort to return with a reply from Norris, rather than just a receipt.

Although the characters will travel beyond Lucan’s sphere of power, the Imperial warrant will still have some influence. Since these regions were
subject to Capital until only recently, they will still have respect for the warrant. In play, NPCs will act as though this document is of small consequence. But if the player characters are in a very tough situation (such as having been captured and maybe executed), the true weight of the document can come into play. In effect, the warrant eliminates many worst-case scenarios.

The referee should study this adventure thoroughly before beginning play. An understanding of what's actually going on is very important and could affect matters early in the adventure. He should also have access to the sector maps for Vland, Corridor, and Deneb (available in Second Survey). It will also be necessary to review Traveller literature on the Vargr, ideally Alien Module 3—Vargr or the forthcoming MegaTraveller Aliens Book. Because this adventure deals with several factions of the Rebellion, a working knowledge of the material in the Rebellion Sourcebook is required.

SPACE ENCOUNTERS

Ship-to-ship battles will probably be frequent in this adventure. Referees should roll ship damage results secretly—to permit control over the outcome, if needed. For instance, if the courier is ambushed while skimming a gas giant, and the maneuver drive is destroyed, it will fall into the planet and be destroyed. The referee should secretly adjust this result to something less fatal. On the other hand, the referee might use a particular outcome to encourage the characters into a predetermined encounter.

Referees should also prepare for the eventuality that the group will lose a combat. The attackers will want the ship in reasonable condition and will try to capture the characters alive (should this occur, the referee will need to have given some advance thought as to events thereafter and possible escape plans). Whatever the result, the characters do not necessarily have to continue in the same ship, but they must be able to recover the diplomatic document case if it is confiscated.

Below is a sequence of space encounters the fleet courier can have in its journey to Deneb. These can be played when the 4C Space Encounters Table (Referee's Manual, page 40) indicates a predetermined encounter. However, each encounter should be played before the courier leaves the applicable area.

POLITICS

Perhaps the referee should present this adventure as a mission for the Imperium rather than for the service of Lucan. The politics of the Rebellion have a major role in the adventure but should be side-stepped initially, if possible. After beginning the mission, let the players consider whether they are on the correct side. Be aware that this adventure has an anti-Lucan, pro-Norris slant. Events during play—particularly rumors and news items—should give the characters reason to take on this perspective. Examples follow that may be fleshed out as needed.

- Late reports confirm that Lucan's Imperium has quietly revived research into biological warfare. Such research was abandoned and outlawed under the rule of Márín III; however, the new programs are more intense than at any time in Imperial history. As research will undoubtedly take advantage of TL15-16 technology, the threat poses may be considerable.
- A mission by independents to rescue Duchess Legama, sister to the Duke Nankaar of Kesali (Vland 2737), has failed. All primary team members are reported as having been killed in the assaults that took place on Capital. Duchess Legama remains hostage within Cleon as insurance that Duke Nankaar will not swear allegiance to the Grand Empire of Stars.
- Revolts against Lucan were put down on Fornol (Core 1715) after fierce, week-long fighting. After declaring martial law, Imperial Marines rounded up dissident leaders and executed them through emergency powers. Although the fighting began when a peaceful demonstration became violent, spokesmen for the Brothers of Varian blame agents of Lucan as being responsible. Agents infiltrated the demonstration and began firing on the marines from the crowds.
- Admiral Wainfrost was awarded the Starburst for Extreme Heroism for handling the defense of Medurma, Dagudashaag's sector capital.

Prior to the Illelish thrust toward Medurma, the Imperial fleets were given a standing order not to surrender high population worlds under any circumstance. Overwhelmed by the concentration of Illelish forces, it was impossible for the squadrons under Wainfrost's command to hold the lines without being destroyed. Wainfrost ordered the worlds of Ispumer, Shankida, and Dashi to be bombarded with nuclear weapons—in order to reduce their status as high population worlds before retreating.

Shocked by these events, Dulinor's admirals immediately halted the advance. With the momentum lost, the drive was soon pushed back by reinforcements, leaving Medurma securely in the hands of Lucan's Imperium.

A segment of the official citation reads, "The agony of having ordered the death of billions of people to fulfill the Emperor's orders far surpasses the sacrifice of one's own life." Wainfrost is believed to be a strong candidate as a replacement for Admiral Yokasi, commander of the Core Fleet, who (it is widely rumored) has been executed.

While such reports are meant to generate doubts, they are not likely to affect the characters on a personal level. However, Agim Sheruu will. If she thinks the characters are being swayed by the stories (especially if there are inclinations to desert the mission and steal the ship), Agim will present arguments against their reaction. She will be cautious in her comments, though, to avoid being regarded as an obstacle and, thus, left out of discussions. However, she will take more obvious steps if the characters go too far, and the referee-designed events should help ensure
that they do, in fact, go too far.

If the characters still do not plan a defection, Agim can be played as though she wrongly believes that they are. She will gradually become more outspoken, isolated, and paranoid.

Agim will have prepared forged naval documents in advance. These documents state that if the characters fail in their mission, relatives or loved ones (to be invented by the referee, if not already created) will be killed. She will announce this to the characters if she needs to. If challenged, she will display the papers. These documents will also be found by the characters if she is killed or if her stateroom is searched.

She does not need to be limited to the use of forged documents. Agim might also have hidden a destruct device on the ship or have given all the crewmembers an extremely addictive drug in order to extort compliance. If only one or two characters are becoming vocal, she might attempt to kill them, making it look like an accident.

VLAND SECTOR

In passing through Vland-controlled space, the characters would be wise to avoid contact with Vilani naval vessels. If available, the military in-system activity checklist (Referee's Companion, page 25) is recommended. Otherwise, roll possible space encounters (Referee's Manual, page 40) for each flight between interplanetary destinations, including normal space travel to and from jump points.

This predetermined encounter is with a small Vilani patrol cruiser (Imperial Encyclopedia, page 82) christened the Ar Keluka. The commander is Captain Mazun Seragen, a Vilani naval officer particularly noted for his devotion to duty and to the Third Imperium. He is still regarded as a dedicated officer, even under Vilani command. However, he has severe doubts about owing allegiance to the Restored Vilani empire. Vland has renounced the original oath he swore to the Third Imperium and to the emperor.

The Ar Keluka will order the fleet courier to stand by for boarding. It will attack if Petasos attempts to flee. However, it can be kept from doing so through direct communications with Captain Seragen. Seragen probably will not seize the courier and take it back to base unless shots are exchanged. His interpretation of duty in confronting an Imperial courier is to inspect it and fully document the encounter before allowing it to pass on. His personal objective is to have a private conversation with the officers on-board.

In this conversation, he intends to confront the Imperial officers with events that have transpired, especially reports of Lucan's atrocities. In a sense, Seragen is looking for the lost Third Imperium, and he wants to hear the player characters' views. Here the players and their characters should begin considering their place in the scope of the Rebellion. Most particularly, they should be given reason to doubt Lucan's worth as Emperor of the Third Imperium. This may be possible through Vilani news reports Seragen will share with the characters. While these might be propaganda, Seragen will claim they are verified by classified reports.

If a second predetermined encounter should occur while the fleet courier is still in Vland sector, the referee is at liberty to insert his own encounter. Generally, if Petasos encounters other Vilani military ships, the ships will ignore the fleet courier, except to establish identity. It is not necessary to make the passage through Vland sector overly difficult; the real challenge lies in Corridor.

If it becomes necessary, Petasos can try to get permission to land at a starport in Vland sector. If it does land, be sure the characters' interactions expose them to views that paint Lucan in a poor light.

To access a Vilani starport: Routine, Liaison (port, fleet), 20 min (uncertain).

Referee: If only the referee's roll succeeds, the players have access to land but are restricted in some ways. If only the player's roll succeeds, the characters may land without restrictions, although there will be repercussions (anti-Lucan demonstrations, questionings by the authorities, etc.).

Two additional modifiers apply to the task:

1. A DM is based on the quality of the starport (A: DM -4; B: DM -2; C: DM +0; D: DM +2; E: DM +4).

2. An additional penalty of DM -4 applies if a Vilani fleet or naval base is present or if the port is within six parsecs of Vland itself. The DM is subtracted once if one or both conditions apply.

ILELISH LISTENING POST

This predetermined encounter will take place after the fleet courier rounds the Great Rift to head spinward. Upon entering a system, the characters detect the radio traffic of the Vilani 29th Fleet refueling at the planet they intended to use. However, the courier needs only to lay low a couple of days before the fleet moves on. In the meantime, let the players know that an asteroid, 10 kilometers in diameter, lies nearby, almost 500,000 kilometers away (Far Orbit). Landing on this asteroid will make the characters less likely to be detected by passing patrols.

Although not immediately recognizable, one of three ilelish reconnaissance scouts in system is already hiding on this asteroid. It was sitting off the planetoid observing the fleet activity and maintaining laser communication with the other scouts. When it detected the courier break into normal space, it quietly moved to the asteroid and settled into a crater.

Routine scans from the courier will not reveal the scout, which is also using EM masking. But if the characters do an object pinpoint, they have a 50-percent chance of the scout being on the face exposed to them (and thus being discovered). This may be rolled while they are at Far Orbit range and again at Planetary range. If they do not detect the scout, report sensors will indicate a striated nickel-iron asteroid. Should the crewmembers elect to examine the whole surface of the asteroid before landing, they will automatically spot the scout.

If they do discover the scout, they will know it's an Ilelish reconnaissance scout, S-45227. The scout will continue to lay quietly, unless the actions of the courier crewmembers suggest they know the scout is there (e.g., the courier turns to leave or it passes within 5 kilometers overhead). In this case, the scout commander will try to communicate via laser,
opening with the following: “This is Lt. Commander Pritcher of llelish scout S-45227. We identify you as Imperial fleet courier FF-27868, Petasos. You boys are a long way from home. Could it be you’re running an errand for the Kinslayer?”

The commander does not want to push the characters so far as to provoke an attack from the courier—since the scout is only armed with one double-laser turret. But he does not expect the courier to attack either. Space combat could draw the attention of the Vilani fleet, which neither side wants. It’s not so much a problem for the llelish scout, though, since it has fuel for a jump.

If the courier should land on the asteroid, other intrigues become possible. The scout will first change its hiding place on the asteroid (in case it was spotted), then it will report events to the other llelish scouts elsewhere in the system. Finally, three of its four-man crew will seek out the location of the courier.

Although the llelish crewmembers are probably unable to successfully board and capture the courier, they could snipe or ambush characters as they come out. If they can, they might attempt a subtle sabotage to the ship. Their objective is to disable the refuel static discharge mechanism so that on-board indicators will be fooled into reading that the discharge mechanism remains operative. The next time the courier skims fuel from a gas giant, it will build up a dangerously high surface charge on the hull. The charge buildup will degrade the maneuver drive to the point where the ship cannot escape the resistance of the atmosphere and the drive threatens to fail altogether.

This situation is meant to be tense but not fatal. Skilled pilotage working to raise the ship higher and out of the atmosphere is possible. The engineer carefully nursing the drive could also work. But the best chance for survival should be to diagnose the problem and have some gutsy character climb out to repair the sabotage while remaining in the ship’s atmospheric entry shadow. There should be enough tasks and second attempts that the chances of escape are actually quite good. If all else fails, the referee can announce that the ship is suddenly discharged by a form of lightning. The lightning causes damage by destroying a turret, for instance, but drive efficiency is restored long enough for the ship to leave the atmosphere.

Each of the crewmembers from the llelish scout ship is armed with a laser weapon, specified below. Their scout uniforms function as TL15 tailored vacc suits and provide armor equal to cloth -2 (armor value 7).

**Team Leader Kkyl Luniril**
468A97  3/4  Age 42  6 terms


**Asst. Team Leader Mikal Gishar**
868986  4/5  Age 38  5 terms


**Asst. Team Leader Leni Dlikel**
B49796  4/5  Age 38  5 terms


**Journeyman Ajit Rajda**
7BC882  4/7  Age 30  3 terms


**PIRATE MAYDAY**

Subsectors D and H of the Corridor sector remain under Vilani control. Vargr incursions, however, are still common. Upon entering this region of the sector, the Petasos will detect a distress signal (probably as it rounds a planet to refuel). The visual transmission will show an attractive blonde woman in a merchant captain’s uniform. She is frantic, though still under control, as she says, “Mayday! Mayday! This is Captain Dira Anfugar of the subsidized merchant Rosalie. We have been disabled, and a Vargr corsair is maneuvering for boarding action. Hijackers have taken over our aft section. We need help!”

The corsair, named Enroz0, was battered by earlier fights and is not fully repaired. Each of its four turrets has a single operable beam laser, giving it a UCP code of x 03, organized into two batteries. Damage has degraded its power plant, and it has no cutter or modules. The ship otherwise conforms to the same characteristics described in Alien Module 3—Vargr. 

The Rosalie looks, to all appearances, like a stretched version of the classic type-R subsidized merchant ship (Disp = 440 tons). However, a densitometer study from visual range (50 kilometers) will reveal it as something very different. The Rosalie was originally a well armed decoy ship operating along the coreward Imperial border by Tukera Lines. It was recently sold to private hands and refitted. Its UCP now conforms to the standard pirate corsair, although it has a 15L hull configuration. The dorsally mounted launch is fake; its configuration can be altered or made to collapse into the hull. Two turrets are visibly mounted
on the forward end of the ship. Two more are hidden as pop turrets in the wings.

Twenty crewmembers are aboard the ship: five humans and 15 Vargr. Eight of the Vargr, most of whom are the ship’s troops, are secretly in league with the crew of the Vargr corsair. Their objective is to seize the cargo which the Rosalie itself stole from a Makhidkarun transfer station. It mainly consists of 100 tons of data processing components in very high demand in the Domain of Deneb. The Enrozo hoped to trade it to the Vaeng-gvae (see below) for repairs to the ship.

When the fleet courier arrives, the defectors will be in control of the lower (cargo) deck. They hold the aft portion of the upper deck, which includes engineering. They also have six captive crewmembers, but they are not using these crewmembers’ lives to force the captain’s capitulation. The remaining six crewmembers, including Captain Anfugar, are forward of a mid-section bulkhead. They are in TL11 vac suits armed with snub pistols. The defectors have combat armor-11 and are armed with laser rifles-9. They have not pressed to take the bridge because they expect Anfugar to surrender as soon as the corsairs board.

The player characters should not have serious difficulty rescuing the Rosalie. They can probably drive off, capture, or destroy the Enrozo. By coordinating their activities with Anfugar, they should succeed in boarding the ship and forcing the surrender of the defectors. Anfugar is not likely to wish the captured defectors be harmed. Rather, they’ll be put off ship at the first opportunity.

That the Rosalie is a pirate ship should be of some surprise to the adventurers, but the fact that Capt. Dira Anfugar is a Vargr should be more of a surprise. What they saw as an attractive blonde woman was a actually pseudo-real image produced by a powerful language translator program. Playing the role of an innocent human merchant was simply her means to attract her means of attracting aid.

Nonetheless, the characters can still benefit from the encounter. They might be able to obtain general information about the situation in Corridor through Dira and her crew. Some specific knowledge might be gained if there are Vargr corsairs to interrogate (probably by Agim Sheruu). The Rosalie and Petasos can also be of mutual benefit if they convoy together to Deneb.

**Pirate Ldr Dira Anfugar**

699885 4½ Age 38 5 terms Cr50,000

**Skills:** Leader-1, Handgun-2, Pilot-1, Streetwise-1, Brawling-2, Linguistics (Gvegh)-1, Vacc Suit-1, Grav Vehicle-0, Computer-0.

**Benefits:** Pirate Corsair.

**Homeworld:** Starport B, Small, Standard, Wet World, Mod Pop, High Law, Avg Stellar.

Though a Vargr, she is still an Imperial citizen but is regarded here as a pirate rather than a Vargr corsair. Her skill at infighting is the same as at Brawling, and her Charisma is 8. She speaks Galangelc as her first language.

Dira will initially be very circumspect in her interactions with the characters—they represent an authority she’s often had to evade. But she will not let the door to an opportunity close. She would like to convoy with the Petasos crewmembers, but she prefers that they be the ones to propose the idea. If an alliance can be arranged, she will always be on the lookout for a means of attaining more weapons for the Rosalie’s turrets.

**EVENTS IN CORRIDOR SECTOR**

The characters should hear rumors from Dira Anfugar (or some other means) that the Vargr are deliberately impeding traffic in Corridor. Imperial ships are seized at the starports, and vessels which are trying to wildness refuel are either captured or even destroyed. Speculation is that the Vargr are making certain there is no communication through the Corridor to assure Humaniti on both sides cannot work together in driving them out. Then again, Dira has heard stories of ships making it through Corridor; and this leads to thoughts that the blockage is not uniform or complete.

In fact, the blockage is quite thorough and surprisingly well organized. Characters will find themselves forcefully challenged in every system when they go to refuel. Fortunately, the Vargr ships are spread thin. They might be lucky, the first time, and meet a force they can successfully combat. But they are certain to face stiffer resistance, intelligently deployed, later. Unless they are clever, the characters will fail.

Using other ships to decoy or refuel for them is among their options. They could, for instance, bargain with a local pinnacle to approach a guarded gas giant in the clear and return with fuel for them. Capturing the craft might be possible if the gold is running low and winning cooperation seems otherwise unlikely. Acquiring a Vargr corsair and appropriate papers would be especially useful for such errand running as the characters hop from system to system. But this could make things too easy.

A second option has already been suggested—convoying with other ships.
Although the courier will be travelling much slower than its full jump, Vargr will not attack if they are outnumbered and outgunned. Unfortunately the Vargr are unusually well organized. When a convoy is detected, the Vargr take very special measures. Ships jump ahead to communicate the convoy's presence. Forces are alerted, and squadrons then lay in wait along the anticipated route. Still, if characters are aware of this strategy, they might yet evade the Vargr. Referees are advised to adjudicate this reasonably, but they also need to provide excitement.

A third option is to obtain as much advanced knowledge as possible. For instance, they can sit off-planet for several days and observe traffic of a military nature. They might also try to gain more specific knowledge about the situation in Corridor. Characters can do this through NPC interactions, especially with Vargr. With good information, they can find relatively safe routes which pass through Corridor.

If characters are gathering intelligence while on-planet, they can learn enough to make good guesses as to where they should go. Referees can create the Vargr factions—describing their strength, morale, discipline, and experience—and identify the systems they are guarding. Additional color may be added (such as conflicts with rival factions or preferred tactics). A faction may have even left the Alliance, leaving a world open to traffic. Characters, with appropriate effort, can discover these things and use them to make effective plans. However, if a more abstract system is desired, use the following.

**VARGR SHIP ENCOUNTER TABLE**

<table>
<thead>
<tr>
<th>Die</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Patrolling Fighters (2)</td>
</tr>
<tr>
<td>3</td>
<td>Scout</td>
</tr>
<tr>
<td>4</td>
<td>Scouts (2)</td>
</tr>
<tr>
<td>5</td>
<td>Corsair</td>
</tr>
<tr>
<td>6</td>
<td>Frigate</td>
</tr>
<tr>
<td>7</td>
<td>Corsairs (1D)</td>
</tr>
<tr>
<td>8</td>
<td>Frigate and corsairs (1D)</td>
</tr>
<tr>
<td>9</td>
<td>Corsairs (1D) and scouts/fighters (2D)</td>
</tr>
<tr>
<td>10</td>
<td>Cruiser and corsairs (1D)</td>
</tr>
<tr>
<td>11</td>
<td>Cruisers (2), corsairs (1D), and fighters (3D)</td>
</tr>
<tr>
<td>12</td>
<td>Cruiser squadron with escorting vessels</td>
</tr>
</tbody>
</table>

Characters making contact with other ships or gathering intelligence while on-planet may or may not be successful. This is adjudicated by events presented by the referee. Knowledge gained from another ship will yield some information of Vargr presence in an arbitrary system within three parsecs of the current system. If the characters have a successful day in gathering intelligence at a port, they will gain information on 1D systems within three parsecs. The first system will be of their choosing; the rest are arbitrary.

What they learn is simulated by throwing 1D. A 1 suggests a weak Vargr presence; a 6 indicates a strong one. The information becomes outdated unless they jump in 2D days. The throw is actually just the first die thrown on the Vargr Ship Encounter Table, much in the way Trader skill is employed. The table shows the vessels the group must evade or defeat in order to refuel.

Vargr ships will usually be lying in ambush at lurking points and often observing through the use of various types of remote sensor probes. Those with major ships displacing 10,000 tons or more (e.g., heavy and battle cruisers) might make less of an effort to conceal themselves.

**THE VARGR**

Corridor is under the control of several Vargr groups and factions. However, they are overloaded by one group, the Vaenggvae, which is slowly absorbing them all. Vaenggvae is based at Depot (Corridor 1511 A686354-F-D), and it has forced the cooperation of the naval personnel stationed there. As with other Imperial Naval bases that surrendered, Vargr ships are kept in exceptionally good repair.

Additionally, Imperial ships are gradually being fielded again, but they are being crewed by the Vaenggvae. These first ships were used to pacify active human resistance in Corridor, then they were used to bloodlessly extort goods and services from the worlds. They continuously patrol Corridor as if it were a threat and stand ready to counter human incursions (primarily by trailing).

Remarkably, local human resistance to Vargr presence is quite weak. Having been abandoned by Lucan and given minimal support from their archduke, the humans have little will left to fight. Further, as the Vaenggvae are gaining in dominance, the ruthlessness of Vargr activity is decreasing. An acceptable degree of order is being established by the Vaenggvae, who have also restored xboat service—although limited and highly controlled.

The Vaenggvae faction was but one of many involved in the Windhorn Alliance that conquered Depot. That battle assured that Vargr corsairs could roam, virtually at will, over Corridor. But Depot itself was of little use without the cooperation of the human personnel on station. The battle of wills lasted for months, with the Vargr clearly losing. Finally, Admiral Xavier gave in and ordered his officers to cooperate fully with the Vaenggvae, but only the Vaenggvae. He also dispatched orders to the sector naval bases to do the same.

Although Xavier's act was widely condemned as traitorous, his stipulation of cooperating only with the Vaenggvae was wise. This faction was the least infected with race hatred and the least rapacious in its activities. It even had a few ex-Imperial Vargr officers in its ranks.

The leader of the Vaenggvae is a female Vargr named Nougzoel. She is given full credit for having broken Admiral Xavier. Nougzoel immediately took control of the Windhorn Alliance and established a general policy of minimizing the destructive activities; she encouraged extortion and ransom as the means...
of gaining Imperial wealth.

With the power of Depot behind Nougzoel, the other Vargr elements want to join with the Vaenggvae. But admission is very selective. Most factions have accepted her authority only grudgingly; however, their lower levels are more enthusiastic about complying with her policies and performing well in hope of being invited into the Vaenggvae.

**KERRZALL'S BAND**

This encounter should be played under any of the following three circumstances.

1. The Petasos is suffering from severe battle damage and needs the services of a class A or B starport. It encounters a band of Vargr ships that, at first, look as though they might exploit the courier's vulnerability. Instead, they offer the characters a deal.

2. In space combat against Vargr, the Petasos is defeated. Rather than sending in armed boarding parties, however, the Vargr hesitate (being in communication with Kerrzall). They then send an unarmed emissary.

3. The fleet courier is at the spinward edge of Corridor, and the referee wishes to play this encounter anyway. The Petasos is confronted with a band of Vargr ships that could overwhelm the courier. The Vargr, however, enter into bargaining with the characters.

Until recently (perhaps as recently as a few hours), Kerrzall's band was part of the Vaenggvae. Kerrzall broke away, however, after a heated radio exchange with a Vaenggvae coordinator. This was rash, as the band is in serious need of spare parts. However, the news of the band's separation cannot travel as fast as the jump6 fleet courier.

Kerrzall will want the Petasos to carry his second-in-command, Duen Kous, to a particular naval base five or six parsecs away. Duen will then purchase the spare parts against Kerrzall's "credit," and secretly send them to an asteroid to await later pickup. He will do the same for the player characters (purchasing turret weapons, ship damage repair, etc).

At the naval base, the characters will have to deal with antihuman attitudes and a growing air of suspicion. Smuggling the parts out will become dangerous. Agents of the Vaenggvae, not yet convinced of the virtues of due process, could kidnap Duen for interrogation (Duen will then have to be rescued). If the Petasos is being serviced, delays might detain the characters until the last minute.

Before entering into this deal, Kerrzall will insist on the exchange of hostages. He might select Agim Sheruu in exchange for Duen Kous. However, Agim will find a means to make herself very ill. She will be returned, and another hostage will be taken. Agim may display her negative qualities during these events.

**DENEB**

In Vargr-controlled Deneb, the group will encounter another fleet courier, FF-34680, travelling from spinward to trailing. The unusual thing about the contact is that it is clearly registering an Imperial Navy transponder code, and yet the Vargr are treating it as though it were routine traffic.

The group can question the ship's commander, Capt. Rikerd Cardullo. He will be polite but will not answer key questions—such as why the Vargr are not bothering him. If he is told that the characters are carrying a message to Norris, he will suggest that they head for Regina rather than Deneb, and that the Depot in Deneb would make a good stopover. Otherwise, FF-34680 will pass on as quickly as possible. Its orders were to avoid contact with Imperial Navy or scout ships from trailing and to do nothing to suggest Deneb might be hostile. Cardullo's advice that Petasos go to Depot rather than Deneb will probably earn him a commendation later.

Capt. Cardullo won't advertise it, but he is required to give his full assistance to the Petasos if he is confronted directly with the group's Imperial warrant. Since Deneb still claims itself as part of the Imperium, he must honor the warrant. But at the same time, how-
was done by Vargr (who faded into Depot’s Vargr population), it was the navy that did it. The characters may conduct their own investigation for the case as long as they retain the warrant. If they do investigate, clues will lead them to Admirals Warsheel’s home. They will be watched; if they attempt a break-in, Denebian Marines in full battle dress will capture them.

The admiral will return the case to them unopened, but he will also state that he is aware that agents of Lucan are trying to extort them into cooperation—he is aware, from naval records in Deneb, of how Agim Sherru operates. He agrees to try to help them overcome the holds she has on them if they agree to join with the Domain of Deneb. A computer will be secretly analyzing their voice patterns and gestures to determine if they are lying. If they are lying or wish to side with Lucan, they could be made political prisoners. At the very least, the warrant and document case will be confiscated, and measures will be taken to assure that they do not return to the Imperial core.

If they do side with Norris, they will be commissioned in the service of Deneb, and asked to willingly turn the case over to the admiral and hereafter deny the existence of the message contained within. They will also be assured that Agim’s documents were mere forgeries after she is intensely interrogated.

Because of their experiences in Corridor, they will probably be sent on special missions there in the future. Under the circumstances, they might be told the full truth of what’s happening in Corridor.

NORRIS AND CORRIDOR

After the Corridor fleet was ordered to Lucan’s aid, the Vargr began raiding and pillaging, and even captured Depot. Depot Naval personnel initially refused to aid the Vargr with technical support. Later the commanding officers “succumbed to pressures,” but all is not what it appears to be. The Vargr could not force their cooperation; instead, Norris arranged it for them.

Vland doesn’t want to “waste” its resources needlessly during the effort to restore the Ziru Sirka, so the Vilani have little concern for what happens in Corridor. Norris, however, also has troubles of his own and cannot spare fleets to patrol that sector. With the cooperation of the Depot commander, he established a secret alliance with the Vaenggvae—the Vargr faction he feels he can trust the most.

This one faction, given the support of Depot, is rising to leadership and is absorbing all the other factions. There are, however, two stipulations imposed on Nougzoel: First, the destruction and killing must be minimized. (Evolution toward a constructive state is encouraged.) Second, all traffic through Corridor must be stopped, except by special arrangement.

Norris can afford to be very generous with his concessions and sincerity because the Vargr faction will only grow so big before it collapses. Its life expectancy should be just long enough to suit Norris’s personal design, which is to separate Deneb from the chaos of the Imperial interior until the Rebellion is over. 

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Star Cruiser Power

C.W. Hess

The very heart of every starship—and therefore the driving force behind man’s entire civilization—is its power generation system. Understanding this system’s nature can help bring alive starship-related occupations in 2300 AD.

Starships require large amounts of energy to power their stutterwarp drives, weapons, screens, and active sensors. This energy need is met by the ship’s main power plant, which is usually an MHD turbine, a fission or fusion reactor, or a fuel cell. Each of these power plants has an electrical output rating measured in megawatts. In the Star Cruiser rules, which cover space combat in the 2300 AD universe, all of the ship’s primary power needs are drawn from this rated output capacity. A ship with a five megawatt MHD turbine, for example, can power a three megawatt stutterwarp, a one megawatt weapon, and active sensors at all times, with nothing left over for other uses. As mentioned in the Star Cruiser rules, however, this is not exactly the case. The power plant’s rating is actually the amount of power available for maneuvering, weapons, and so on after the ship’s basic lighting, life support, control system, and general housekeeping needs have been met.

The Power Plant System

A ship’s power plant system consists of several parts. Besides the main power plant itself, these components include a backup power system, main power channeling system, primary power allocation system, and secondary power allocation system. Other control systems exist, but these are not directly related to power output allocation. These control systems include fuel control systems, coolant control systems, power plant controls, engineering computers, backup control systems, and so on. The following diagram illustrates the flow of power output from the main power plant and backup power system. The diagram shown is for a single power plant system. Dual power plant systems are arranged in a very similar manner, but they possess an additional step in the power output flow.

COMPONENT DESCRIPTIONS

The following section describes the components.

A. Main Power Plant: The ship’s main power plant provides all the electrical needs of the ship. All power plants have a megawatt rating corresponding to their primary power output. Some vessels have a secondary power plant which is used in conjunction with the first or as a backup, in case the first is damaged or simply shut down. Power plants are most commonly MHD turbines, although fuel cells, fission, and fusion power plants are used aboard some vessels.

B. Backup Power System: This unit is part of the power plant system, and is included in the mass, volume, and price of each power plant. It is made up of a combination of generators and batteries, and will maintain up to 50 percent of the main power plant’s secondary power output level for 72 hours.

C. Emergency Power: Emergency power provides a limited supply of energy to run life support and lighting at minimum levels. Individual batteries are actually located with each life support unit and emergency light. Aboard vessels with minimal emergency power reserves, life support and emergency lighting can be maintained for roughly 48 hours.

D. Main Power Channeler: This unit consists of large transformers, relays, and cabling, which adjusts the electrical output from the power plant and breaks it out into two channels. The first channel is the primary power channel and feeds the ship’s primary systems through a power allocation system. The second channel is the secondary power channel which directly feeds the ship’s secondary systems. Controls are located only in engineering, and are limited to switching power off and on to the two channels. Power cannot be reallocated between the two channels without the major efforts of a skilled engineer.

E. Primary Power Allocation System: This system is fed from the main power channeler and controls allocation of power to the ship’s primary systems. These include the stutterwarp drives, screens, energy weapons, and active sensors. The main controls are located on the bridge, but auxiliary control is located in engineering and has the capability of overriding bridge control.

F. Secondary Power Allocation System: This system is much less bulky than the primary system, but it is somewhat more complex due to the large number of small systems which must be powered. Electricity is received from the main power channeler and allocated to each of the general internal systems, which include internal and external lighting, life support, general housekeeping systems, various control systems, and so on. Controls are located in engineering but do not have total control over all systems. Life support and control systems cannot be shut off here. These will always draw power unless the systems are shut down or power is cut off closer to the main power plant. However, a skilled engineer could gain access to the proper power lines which come through this section and could disable power flow.

G. Defensive Screens: This system uses power allocated from the ship’s primary power system. Screens use energy to maintain an electromagnetic field containing suspended metallic particles. These particles absorb and reflect incoming laser fire. Screens are a major power consumer. Depending upon the screen’s rating, the power required can range from one megawatt
all the way up to a high of 36 megawatts.

**H. Energy Weapons:** Energy weapons provide a ship with short-range firepower consisting of lasers and/or particle accelerators. Energy weapons use power allocated from the ship's primary power system. The amount of energy required to operate one of these weapons is one megawatt, though some weapons may require two or three.

**I. Active Sensors:** These systems are used to track and identify bogeys detected in space. The system operates by detecting an object's reflected signature. Active sensors require power from the ship's primary power system. An operation active sensor array requires one megawatt of power to operate.

**J. Stutterwarp Drives:** The stutterwarp drive, otherwise known as a Jerome Drive, provides the starship with its primary means of propulsion. Drives are available in numerous sizes and consume proportionate amounts of energy. They all use power allocated from the ship's primary power system. Drive power requirements range from tiny 10-kilowatt drives to massive 300-megawatt drives.

**K. Life Support/Emergency Lighting:** A ship's life support system is designed to provide a comfortable atmospheric environment for the ship's passengers and crew. The system draws power directly from the ship's secondary power system. In the case of complete power failure, the life support systems draw power directly from the emergency power system described above.

**L. Main Control Systems:** These are the ship's basic operating controls located in engineering, the bridge, and the tactical action center—if one is present. These systems use power drawn from the ship's secondary power system.

The following are various shipboard systems which are powered by the ship's secondary power system. Many of these are not critical to the operation of the ship. However, if any of these are damaged or shut down, the ship and crew may suffer some inconvenience which may affect the vessel's operating efficiency.

<table>
<thead>
<tr>
<th>OTHER POWER SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Interior Lighting</td>
</tr>
<tr>
<td>N. Miscellaneous Power Access</td>
</tr>
<tr>
<td>O. Running Lights</td>
</tr>
<tr>
<td>P. Sanitation Systems</td>
</tr>
<tr>
<td>Q. Other Systems</td>
</tr>
</tbody>
</table>

Aside from the ship's main power plant, there are other ways to provide power for shipboard systems, whether for primary, secondary, backup, or emergency power uses. One method, especially if large amounts of power are required, is to install a second power plant. These are usually MHD turbines or fuel-cells, as other power plants are essentially too large to be useful as a second unit.

Three other types of power sources are not covered in the Star Cruiser rules. None of these are really useful as a starship's main source of power, but they are useful in providing some backup and emergency power and may be used to supplement the ship's primary power output for short periods of time. These sources are batteries, solar panels, and generators.

**Batteries**

Batteries are a common means of storing additional backup and emergency power. Batteries are continually charged from the ship's main power plant, usually from the secondary power system. Batteries come in two varieties: a quick drain/quick charge type, and a less expensive, slower type.
Battery storage capacity, output, mass, and cost are based on the total volume of batteries used. A bank of quick charge/quick drain batteries provides a total of .1 megawatt of power, has a volume of .5 m³, and costs .2 MLv per m³. Maximum power output for this type of battery is .1 Mw per m³ per turn. Slow charge/slow drain batteries provide a total of .1 megawatt of power, have a volume of .3 m³ and cost .1 MLv per m³. Power output for slow charge/slow drain batteries is .01 Mw per m³ per turn.

Solar Arrays

Solar power is commonly used by many vessels, but it is often dedicated to providing power for fuel cracking units. However, it is quite possible to use solar arrays to provide secondary, backup, or emergency power for the ship. Primary power could be supplied by solar arrays, but because of their relatively fragile nature, they normally cannot be deployed while a vessel is maneuvering. During such times, the arrays are normally folded up in such a way that they will not get damaged during travel. Solar arrays are useful on long-term operations, as they can satisfy the basic secondary power needs of most vessels at no cost, using no fuel.

Solar arrays come in a variety of sizes, but the standard size is a 10x10 meter panel which, under normal conditions, produces two megawatts of power when deployed. Custom sizes are available, each producing a proportional amount of power. The following table indicates the specifications on some of the solar arrays that are generally available.

<table>
<thead>
<tr>
<th>SOLAR ARRAYS</th>
<th>Dimensions</th>
<th>Output</th>
<th>Mass</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>10x10 meter</td>
<td>2.00 Mw</td>
<td>100 kg</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>5x10 meter</td>
<td>1.00 Mw</td>
<td>52 kg</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>2x5 meter</td>
<td>0.20 Mw</td>
<td>27 kg</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>1x5 meter</td>
<td>0.10 Mw</td>
<td>14 kg</td>
<td>2500</td>
<td></td>
</tr>
<tr>
<td>1x1 meter</td>
<td>0.02 Mw</td>
<td>7 kg</td>
<td>500</td>
<td></td>
</tr>
</tbody>
</table>

One drawback to using solar arrays is that the actual level of power they provide varies depending upon the amount of radiation they receive. As a general rule, if the arrays are operating within a star system’s life zone, they provide the amount of power indicated by the table above. If they operate closer to a star than its life zone, the unit will produce 50-percent more power than indicated. If the arrays operate farther from a star than the star’s life zone, the unit only produces half the power indicated. At a distance of twice that of the star’s life zone, the power output is quartered; at four times the star’s life zone, the array produces no significant power.

Generators

Electrical generators are powered by advanced internal combustion engines. Most units operate off the ship’s main fuel supply or have a small dedicated supply. Because they are very inefficient compared to MHD turbines and fuel cells, shipboard generators are kept only for providing emergency power. Fuel consumption by generators is .005 megawatts per hour. Generators vary in size and output, but are all of roughly the same technical level. Standard shipboard generators can also be used by surface vehicles and installations, and some are available in portable versions.

<table>
<thead>
<tr>
<th>STANDARD GENERATORS</th>
<th>Output</th>
<th>m³</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>.001 Mw</td>
<td>0.1</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>.002 Mw</td>
<td>0.2</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>.005 Mw</td>
<td>0.5</td>
<td>4000</td>
<td></td>
</tr>
<tr>
<td>.01 Mw</td>
<td>1.0</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>.02 Mw</td>
<td>1.5</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>.05 Mw</td>
<td>2.0</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>.1 Mw</td>
<td>3.0</td>
<td>150,000</td>
<td></td>
</tr>
<tr>
<td>.2 Mw</td>
<td>4.0</td>
<td>350,000</td>
<td></td>
</tr>
<tr>
<td>.5 Mw</td>
<td>6.0</td>
<td>800,000</td>
<td></td>
</tr>
<tr>
<td>1.0 Mw</td>
<td>8.0</td>
<td>2,000,000</td>
<td></td>
</tr>
</tbody>
</table>

USES OF POWER

As stated earlier, a ship has a number of power needs, especially if it is a combat vessel. The greatest amounts of power are used by the ship’s stutterwarp drive, energy weapons, screens, and active sensor systems. These are all of the systems that the 2300 AD Star Cruiser rules cover and are referred to in this article as primary power systems. Systems which use relatively small amounts of power but are no less important are referred to as secondary systems. These include life support systems, internal lighting, automatic doors, control panels, communications systems, computers, turret traversing mechanisms, and so on. Power usage by these systems is so small that the Star Cruiser rules generally ignore it.

Power Calculations

The main power plant produces an amount of primary power equal to the power plant’s megawatt rating. Secondary power needs are met by the power plant’s secondary power output. The formula for determining how much power this really is follows.

Where primary power output is equal to the power plant’s megawatt rating, the result, secondary power output, is in megawatts. The result is the amount of power available to run secondary systems.

In order to determine a ship’s secondary power requirements, the simplest method is to make an extension of Parkinson’s Law that says, “The amount of power needed by a starship expands to take up the amount of power which is available.” In other words, the secondary power needs are equal to the secondary power output. What this comes down to is that ships with larger power plants will often have better lighting, use a larger percentage of automated, electrically powered devices, provide a greater amount of power access for personal use by the ship’s passengers and crew, and so on.

Backup Systems and Emergency Power

Aside from the ship’s power plant’s primary and secondary power production, the ship also has a backup power system which provides electricity when the main power plant is not functioning. The backup system produces exactly half the secondary power output. For example, a one megawatt power plant produces .01 megawatts of secondary power. If the power plant is shut down, units will provide .005 megawatts of power. Full backup power output will last for up to 48 hours of continuous operation. Power output can be cut down to any smaller amount with a proportional increase in duration.
the example previously mentioned, the vessel could maintain .0025 megawatts of output for 96 hours, .001 megawatts for 240 hours, and so on.

Emergency power is also available, but this is tied directly into the life support systems. This provides only enough power to run life support for 48 hours. If only half the ship's life support requirements are needed, this emergency power will last for 96 hours, and so on.

New Tasks

Three new tasks are introduced in this article, all of which are related to starship engineering. The first task is used whenever a character attempts to alter the standard routing of power from any of the ship's power sources to any of the ship's systems. The second task is the increasing of power plant output, thus making more energy available to various shipboard systems. The third task is used when a character is attempting to conserve ship's power by shutting down any unnecessary systems without seriously affecting the operation of the ships.

Rerouting Power Output: Power can be diverted from the secondary power system to the primary power system, and vice versa. This is most commonly used on ships with large secondary power reserves to divert some of this power to weapons, drives, and such.

Task: To reroute power: Routine. Ship Drive Engineering. 1 hour.

Referee: Performing this task requires standard electrical tools and a proper length of heavy power cabling, commonly found in engineering stores.

Increasing Power Output: This task allows the engineer to increase the total amount of power output from one of the ship's power plants. This task is similar to the task of the same name located in the 2300 AD Director's Guide rules in the "Star Travel" chapter. The main difference is that this task is easier and does not affect the ship's stutterwarp drive efficiency.

Task: To increase power output: Routine. Ship Drive Engineering. 1 hour.

Referee: Success of this task increases the total output of one power plant by 1D6 percent. This task must be repeated once per day to maintain increased output. However, maintaining increased output is Simple and Instantaneous.

Conserving Power: At times it may become necessary to conserve power by shutting down unnecessary secondary systems. This task is most commonly used if a ship's main power plant is shut down and the ship is operating on backup power.

Task: To conserve power: Simple. Ship Drive Engineering. 10 minutes.

Referee: Success results in the reduction of normal power consumption by secondary systems by 1D6 x 10 percent, without seriously affecting the operation of the ship.
Sometimes when you and your group get together for an evening's entertainment with *Star Trek: The Role Playing Game*, you haven't created a setting for your adventures beforehand. The following has been written to help those of you in need of a place to start your player characters on the road to where no man has gone before.

The Beta Antarae Sector is located on the outer reaches of the United Federation of Planets' border—strategically placed half in UFP space and half in the Organian Treaty Zone. Its name is taken from the large red giant star in the binary system located near the UFP-Treaty Zone border. The Beta Antarae Sector has only recently become an area of importance and intense colonization efforts, by the Federation and (in the case of planetary systems within the Treaty Zone) by the Klingon Empire. As such, the Beta Antarae Sector is a region of possible contention between these two governments.

The Organians have been watching over the developing planets in the Treaty Zone, and they have given some preferential treatment to whichever government can peacefully show a better lifestyle to any particular planet and its inhabitants. However, with the apparent disappearance of this highly developed race from our plane of existence, this policy is now in doubt.

The following are some basic planetary surveys and background material on various planetary systems in the Beta Antarae Sector. Keep in mind that any or all of this material can be altered or ignored to fit into your specific campaign or adventure; however, you should remember that the material should only be used as the framework from which your originality can spring.
Farreach Station

System Data
- System Name: Farreach Station
- Map Coordinates: (17,4)
- Number of Class M Present: 1

Planetary Data
- Position in System: First and only planet
- Number of Satellites: 0
- Planetary Gravity: .58

Planetary Size
- Diameter: 7540 km
- Equatorial Circumference: 23,200 km
- Total Surface Area: 295,800,000 sq. km.
- Percent Land Mass: 81%
- Total Land Area: 239,598,000 sq. km.

Planetary Conditions
- Length of Day: 19 hours
- Atmospheric Density: Terrestrial
- General Climate: Warm temperate

Mineral Content
- Normal Metals: 36%
- Radioactives: 17%
- Gem Stones: 11%
- Industrial Crystals: 0%
- Special Minerals: 0%

Cultural Data
- Dominant Life Form: Birdstavians
- Technological Index: 000000
- Sociopolitical Index: None
- Planetary Trade Profile: ?

Farreach Station, the farthest extent of Federation colonization in this area of the Organian Treaty Zone, is mainly a mining colony specializing in the dangerous process of refining and processing radioactive materials. Because of this work, only the hardest miners consider working here. Despite continued safety measures and tests being implemented, fatal accidents occur all too frequently. The Farreach mines are quite productive and profitable, however, and the Federation is at last interested in maintaining a presence there (if for nothing but political reasons).

Many habitation areas of Farreach Station are built underground, while most of the processing plants are located on the surface. This provides the inhabitants with more shielding. A loading platform docking station, in orbit above the planet, also acts as the warehouse for completely processed material ready for shipment. Usually this material is daily shuttled up from the processors on the surface.

Farreach Station is the epitome of the frontier town. All sorts of activities can be found within the corridors of the underground base. The inhabitants are all hard-drinking, hard-living types, and weaklings are quickly weeded out. Currently, there are 876 miners, administrators, etc. at Farreach Station.

Calamar Star System

System Data
- System Name: Calamar Star System
- Map Coordinates: (29,32)
- Number of Class M Present: 1

Planetary Data
- Position in System: Second of four planets
- Number of Satellites: 2
- Planetary Gravity: 1.03

Planetary Size
- Diameter: 13,390 km
- Equatorial Circumference: 41,200 km
- Total Surface Area: 525,300,000 sq. km.
- Percent Land Mass: 78%
- Total Land Area: 409,734,000 sq. km.

Planetary Conditions
- Length of Day: 26 hours
- Atmospheric Density: Terrestrial
- General Climate: Warm temperate

Mineral Content
- Normal Metals: 15%
- Radioactives: 5%
- Gem Stones: 13%
- Industrial Crystals: 3%
- Special Minerals: 0%

Cultural Data
- Dominant Life Form: Human
- Technological Index: 443452 (level of colony)
- Sociopolitical Index: 7
- Planetary Trade Profile: ?

Calamar II, which is located within the Federation border, is the site of an agro-colony of some 236 Federation citizens. They have forsworn the technological society, enabling them to start anew on the Federation frontier. The colony is simply organized and totally self-sufficient. Although they do not shun outside contact with ships entering the Calamar System, the colonists aren't interested in new settlers or converts: They simply want to be left to their own devices. Their wish is usually granted.

Calamar II was the first planet to be colonized in the Beta Antareae Sector. With such a low growth rate, the isolated inhabitants are hardly aware of the present situation. But the tension of the Federation/Klingon confrontation goes on.
## Sirus Alpha and Sirus Beta

### System Data
- **System Name:** Sirus Alpha
- **Map Coordinates:** (21,31)
- **Number of Class M Present:** 1

### Planetary Data
- **Position in System:** First and only planet
- **Number of Satellites:** 1
- **Planetary Gravity:** .7

### Planetary Size
- **Diameter:** 9000 km
- **Equatorial Circumference:** 28,000 km
- **Total Surface Area:** 357,000,000 sq. km.
- **Percent Land Mass:** 65%
- **Total Land Area:** 232,050,000 sq. km.

### Planetary Conditions
- **Length of Day:** 16 hours
- **Atmospheric Density:** Thin
- **General Climate:** Warm temperate

### Mineral Content
- **Normal Metals:** 24%
- **Radioactives:** 6%
- **Gem Stones:** 0%
- **Industrial Crystals:** 0%
- **Special Minerals:** 0%

### System Data
- **System Name:** Sirus Beta
- **Map Coordinates:** (21,32)
- **Number of Class M Present:** 1

### Planetary Data
- **Position in System:** First and only planet
- **Number of Satellites:** 1
- **Planetary Gravity:** 1.0

### Planetary Size
- **Diameter:** 13,000 km
- **Equatorial Circumference:** 40,000 km
- **Total Surface Area:** 510,000,000 sq. km.
- **Percent Land Mass:** 70%
- **Total Land Area:** 357,000,000 sq. km.

### Planetary Conditions
- **Length of Day:** 18 hours
- **Atmospheric Density:** Thin
- **General Climate:** Warm temperate

### Cultural Data
- **Dominant Life Form:** Insectoid
- **Technological Index:** 668575
- **Sociopolitical Index:** 9
- **Planetary Trade Profile:** ?

### Alien Creature Record
- **Name:** Sirans
- **Life Form:** Insectoid
- **Size:** Small
- **Feeding Habits:** Herbivore
- **Attributes:** Str-51, End-74, Dex-54, Int-61, Luc-50, Psi-60

### Tactical Movement and Combat Statistics
- **AP:** 9
- **Combat Skill Rating:** 32
- **Damage:** 1D10
- **Armor:** 6

Sirans are herbivorous hive/colony dwellers. Underground tunnel habitats honeycomb the surface area of both planets. Insectoid with three main body components (head, thorax, abdomen), Sirans are similar to the Terran ant but standing approximately one meter tall.

The twin planets of Sirus Alpha and Sirus Beta are unusual in many respects. For planets in two different star systems, they are amazingly alike. Both planets orbit a Type G star, and they are basically similar in size, mineral composition, and climate. But most remarkable are the similarities between these two planets' inhabitants: the Insectoid Sirans. For all practical purposes, the two species are almost identical.

The Sirans in both systems are technologically similar and are rapidly advancing after contact with the Federation. Psychologically, the races are quite complex and will provide many years of study for scholars. From what can be understood from universal translator tapes obtained from the Federation contact team, the Sirans have known for centuries about their brothers across the stars. Their goal has always been to combine the two races into one. Siran technology has not reached the interstellar flight capability yet, so this knowledge can only be explained by their high proficiency in psionics. Interestingly, both races of Sirans have refused Federation aid in gaining an interstellar capability; they claim they must do it on their own to keep the achievement from “smothering in the unclean hive area,” as the translations say. This attitude allowed the Prime Directive purists in the Federation to breathe a sigh of relief. Interestingly, this philosophy of attaining their goal on their own seems to be a form of religion for the Sirans, and they allow no breach of this faith within their ranks.

Presently, Sirus Alpha and Sirus Beta are not members of the United Federation of Planets, although they are within the Federation exploration area. They have permitted the establishment of the Sirus scientific outposts, which orbit the two planets, so Federation scientists can monitor the possible parallel development in the two systems. The possibility that the planets could develop so alike has been calculated at more than 10 billion to one, so other theories are being presented (e.g., the two planets were seeded by an unknown advanced race; the planets used to be from the same system, etc.)
Rondor Star System

System Data
- System Name: Rondor Star System
- Map Coordinates: (10,20)
- Number of Class M Present: 1 of 9

Planetary Data
- Position in System: Fourth of nine planets
- Number of Satellites: 2
- Planetary Gravity: .6

Planetary Size
- Diameter: 7800 km
- Equatorial Circumference: 24,000 km
- Total Surface Area: 306,000,000 sq. km.
- Percent Land Mass: 6%
- Total Land Area: 18,360,000 sq. km.

Planetary Conditions
- Length of Day: 19 hours
- Atmospheric Density: Terrestrial
- General Climate: Tropical

Mineral Content
- Normal Metals: 7%
- Radioactives: 0%
- Gem Stones: 3%
- Industrial Crystals: 5%
- Special Minerals: 0%

Cultural Data
- Dominant Life Form: Humanoid mammals
- Technological Index: 4553301
- Sociopolitical Index: Unknown
- Planetary Trade Profile: None

Rondor IV is one of the rare planets in located in Federation space whose inhabitants have refused contact with the UFP. The planet did undergo a basic scan by the U.S.S. Formahault some 75 years ago. However, since then, all requests for landing and survey rights on Rondor IV have been consistently refused by the somewhat technological inhabitants who dwell on the planet.

Due to the strict limitations of the Prime Directive as interpreted at the time of the Formahault survey, these directions were honored. And thus, the society and sentient beings of Rondor IV remain a mystery to the rest of the Federation to this day.

Apparently, the inhabitants of Rondor IV have never attempted any space flight. Moreover, they seem quite happy to be left alone. The reasons for this desire for isolation remain obscure.

Rondor IV occupies a strategic area in Federation space. For this reason, the Star Fleet Exploration Branch has recently been subjected to a great deal of pressure: Many would like the Federation to possibly force the inhabitants of Rondor IV to respond favorably to another request for an attempt to survey the planet.

These Federation demands have so far been ignored by Rondor IV’s inhabitants. How long Rondor IV's hands-off status can be maintained, however, depends upon the political situation in the Rondor IV area, as well as on the continued observance of a strict Prime Directive policy by Star Fleet Command.
Zenophen

System Data
System Name: Zenophen
Map Coordinates: (5,8)
Number of Class M Present: 1

Planetary Data
Position in System: Third of six planets
Number of Satellites: 1
Planetary Gravity: .92

Planetary Size
Diameter: 11,700 km
Equatorial Circumference: 36,000 km
Total Surface Area: 469,200,000 sq. km.
Percent Land Mass: 91%
Total Land Area: 426,972,000 sq. km.

Planetary Conditions
Length of Day: 21 hours
Atmospheric Density: Terrestrial
General Climate: Desert

Mineral Content
Normal Metals: 45%
Radioactives: 22%
Gem Stones: 28%
Industrial Crystals: 10%
Special Minerals: 5%

Cultural Data
Dominant Life Form: Mammalian Humanoid
Technological Index: 213321
Sociopolitical Index: 3
Planetary Trade Profile: ?

Alien Creature Record
Name: Zenophenians
Life Form: Mammalian Humanoid
Size: Small
Feeding Habits: Omnivore
Attributes: Str-60, End-70, Dex-50, Int-40, Luc-30, Psi-5

Tactical Movement and Combat Statistics
AP: 8
Combat Skill Rating: 60
Damage: 1D10+2
Armor: 2

The inhabitants are omnivorous desert dwellers, nomadic tribes, and some oasis/river valley dwellers. Five to six feet tall, they are hairless, tough-skinned, and dark complected. Three eyelids protect the eyes from the intense rays of star NGC-238. Zenophen is a developing world located in the Organian Treaty Zone. As such, the planet has a diplomatic mission from the Klingon Empire and the Federation on it. Both of these governments are striving to prove that they are the most capable in aiding the Zenophenians with their development. Mainly grouped in approximately 20 district nomadic desert tribes, the Zenophenians possess only rudimentary technology. Travelling the desert wastes in their brightly colored caravans, they wander their planet’s expanses according to the familiar, seasonal sandstorm pattern. The Federation is assisting the Zenophenians in technological development by helping interested individuals settle amid the desert oases and the few river valleys of the planet. Skills such as crop cultivation, irrigation, and livestock herding (a skill only necessary to refine since all nomads are also herders) are being taught to the inhabitants. In this way, they hope to develop a technological base. The Klingons, on the other hand, have been showing some of the larger nomadic tribes that the best way to thrive is by building on the old ways of their ancestors and not leaving the nomadic life they have always known. They are showing them ways to breed more productive livestock and, through condensation and well digging, to produce more water. The Klingon advisors have taught their pupils techniques of mining and metallurgy, beginning the exploitation of the planet’s vast mineral wealth which had only been started superficially by the natives before the coming of the starfarers.

From time to time, there has been some trouble between the Federation and Klingon missions and their respective native supporters. It hasn’t been unheard of for Klingon agents to attempt to sabotage the efforts of the Federation diplomats and advisors on the planet. Also, the Federation is known to have a number of operatives (usually natives in favor of UFP policies) within the Klingon-supported tribes. The possibilities for confrontation are endless, but the overriding aim is not to alarm the Organians, regardless of their alleged disappearance. Because of this, these confrontations are usually of a clandestine nature.

There has been some dissension within the Federation camp lately over the possible opinion that the policy of the Federation regarding Zenophen could be against the intent of the Prime Directive. Some members of the diplomatic staff are of the opinion that even though this aid is beneficial to the inhabitants and mostly performed by them, the interference of Federation advisors could be a violation. So far, this opinion has been discounted, and aid to Zenophen continues in the name of political and strategic expediency. Such a stand is not unknown in Federation policy.
## Keplar’s World

### System Data
- **System Name:** Keplar’s World
- **Map Coordinates:** (11,14)
- **Number of Class M Present:** 1

### Planetary Data
- **Position in System:** Second of six planets
- **Number of Satellites:** 1
- **Planetary Gravity:** 1.3

### Planetary Size
- **Diameter:** 21,970 km
- **Equatorial Circumference:** 52,000 km
- **Total Surface Area:** 663,000,000 sq. km.
- **Percent Land Mass:** 55%
- **Total Land Area:** 364,650,000 sq. km.

### Planetary Conditions
- **Length of Day:** 25 hours
- **Atmospheric Density:** Thick
- **General Climate:** Warm temperate

### Mineral Content
- **Normal Metals:** 25%
- **Radioactives:** 16%
- **Gem Stones:** 6%
- **Industrial Crystals:** 4%
- **Special Minerals:** 2%

### Cultural Data
- **Dominant Life Form:** Klingon
- **Technological Index:** 998882
- **Sociopolitical Index:** 6
- **Planetary Trade Profile:** ?

Keplar’s World is the only major Klingon colonized planet located in the Beta Antarae Sector.

The planet is said to have been first one to be surveyed by the stranded crew of a disabled Klingon cruiser. The commander of the stranded Klingon mission, of course, was Captain Keplar.

After it was surveyed, Keplar’s World was used extensively as an outlying base of operations and resupply during the continued adversary relationship between the Federation and the Klingons.

When the Organian Peace Treaty was implemented, however, activities on Keplar’s World shifted from away from its previous military slant, and it now leans toward a more economic slant.

Keplar’s World is now the headquarters of all Klingon-sponsored economic aid operations which are centered in this sector.

The Imperial Naval repair and resupply base is in operating condition, and a small squadron of warships is normally stationed there.

Although the Organian Peace Treaty grants the Federation the right to have a diplomatic mission presence on Keplar’s World, the Federation has surprisingly not exercised this option.

## Binary System Alpha and Beta Antarae

### System Data
- **System Name:** Binary System Alpha Antarae and Beta Antarae
- **Map Coordinates:** (19,22)
- **Number of Class M Present:** One of 16 planets

### Planetary Data
- **Position in System:** Fourth of 16 planets
- **Number of Satellites:** 3
- **Planetary Gravity:** 1.2

### Planetary Size
- **Diameter:** 15,600 km
- **Equatorial Circumference:** 48,000 km
- **Total Surface Area:** 612,000,000 sq. km.
- **Percent Land Mass:** 24%
- **Total Land Area:** 146,880,000 sq. km.

### Planetary Conditions
- **Length of Day:** 32 hours
- **Atmospheric Density:** Terrestrial
- **General Climate:** Arctic

### Mineral Content
- **Normal Metals:** 36%
- **Radioactives:** 14%
- **Gem Stones:** 11%
- **Industrial Crystals:** 4%
- **Special Minerals:** 1%

### Cultural Data
- **Dominant Life Form:** None discovered
- **Technological Index:** 000000
- **Sociopolitical Index:** None
- **Planetary Trade Profile:** None

Beta Antarus IV—Alpha Antarae (white dwarf) and Beta Antarae (red giant)—is used by the Federation as a navigational beacon point and a frontier outpost. The system contains the brightest sun in the Star Fleet District. Along with its strategic location (right off the border between the Organian Treaty Zone and the UFP), it is used extensively as the Federation entry point into the Treaty Zone in this area. The inhabitants are located mainly in a number of orbiting structures used to repair and/or resupply the Federation vessels that come through. A number of mining companies have begun exploring the potentials of the rich gem and industrial crystal deposits found under the ice of Beta Antarus IV. Some encouraging reports have been coming from the various geologic teams travelling the surface—plans are under way for construction of a major mining facility, which will ensure that the Beta Antareae System will be more crowded with merchant vessels in the future.
Tamara Star System

System Data
System Name: Tamara Star System
Map Coordinates: (25,12)
Number of Class M Present: 1

Planetary Data
Position in System: Second of eight planets
Number of Satellites: 0
Planetary Gravity: 1.4

Planetary Size
Diameter: 18,200 km
Equatorial Circumference: 56,000 km
Total Surface Area: 714,000,000 sq. km.
Percent Land Mass: 85%
Total Land Area: 606,900,000 sq. km.

Planetary Conditions
Length of Day: 26 hours
Atmospheric Density: Thin
General Climate: Cool temperate

Mineral Content
Normal Metals: 8%
Radioactives: 16%
Gem Stones: 14%
Industrial Crystals: 3%
Special Minerals: 0%

Cultural Data
Dominant Life Form: Fish
Technological Index: Federation Standard—999994
Sociopolitical Index: 7
Planetary Trade Profile: ?

Tamara II is used as a supply and shore-leave planet by the Federation. Since the UFP seems to show an interest in the planet, the Klingons, of course, must show some sort of presence there as well. The Federation permits this to show the Organians how friendly and understanding they can be (ah, the subtlety of interstellar politics) and because of the limited strategic importance of Tamara II. With no sentient beings present, the Federation has begun various terraforming projects to make the cool planet more comfortable for humans. For now, a number of domed areas on the planet are being used by the thousands of Federation and Orion merchants and traders dealing in items from the Beta Antarae worlds and beyond. The Klingons, in their single domed base at the planet's equator (Klingons hate colder climates), are permitted entrance into Federation recreational and trading facilities upon request.

Tamara II is a popular shore-leave planet with Federation and Klingon patrol ships. Serious confrontation is usually avoided, but some barroom brawls have gone into the planet's recreational history. An unofficial tally of barroom victories and defeats is kept in the largest gambling hall, where bets are taken, with revised odds when a new vessel comes into orbit.

Anaron Star System

System Data
System Name: Anaron Star System
Map Coordinates: (3,31)
Number of Class M Present: 1

Planetary Data
Position in System: First of five planets
Number of Satellites: 0
Planetary Gravity: 1.5

Planetary Size
Diameter: 19,500 km
Equatorial Circumference: 60,000 km
Total Surface Area: 765,000,000 sq. km.
Percent Land Mass: 96%
Total Land Area: 734,400,000 sq. km.

Planetary Conditions
Length of Day: 24 hours
Atmospheric Density: Terrestrial
General Climate: Desert

Mineral Content
Normal Metals: 41%
Radioactives: 12%
Gem Stones: 2%
Industrial Crystals: 3%
Special Minerals: 0%

Cultural Data
Dominant Life Form: Reptile
Technological Index: 000000
Sociopolitical Index: None
Planetary Trade Profile: None

Anaron I is a relatively inhospitable world of high temperatures and dry, arid expanses. Used mainly as a Federation training and testing base for various members of Star Fleet's Exploration Division, the system has also been used as a weapons test range. Almost all facilities available on Anaron I are in a polar orbit around the planet. These facilities provide the various participants training in survival, advanced mining techniques, and adverse colonization. Trainees are monitored and given additional instruction as needed.

Entrance into the Anaron System is only restricted during the test sequence of various weapons systems under development around Anaron I. In any case, the system is rarely visited by anyone. Подробнее
Direct-Fire Artillery
C.W. Hess

Direct-fire artillery is an important factor in many battlefield engagements. These weapons are capable of providing large amounts of firepower at a relatively low cost when compared to armored vehicles and BattleMechs. The weapons used include a variety of autocannons, lasers, missiles, and others. However, because of the need for power plants and amplifiers with energy weapons, most are equipped with projectile weapons.

Direct-fire artillery is mostly towed, being mounted on wheeled carriages or platforms for easy transportation, and has both advantages and disadvantages. To begin with, towed artillery requires a certain amount of setup time which varies from weapon to weapon. Setup must be accomplished by a weapons crew with or without the aid of special equipment. The average gun crew can set up a weapon for firing in less than one minute, assuming that the weapon is to be placed either out in the open or in a pre-prepared firing position.

Another problem with towed artillery is that it is usually equipped with little or no armor, thus making the weapon and its crew vulnerable to enemy fire. Also, most towed artillery has little room to carry ammunition, so supply is limited, and extra ammo is usually kept nearby. This supply of ammunition is a critical link in the weapon's operation. If hit by enemy fire, the ammunition will not only be destroyed, but will result in secondary explosions killing nearby personnel and damaging equipment.

Because direct-fire towed artillery does not require an engine, control equipment, and so on, it tends to be much less costly than other weapon platforms. Also, because these weapons are often relatively small, they can be put into fortified positions. Creating these positions can take time—time well spent.

Direct-fire artillery is primarily found in the defensive role—these weapons must be set up to fire; and in the fluidity of an assault, the towed weapons have little place. The direct-fire artillery units operate in support of infantry units and in defense of headquarters and support units.

ARTILLERY WEAPON MOUNTS
The three basic classifications of towed mounts for direct-fire artillery weapons are the standard towed carriage (STC), the towed platform (TOP), and the mobile emplacement (Mobiles).

Standard Towed Carriage (STC)
The STC, or standard towed carriage, is a crew-served weapon consisting of a weapon mounted on a two- or four-wheeled carriage. Attached to the back end of the platform is a hinged, V-shaped towing arm, providing counterbalance and stability for the weapon when deployed. When in tow, the arms are locked together and attached to the back of the towing vehicle. With this configuration, this weapon mount takes a little time to unload and deploy, but requires little or no mechanical assistance.

Often included in this mount design is a gun shield, which is simply an armored plate that provides partial protection for the weapon's crew from small arms fire and shell fragments. These shields normally provide protection only from the direction in which the gun is aimed. However, a few mounts of this type provide protection from other angles as well.

Because of the limited mounting and recoil absorbing components, the STC possesses a restricted field of fire, limited to a 60-degree arc to the weapon's front. In order to change the weapon's firing arc, the crew must physically reposition the weapon. This gives the weapon a limited application, but it aids in keeping down the overall cost of the weapon and in keeping the maintenance needs to a minimum.

The STCs are crew served, requiring personnel to handle the aiming, ammunition loading, and ammunition handling.

Because of the mounting carriage's limited capacity, usually machineguns, autocannons, flamers, and missile racks are the only weapon systems to be mounted.

Lasers and particle cannons require energy sources which
are generally too bulky to fit on the carriage. However, a few laser systems use power from a vehicle-mounted or separate portable generator.

**Towed Platform (ToP)**

The towed platform, or ToP, is actually more common than the standard towed carriage, despite its slightly greater expense. The weapon is mounted onto a traversing platform which is capable of providing 360-degree movement, thus giving the weapon a completely open field of fire. This platform is mounted on a set of four or more wheels, allowing the weapon to be moved from one location to the next with minimal preparation.

The ToP is somewhat more self-contained than the standard mount, carrying the weapon's ammunition and crew on-board. The towed platform is usually equipped with a complete ring of armor rather than a simple gunshield, protecting the weapon and the crew from fire coming from any side. Most platforms are open topped, but a few are completely encased in armor to protect them from airborne weapons. These, however, either require the addition of heat sinks or require the crew to suffer the heat buildup within the confines of the enclosed system.

ToPs tend to require a smaller crew than standard towed mounts, primarily due to the weapon's automatic traversing capability. With standard mounts, repositioning the weapon is a major effort requiring two or more people. Also, most weapons mounted on the towed platforms use automatic loaders, requiring only a gunner to operate them, although most weapons crews also include a co-gunner and a gunner chief.

Towed platforms are most commonly found among noncombative, vehicle-based units, such as supply, headquarters, transports, and so on. Whenever the unit is stopped at a location for any length of time, these weapons are deployed at key positions to provide defensive fire against attacking 'Mechs, ground vehicles, and air and aerospace craft.

**Mobile Emplacements (Mobile)**

The mobile emplacement, or Mobile, is something of a cross between the towed platform and a fixed-position, hardened weapons emplacement. It is a completely armored unit which is much like a tank in many respects except that it is not capable of moving under its own power. The weapon system is extremely mobile, having a very short setup time like the towed platform, yet well armored.

Unlike standard towed carriages and towed platforms, the mobile emplacement is often equipped with energy weapons. Power for this is provided by an on-board power plant. Because the weapon is totally enclosed, heat sinks are also built into the system's design.

The weapons carried are usually turret-mounted, and always equipped with autoloaders and internal supplies of ammunition. This keeps the weapon crews down to a minimum but makes the weapons somewhat more costly to build and maintain than any other weapon system.

Mobile emplacements are commonly employed within the rear echelon units of assault forces. After an area has been taken by main forces, units equipped with mobile emplacements are quickly set up to hold the area from counterattacks.

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**UNIT ORGANIZATION**

Direct-fire towed artillery is found in numerous organizational forms throughout the successor states, most commonly organized at the company level. This is the most flexible type of organization, giving each company commander one or more weapons for his own use. It also has the drawback of placing a greater burden of supply and maintenance at such a low level.

Numerous other forms of organization exist, each with its own strengths and weaknesses. A few of these are illustrated in the organizational charts and descriptions which follow.

**93rd Infantry Battalion (Heavy), House Liao**

House Liao's 93rd Infantry Battalion is employed by House Liao for area defense. The unit—besides being equipped with two infantry companies, a wheeled armor company, and a service company—also includes a towed weapons battery.

Within the weapons battery are three weapons platoons. Each platoon is made up of three weapon sections, each containing a single weapon. The type of weapon used varies by platoon, but each platoon is equipped with a single type of weapon, usually an autocannon or a missile rack. All weapons sections within a platoon are equipped with the same type of weapon, which gives the unit less flexibility than some other units but reduces the possibility of supply and repair parts problems. It is often the case, especially among mercenary units, that one of the weapons within a platoon is scavenged to provide repair parts for similar weapons.

Transportation for the towed weapons is the responsibility of the battalion service company. This company is equipped with all the necessary vehicles, personnel carriers, and supply trucks for every unit in the battalion.

**4th Dragon Battalion, House Kurita**

House Kurita's 4th Dragon Battalion is a rather unusual type of unit, being primarily a direct-fire artillery unit. The battalion is used by the Draconis Combine to provide large amounts of firepower with a minimal amount of manpower. The unit is normally reserved to provide support for major assaults. It usually sets up just to the rear of the forward edge of the battle area to defend against preemptive strikes against a grouping attack force. The battalion is composed on one-wheeled armor company and a pair of weapons batteries. The weapons batteries of the unit provide the major line of defense, while the armor unit's mission is to fill in gaps in the defensive line and to provide advanced reconnaissance.

Each weapons battery is composed of three platoons. Two are weapons platoons, while the third is an infantry platoon. The infantry platoon is attached at this level to provide direct support to the weapons batteries against both enemy infantry and vehicles. This platoon is normally equipped with heavy
Toons, but with the addition of a weapons section. This section contains a tractor vehicle for towing the weapons and for carrying small autocannon. The weapons section also contains a single weapon or trailer—this vehicle receives no movement penalties for towing, the trailer or artillery weapon must first be attached to the towing vehicle, setting up the weapon itself and the ammunition required.

Transportation of the unit is handled at the regimental level, so the battalion has no vehicles of its own. This takes away some of the burden of supply and repairs from the battalion but makes the unit somewhat more static.

Milford's Company, House Steiner

This unit has a rather unusual organization compared to most: Artillery is directly attached to each platoon. This means that each platoon of infantry within the company has the dedicated support of direct-fire artillery, giving each platoon leader a very useful asset but also increasing the burden of supply and maintenance on the resources of each platoon.

The company itself is a mechanized infantry unit which operates in support of House Steiner's 10th Lyran Regulars. The company's mission is to provide direct support to any operation of the regiment. Each of the three platoons of Milford's Company contains three infantry squads, making the platoon equivalent in manpower to most other infantry platoons, but with the addition of a weapons section. This section consists of a single direct-fire towed weapon, most commonly a towed platform mounting either an SRM rack or a small autocannon. The weapons section also contains a single tractor vehicle for towing the weapons and for carrying necessary ammunition.

**NEW RULES**

The following new rules may be applied to *BattleTech* play.

**Towing**

Towing artillery weapons is a simple game process. A ground vehicle may tow any trailer or artillery piece of equal weight, but its movement rates are halved (rounded up). A vehicle may be constructed with extra tonnage allocated for a towed weapon or trailer—this vehicle receives no movement penalties for towing an amount equal to the tonnage allocated. Before towing, the trailer or artillery weapon must first be attached while the weapon is undeployed. A weapon may start a scenario either deployed or undeployed.

**Undeploying Artillery**

Undeployment depends on proper preparation and procedure.

**Preparation:** Undeployment, or limbering, involves locking a weapon into a travelling position, hooking it up to a towing vehicle, and loading necessary cargo. This process requires a number of turns in which the weapon will be fully occupied. During undeployment, the vehicle to which the weapon is to be attached must occupy the same hex as both the weapon and the weapon crew. Note that this will exceed normal stacking restrictions (vehicles, infantry, and artillery pieces may only stack two to a hex). This is acceptable, but the crew unit may not perform any other action while stacking restrictions are being exceeded.

**Procedure:** During the movement phase, the player declares that the weapon is being mounted to the vehicle. He must then determine the exact amount of time this will take. The undeployment operation requires \(6 + 1D6\) turns for standard towed mounts, \(3 + (1D6 + 2)\) for towed platforms, and \(1 + (1D6 + 2)\) for mobile emplacements, rounding fractions up.

This length of time should be modified for crew losses. During this operation, the crew unit may perform no other action. Undeployment can be temporarily suspended while the crew performs some other actions. If this is the case, the number of turns completed should be noted. The procedure may then resume during any movement phase that the crew unit begins in the same hex as the weapon. If the mounting vehicle is moved, the process must be restarted from the beginning.

### MODIFIERS

<table>
<thead>
<tr>
<th>Crew Strength</th>
<th>STC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>0</td>
</tr>
<tr>
<td>3/4</td>
<td>+1</td>
</tr>
<tr>
<td>1/2</td>
<td>+2</td>
</tr>
<tr>
<td>1/4</td>
<td>+5</td>
</tr>
<tr>
<td>Below 1/4</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note:* Artillery pieces carrying energy weapons or weapons with only on-board ammunition receive a \(-2\) turn modifier as they require less handling time.

After the appropriate number of turns has passed, the weapon is considered undeployed and attached to the towing vehicle. The vehicle, along with all equipment, may proceed normally. If the crewmembers are to travel on the same vehicle, they may board on any turn following the completion of undeployment.

**Deploying Artillery**

Specific procedures govern preparing and deploying artillery.

**Preparation:** Before a towed artillery weapon may fire, it must first be deployed. This consists of unhooking the weapon from the towing vehicle, setting up the weapon itself and the ammunition supply, and so on. This may be done prior to the start of a scenario, or during the course of a scenario. Deploying requires a crew unit which must be present at the beginning of the turn in which deployment is to begin. Transferred crews may not begin deployment procedures in the same turn that they disembark.

**Procedure:** At any time during a movement phase, the deployment operation may be declared. During deployment, the towing vehicle must spend one full turn stationary in the hex in which the weapon is being deployed. The vehicle may fire normally. Standard towed carriages require one additional turn
to set up. Deployment time is determined exactly like
undeployment, except that total times are divided in half
(rounded down). Upon completion of deployment, the weapon
is facing in any desired direction within the deployment hex
and may begin firing during the fire phase of any subsequent
turn. Also, ammunition may be placed within the same hex.

Ammunition

Ammunition is usually kept on the artillery piece itself. In
some cases, however, this supply is not sufficient. This is true
of weapons with limited on-board supplies or weapons used
in extended engagements. Any extra ammunition may be kept
in a storage area near the weapon. Any hex containing an am-
munition dump should be marked with a spare counter. This
does not count against stacking restrictions.

Ammunition which is not stacked with an artillery weapon
may be targeted by enemy fire but is generally a small target.
Any shots on an ammo marker automatically receive a to hit
modifier of +2 (in addition to any modifiers received for ter-

Changing Facing

During the reaction seg-
ment, following the movement
phase, a weapon may have its
facing adjusted. Standard
towed weapons may be ad-
justed by one hexside in any
direction. If the weapon crew
is at least at half strength, then
the weapon may fire during
the fire phase. Otherwise, it
may not fire until the following

Moving The Weapon

A towed weapon may be moved one hex in any direction
by a full-strength crew unit. The crew unit must begin the turn
stacked with the artillery piece to be moved. Also, the artillery
piece must be undeployed. When these conditions are met,
the weapon may be moved into any adjacent hex, as long as
it is at the same level as the starting hex. The crew involved
in this operation may not perform any other action during the
turn and may perform no actions during the following turn.

Weapon Rate Of Fire

Most weapons can fire a maximum of once per turn. How-
ever, some weapons, either by design or by lack of sufficient
crew, may only fire every other turn, or every third turn, and
so on. A weapon’s designed rate of fire (ROF) is the maximum
number of rounds the weapon can put onto a target, assum-
ing a full-strength crew. All autoloading weapons and energy
weapons have a designed rate of fire of one shot per turn.
Manually loaded projectile weapons may have lower designed
rates of fire. These rates are listed in the table.

The values for manually loaded weapons may be modified
by crew strength and other factors. For each full one-fourth
loss in crew strength, increase the delay in the weapon’s ROF
by one turn. A weapon capable of firing once per turn which
has lost one-fourth of its crew fires once every two turns.

COMBAT

Direct-fire artillery units fire the same as do BattleMechs and

BATTLETECH™

turn. Towed platforms and turret-equipped mobile emplace-
ments may realign their turrets to face any arc without penalty.
vehicles. All standard modifiers apply. Certain direct-fire artillery pieces have fire arc restrictions. The standard towed carriages are limited to firing only at targets located in their forward firing arcs. The towed platforms all have 360-degree fields of fire. Mobile emplacements may be constructed with limited or full fire arcs. Because of limited gun depression or limited fields of fire, direct fire artillery, like ground vehicles, cannot fire at targets that are within the same hex as the firing weapon.

**Towed Platforms**

Weapons can take hits from any of four main arcs: the front, rear, right, and left sides. When a weapons platform is hit, roll two dice and consult the Towed Platform Hit Location Table. A towed platform is knocked out of action when the weapon is destroyed or when sufficient operating crew is killed. Also, the weapon may be neutralized if the platform which mounts the weapon is destroyed.

### Towed Platform Hit Location Table

<table>
<thead>
<tr>
<th>Die Roll</th>
<th>Front/Rear</th>
<th>Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Critical</td>
<td>Critical</td>
</tr>
<tr>
<td>3</td>
<td>Armor + Axle</td>
<td>Armor + Axle</td>
</tr>
<tr>
<td>4</td>
<td>Destroyed</td>
<td>Destroyed</td>
</tr>
<tr>
<td>5</td>
<td>Armor + Wheel Hit</td>
<td>Armor + Axle</td>
</tr>
<tr>
<td>6</td>
<td>Armor</td>
<td>Armor</td>
</tr>
<tr>
<td>7</td>
<td>Armor</td>
<td>Armor</td>
</tr>
<tr>
<td>8</td>
<td>Armor</td>
<td>Armor</td>
</tr>
<tr>
<td>9</td>
<td>Armor</td>
<td>Armor</td>
</tr>
<tr>
<td>10</td>
<td>Armor</td>
<td>Armor</td>
</tr>
<tr>
<td>11</td>
<td>Armor + Traverse Locks</td>
<td>Armor + Traverse Locks</td>
</tr>
<tr>
<td>12</td>
<td>Critical</td>
<td>Critical</td>
</tr>
</tbody>
</table>

**Axle Destroyed:** Weapon mount may not be transported without use of a crane-equipped transporter vehicle.

**Wheel Hit:** Movement point reduction is applied to the towing vehicle.

**Traverse Locks:** Weapons with 360-degree fire capability are locked in the current firing arc.

If a side that is hit has no armor, or if the armor on that side has been penetrated, then the hit should be treated as a critical hit.

### Towed Platform Critical Hit Table

<table>
<thead>
<tr>
<th>Die Roll</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crew stunned (no actions for two game turns)</td>
</tr>
<tr>
<td>2</td>
<td>Weapon jams (no fire for one turn)</td>
</tr>
<tr>
<td>3</td>
<td>Platform hit (may not be moved until repaired)</td>
</tr>
<tr>
<td>4</td>
<td>Crew hit (crew killed = damaged point)</td>
</tr>
<tr>
<td>5</td>
<td>Gun destroyed (weapon out of play + crew killed = 1/2 damage points)</td>
</tr>
<tr>
<td>6</td>
<td>Ammo hit (weapon explodes and 1D6 + 4 crew killed)</td>
</tr>
</tbody>
</table>

**Fire on the Crew**

During combat, fire may be directed against the weapons crew instead of the artillery piece itself. When a crew unit is stacked with an artillery piece, it is considered to be in covering terrain: Any fire directed at the crew does not automatically do double damage. Instead, it will do normal damage, just as if the unit were in covering terrain. If shots against a crew unit are directed at it from a side that is protected by the artillery piece’s armor, the shots will strike the armor, doing damage to it instead. However, the normal roll to hit must still be made. Protected sides are the front arc if the weapon has a gunshield and all sides if the weapon has a full armored ring.

**Fire From The Air:** Any fire directed on a weapon from aerospace fighters and conventional aircraft ignores any armor possessed by the weapon unless the weapon is fully enclosed within armor.

**Improved Positions:** Artillery weapons may begin a scenario in improved positions. These units may be hidden by the use of camouflage at the players’ discretion.

### Artillery Weapons Construction

The following section details the construction of direct fire artillery pieces. Using this system, players can determine the capabilities and costs of these weapons.

The first task when constructing a new direct-fire artillery piece is to select the type of mount for the weapon. The three types of mounts are the standard towed mount, the towed...
platform, and the mobile emplacement. The actual construction process may vary depending upon the type chosen. Consult the section pertaining to the chosen weapon mount below.

**STANDARD TOWED MOUNT AND TOWED PLATFORMS**

To construct these types of weapon mounts the following steps must be completed.
- Choose weapon.
- Add armor.
- Add traversing mechanism (for towed platforms and standard mounts with recoilless weapons only).
- Determine loader type.
- Add ammunition.
- Determine designed rate of fire.
- Determine crew requirements.
- Calculate cost.
- Fill in record forms.

1. Choose Weapon

This procedure is handled as with 'Mechs and vehicles. The player must choose weapon systems, giving consideration to weapon tonnage, shots available per ton, and, of course, range.

If energy weapons are used, a power plant and possibly an amplifier must be available. Towed weapons platforms may carry these. However, standard towed mounts are not capable of carrying either. Instead, they must be carried by an accompanying vehicle or be placed on the ground near the weapon. The rules for creating power plants and amplifiers for towed weapons are the same as those for standard gun emplacements.

2. Add Armor

Though not always used, armor can protect the weapon and its crew from enemy weapons fire. Standard towed mounts may possess a gunshield if the player so desires. This will only protect against fire coming from the weapon's front arc. Towed platforms may mount armor in a complete ring around the weapon and crew. Armor is added in half-ton increments. Each half ton of armor will provide eight points of protection which may be allocated to any valid side.

Armor is normally open topped, thus making the weapon an easy target for strafing attacks. A towed weapons platform may be made enclosed at no extra cost. However, heat sinks must then be added to compensate for internal heat buildup. The number of heat sinks added must equal the number of heat points produced by the weapon when fired.

3. Add Traversing Mechanism

Towed platforms are normally built with a 360-degree fire capability. This is achieved by the addition of a traversing mechanism, very much like those which operate tank turrets. The mechanism has a tonnage equal to (weapon tonnage + armor tonnage) ÷ 10. A traversing mechanism may be added to standard mounts only if the weapon is recoilless. For this purpose, all missiles, flammers, and lasers are considered recoilless.

4. Determine Loader Type

All nonenergy weapons utilize one of two means for loading ammunition. The autoloader is the most common and is included in the price and weight of the weapons as they are listed on the weapons chart. If a weapon is not to be equipped with an autoloader, then ammunition must be loaded manually by the weapon crew. The deletion of the autoloader will result in a cost savings of 5 percent of the weapon's cost and a weight savings equal to 20 percent of the weapon's standard tonnage.

5. Add Ammunition

All nonenergy weapons require ammunition. A minimum of a half-ton of ammunition must be included on weapon mounts with an autoloader. More ammo may be added in half-ton increments. Any weapon with a manual loading system may or may not carry ammo. Weapons which do not carry ammo are further dependent on the weapon crew to maintain a normal rate of fire.

6. Determine Designed Rate of Fire

Each weapon has a designed rate of fire depending upon the size of the ammunition, ease of reloading, and so on. All energy weapons and projectile weapons equipped with autoloaders have a rate of fire of one shot per turn. Manually loaded weapons have rates of fire as listed in the table below. During combat, the actual rates of fire will vary depending upon crew strength and ammunition placement.

<table>
<thead>
<tr>
<th>Weapon Type</th>
<th>Designed ROF</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC/2</td>
<td>1 per turn</td>
</tr>
<tr>
<td>AC/5</td>
<td>1 per turn</td>
</tr>
<tr>
<td>AC/10</td>
<td>1 per 2 turns</td>
</tr>
<tr>
<td>AC/20</td>
<td>1 per 3 turns</td>
</tr>
<tr>
<td>MG</td>
<td>1 per turn</td>
</tr>
<tr>
<td>LRM/5</td>
<td>1 per turn</td>
</tr>
<tr>
<td>LRM/10</td>
<td>1 per turn</td>
</tr>
<tr>
<td>LRM/15</td>
<td>1 per 2 turns</td>
</tr>
<tr>
<td>LRM/20</td>
<td>1 per 2 turns</td>
</tr>
<tr>
<td>SRM/2</td>
<td>1 per turn</td>
</tr>
<tr>
<td>SRM/4</td>
<td>1 per turn</td>
</tr>
<tr>
<td>SRM/6</td>
<td>1 per turn</td>
</tr>
</tbody>
</table>

7. Determine Crew Requirements

Each weapon requires a crew for firing, loading, ammo handling, directing fire, and so on. To determine the standard crew requirements of a weapon, divide the tonnage of the completed weapon by three, and round this number down. For cannons and MGs, add four. If the weapon is a missile rack, add four, plus one for every 10 missiles the rack can fire in one salvo.

For example, the LAW-10M is a four-ton weapon system equipped with an LRM/10 rack. The number of crew required is one (4 tons ÷ 3, rounded down) + 4 + 1(10 missiles per salvo ÷ 10) = 6 crewmembers.

8. Calculate Cost

To calculate the cost for the completed standard towed mounts and towed platforms, total the cost of each component used. These costs for weapons can be found in *The Battletech Manual* and in *Mechwarrior*. Other costs are listed in the Towed Artillery Cost Table.

After all costs have been totaled, multiply this number by
a cost multiplier (also given in the Towed Artillery Cost Table).
To calculate costs for mobile emplacements, use the Vehicle Cost chart from The BattleTech Manual or Mechwarrior. When determining cost multipliers, treat the weapon as a wheeled vehicle.

**TOWED ARTILLERY COST TABLE**

<table>
<thead>
<tr>
<th>Part</th>
<th>Formula/Cost (C-Bills)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion</td>
<td>(Total tonnage x 5000 x rating)/75</td>
</tr>
<tr>
<td>ICE</td>
<td>(Total tonnage x 1250 x rating)/75</td>
</tr>
<tr>
<td>Power amplifiers</td>
<td>20,000 x amplifier tonnage</td>
</tr>
<tr>
<td>Heat sinks</td>
<td>2000 per each over 10, if fusion 2000 each, if ICE or none</td>
</tr>
<tr>
<td>Weapon</td>
<td>per Weapons Price List</td>
</tr>
<tr>
<td>Armor</td>
<td>10,000 x armor tonnage</td>
</tr>
<tr>
<td>Traverse</td>
<td>5000 x turret tonnage</td>
</tr>
<tr>
<td>Manual loader</td>
<td>−5% of weapon’s cost</td>
</tr>
<tr>
<td>Artillery cost</td>
<td>1 + (tons/20) multiplier</td>
</tr>
</tbody>
</table>

9. Fill in Record Forms

At this point, the player should fill out copies of the towed artillery record form for standard towed mounts and towed platforms. If a mobile weapons emplacement was constructed, then the standard vehicle record sheet should be used at this time.

The players should also fill out record forms for the weapon crews. This should be a standard infantry record form included in City Tech and in The BattleTech Manual.

**MOBILE EMLACEMENTS CONSTRUCTION**

Mobile emplacements are constructed exactly like a vehicle using standard vehicle construction rules. The exception to this is that the towed emplacement is not a vehicle and does not need control components, lift or driving equipment, or an engine, although it does require suspension and is always wheeled. Any towed emplacement that is to be equipped with an energy weapon or a turret must have a power plant. The rules for choosing the power plant are the same as for the gun emplacements in the CityTech rules. The mobile emplacement does not require a full crew unit, just a gunner.

**ARTILLERY UNITS LIST**

The following are lists of common pre-designed direct-fire towed artillery weapons. Each entry shows the basic information for a weapon. Players may use these weapons instead of going through the construction process.

**STANDARD TOWED CARRIAGE**

<table>
<thead>
<tr>
<th>Name</th>
<th>Wpn</th>
<th>Cost</th>
<th>Tons</th>
<th>Armor</th>
<th>Crew</th>
<th>Ammo</th>
<th>ROF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-928*</td>
<td>AC/2</td>
<td>83</td>
<td>7</td>
<td>8 GS</td>
<td>6</td>
<td>22</td>
<td>1/turn</td>
</tr>
<tr>
<td>TV-1A*</td>
<td>AC/5</td>
<td>136</td>
<td>9</td>
<td>8 GS</td>
<td>7</td>
<td>10</td>
<td>1/turn</td>
</tr>
<tr>
<td>M-90</td>
<td>AC/2</td>
<td>73</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>1/turn</td>
</tr>
<tr>
<td>M-900</td>
<td>AC/5</td>
<td>128</td>
<td>7.5</td>
<td>8 GS</td>
<td>6</td>
<td>0</td>
<td>1/turn</td>
</tr>
<tr>
<td>LAW-3A</td>
<td>LRM/5</td>
<td>28</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1/turn</td>
</tr>
<tr>
<td>LAW-10M</td>
<td>LRM/10</td>
<td>97</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>1/turn</td>
</tr>
<tr>
<td>SAM-X6</td>
<td>SRM/6</td>
<td>88</td>
<td>4</td>
<td>16 GS</td>
<td>5</td>
<td>0</td>
<td>1/turn</td>
</tr>
</tbody>
</table>

*Auto.
A pair of scenarios for FASA's BattleTech and City Tech games.

**A Place in the Sun**

Use the expert rules and the characters from the supplement *Fox's Teeth* to play these scenarios, which use special rules to simulate 'Mech combat in a hostile environment. Except for the lava, Hotspot's conditions approximate Mercury, so the rules can be used for BattleMech combat on any Mercury-type world.

**FROM THE DIARY OF MARK MCKINNON**

They called the place Hotspot, but we called it Hell. It was the second planet of an F0 star, and no one, especially not us, would've wanted to go there except for one thing: It was lousy in the heavy metals that could be used to run the few remaining fission reactors left to the House of Davion. Of course, McKinnon's Raiders still wouldn't want to go there, but in a brilliant (some say exceedingly stupid) move, House Kurita launched a deep penetration raid and captured the mines and on-planet processing complex intact. Hanse Davion had to act fast to prevent the raiders from getting away with a six-month stock of radioactives, so he sent McKinnon's Raiders—the “Fox's Teeth.” After this mission we called ourselves the “Baked Beans.” We don't know what the enemy called us because none of them lived to tell us. You couldn't punch out on Hotspot—and still live.

*David L. Pulver*
DAYSIDE: SUNDRAZON MINING COMPLEX, 0600 HOURS, TST

Despite the anvil sun, the four surviving ‘Mechs of the Black Sword Company of Wolf’s Dragoons—and their pilots—sat cool as cucumbers in the protective shade of the ridge. They had driven off one orbital assault by Davion regulars, and, their heavy losses notwithstanding, they were confident they could do it again.

Inside his Wolverine’s cockpit, Captain Urlik Skarsol quickly looked up into space as a sudden pinpoint of light caught his attention.

Somewhere high above, another aerospace fighter flashed out of existence. Another dying star, he thought: Kurita was losing the orbital battle.

His techs had perhaps 15 minutes to get the precious radioactives loaded onto the shuttles and be away—only 15 minutes before the fighter screen evaporated and left Serpent’s Eye vulnerable.

Still, that was plenty of time. Since that first assault of light and medium jump capables, only one dropship had made planetfall—it had crashed 100 klicks from the complex. (Drop cocoons were useless in atmosphere—either the ‘Mechs used their own jets to slow themselves down or the dropships had to land—leaving them easy targets for the surviving fighters.) And though sunspots played havoc with radar and com, Skarsol was confident that no sane commander would send his ‘Mechs across the hell that was dayside on Hotspot during perihelion.

But then, as his eyes dropped from the embattled heavens to the too-close horizon and he saw the dark shapes of Ian McKinnon’s ‘Mechs striding across the barren plain, he remembered that, of all Hanse Davion’s commanders, there was one who was not entirely sane.

SETUP

Lay out two basic BattleTech maps next to each other with their long sides adjoining. The side of the board marked by the BattleTech logos on both maps is south; the right side of the board is east; the left side west. The western map is considered map 1; the eastern map is map 2.

Water hexes are treated as molten lava of the same depth. Ignore light and heavy woods terrain, and treat any nonelevated terrain woods hex as being clear, level one; elevated terrain (if light woods) or clear, level two, elevated terrain (if heavy woods).

Any hex that is one hex to the west of higher elevation terrain is considered to be in shadow. (Other hexes are exposed to direct sunlight and are rather unhealthy.)

For example, hex 0902 (heavy woods) is now clear, level two, elevated terrain. As a result, hexes 0801 and 0802 are now in shadow. This may seem complicated to keep track of, but from my experience, players are very aware and eager to point out that their ‘Mech is in a shadow hex rather than roasting in the 450-degree C heat of the sun.

Place one marker in each of the following hexes to represent shuttle landing fields: hex 0109 (shuttle 1), hex 0703 (shuttle 2), hex 0709 (shuttle 3), and hex 0715 (shuttle 4).

DEPLOYMENT

Defender: The remnants of Urlik Skarsol’s Black Sword Com-
SPECIAL RULES

The following are special rules.

Shuttlecraft: McKinnon's Raiders must destroy the shuttles before they lift off to rendezvous with the dropship Serpent's Eye. One shuttle leaves on turn 4, one on turn 6, one on turn 9, and one on turn 11. During setup, the defender secretly notes which departure time each shuttle will leave on. All shuttles must leave on different turns. For example, the defending player might decide shuttle 1 will leave on turn 9, shuttle 2 on turn 4, shuttle 3 on turn 11, and shuttle 4 on turn 6. A shuttle lifts off at the end of the turn, but whether or not it is lifting off that turn is announced at the start of the turn.

BECAUSE OF THE very low gravity of Hotspot, 'Mechs are able to jump farther than normal.

Shuttlecraft can take 30 points of damage before being disabled. They are treated as stationary targets except on the turn they are taking off. During that time they are harder to hit (+3) and may not be attacked in close combat, although they are in line of sight to all units regardless of terrain.

Sunlight: Due to the proximity of Hotspot's star any unit that does not end its move in a shadow hex (see Setup) suffers an additional four points of heat in the heat phase.

Lava: Lava is treated as water except in regard to heat. Unlike water, lava does not decrease a 'Mech's heat buildup. Instead lava adds 2 heat points per depth level to any 'Mech present in lava during the heat phase.

Jumping: Because of the very low gravity of Hotspot, 'Mechs are able to jump farther than normal. Add 2 movement points to the jumping movement allowance of all 'Mechs, even nonjump-capable ones. Thus, a Shadowhawk now has 5 MPs if jumping, while a Warhammer has 2.

Firing: The tenuous atmosphere of Hotspot (mostly traces of argon and helium) enhances the effectiveness of energy weapons while the lack of gravity increases the range of projectiles. Multiply all long ranges by two for lasers, particle accelerator cannon and flamers, and by 1.5 for all other weapons. Due to the lack of oxygen, no fires can be started.

VICTORY CONDITIONS

The scenario lasts 12 turns; victory is based on points gained by each side during the scenario. The highest point total wins.

A one- to two-point advantage is a marginal victory (assigned to garrison duty here for the next six months); three to four points is a victory (footnote in the history tapes); a five or more point advantage is a famous victory (a turning point in the gravity of Hotspot, 'Mechs are able to jump farther than normal. Add 2 movement points to the jumping movement allowance of all 'Mechs, even nonjump-capable ones. Thus, a Shadowhawk now has 5 MPs if jumping, while a Warhammer has 2.

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The attacker scores two points for each shuttle that is disabled, as well as one point for each 'Mech that survives intact (able to both move and fire). The defender scores two points for each shuttle that escapes and one point for each of his 'Mechs that exits off the west edge of the board before turn 12 ends (as any defending 'Mechs left on the board at the end of the scenario will not reach the pickup point in time and will be abandoned by Serpent's Eye as the dropship leaves orbit).

TACTICAL NOTES

The attacker has two disadvantages. First, McKinnon's Raiders are in a race against time and must carefully allocate resources between destroying shuttles before they launch and fighting enemy 'Mechs. Second, the sun is literally on the defender's side. All the shadow hexes are west of the elevated terrain, and the attacker is coming in from the east. As a result, defending 'Mechs may be both in cover and in the shade, while the attacker must initially choose between the two and may have to advance rapidly to negate the defender's positional advantage. At close range the attacking force has tremendous fire power: The Marauder and Warhammer can combine fire to rapidly annihilate single 'Mechs or destroy shuttles in a single turn. Don't forget that in the low gravity all 'Mechs can jump, even 75-ton Marauders. Death from above!

In contrast, the defender must maximize the initial period where terrain gives him the advantage. Remember that all long ranges are increased, and you should stay in cover (even prone if necessary) as much as possible. LRM and autocannons from the Archer and Rifleman are particularly useful here. Know when to stop fighting and evacuate. Remember, any units left on the board by turn 13 are considered destroyed, even if all enemy 'Mechs are disabled.

HOTSPOT: THE OTHER SIDE, 0630 HOURS, TST

While McKinnon mixed it up with Skarsol and his Black Swords, the rest of the Raiders—Karl Ryder's medium lance—struck out from the crashed dropship to capture McTavish starport on Nightside. The Crucis Lancers needed a landing field, and it was their job to provide one. Ryder thought he had surprised the garrison, until Decker stuck his Wasp's nose into a cave and woke a sleeping giant....
SETUP

Use a single CityTech map. Treat woods and water as clear terrain. Place hardened buildings in hexes 0609 and 0809 (fighter hangers), and 1009 (control tower); heavy buildings in 1106 and 1108 (troop barracks), and 0713 (vehicle garage); and rubble in hexes 0406, 0714, 1004, and 1209. All hardened buildings have three levels; all heavy buildings have two.

DEPLOYMENT

Defender: Major Yamada stayed on the ground until the last minute to coordinate resistance and deny the starport to the enemy. But even with the aid of the giant Battlemaster, could her infantry forces stand against Ryder's veteran 'Mechs? Ryder's veteran 'Mechs consist of the following.

- Major Dana Yamada's Battlemaster (pilot 3, gunner 4) in hex 0812.
- Molly's Marauders (laser jump infantry platoon) in hex 1106.
- Andrei Tokumura's Cossacks (SRM jump infantry platoon) in hex 1108.

The reinforcements arriving on turn 5 (returning from long-range patrol) on any map edge are as follows.

- Steve True's Stinger (pilot 2, gunner 2).
- Hikaru Ichiju's Wasp (pilot 3, gunner 3).
- Polk's Persuaders (machinegun jump infantry platoon).

True and Ichiju are of the elite Musashi squadron of the Sun Zhang Academy, seconded to the Dragoons for this operation.

Attacker: Karl Ryder's medium lance consists of the following.

- Lt. Karl Ryder's Crusader (pilot 5, gunner 3) in hex 0806.
- Iskoru Chipende's Phoenix Hawk (pilot 5, gunner 4) in hex 0607.
- Ernst Lang's Rifleman (pilot 4, gunner 3) in hex 1516.
- Henrik Dekker's Wasp (pilot 5, gunner 4) in hex 0912.

The attacker has initiative on turn 1, and Dekker had better use it to get out of there!

SPECIAL RULES

Nightside on Hotspot is quite different from dayside. In the month-long night, the temperature can drop to -180 degrees C, quite a contrast from the 400-degree C furnace on the other side of the world. Gravity and atmosphere are the same, of course. Use the jumping and firing special rules from the first scenario, but do not use any of the other rules.

VICTORY CONDITIONS

The side with the last surviving unit wins. Any unit that leaves the map is considered eliminated. The attackers win a decisive victory if they win and at least two 'Mechs are left, while defenders win a decisive victory if they triumph and the Battlemaster survives.

Tactical Notes

This is a pure slugfest, but victory will depend on who makes best use of the buildings for cover—the 'Mechs or the infantry. Ryder's forces begin to spread out and must concentrate quickly to rescue Dekker and surround the Battlemaster.

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This adventure was designed to be used with the Star Wars roleplaying system from West End Games. “Starfighters Down” assumes that the referee owns and is familiar with both the Star Wars basic rules book and the Star Wars Sourcebook. The adventure can be run without the latter, but such play will require additional effort on the part of the game master.

The characters in this scenario are assumed to operate a small military vessel similar in size and armament to the Imperial Customs Frigate listed in the Star Wars Sourcebook. If they do not normally travel on such a vessel, simply assign them to it for this mission, so they can provide support for the brave young boys in the fighter squadrons.

**PLAYER INTRODUCTION**

As the image of Commander Fenris came into being at the center of the holotank, a hush fell across the room. Despite the fact that he was actually in his ship high above the planet, his presence seemed to fill the hall. With a glint in his precise gray eyes, he began to speak.

“Comrades,” he began calmly, “some two weeks ago the forces of Commander Skywalker engaged a large Imperial fleet near Bespin. The intended target was the Super-class star destroyer Enforcer, flagship of Admiral Kohrin and his second fleet.”

He paused, and a murmur of expectation swept across the assembly. News of Commander Skywalker’s exploits was always welcome. But the brief feeling of hope faded quickly when Commander Fenris began his next sentence.

“Unfortunately, the arrival of additional Imperial forces turned the tide of battle at the last moment, and Commander Skywalker was forced to order his fleet to withdraw. Enforcer, though badly damaged, was not destroyed.” Sounds of disappointment quickly fell away as Fenris broke into a thin, smug smile.

“While Enforcer limped to Phaylenn for repairs, her escort fleet joined forces with that of the newly arrived Imperial fleet to lead a devastating counter strike against rebel positions in the Ahlenn system.”

Laughter filled the room as each and every one of them recalled the hectic evacuation of Ahlenn two months ago. When the Imperials arrived there, they would find nothing but empty tunnels and a small abandoned fighter base.

“While our Imperial friends are busy bombing us out of existence, Enforcer sits almost helpless above Phaylenn. Like a proverbial sitting duck. As you may have guessed, we have been ordered to head at once to Phaylenn and engage the Enforcer again. This time, she won’t be as lucky as she was before.”

A loud cheer raced across the room, and it was several minutes before Commander Fenris’ attache could continue with the operational details of the briefing.

**PLOT SYNOPSIS**

This adventure begins with an attack by members of the Rebel Alliance on the starship repair facilities at Phaylenn. The target of their attack is the Imperial Super-class star destroyer Enforcer, which is undergoing major reconstruction at the facility’s orbital station. During the attack, the starship the characters are in is hit and forced to crash-land on Phaylenn.

Once down on this forsaken planet, the characters examine their ship and come to the conclusion that it can be repaired. In the end, however, it becomes clear that one of the major hyperdrive control modules is beyond repair. In order to fix their ship and get away from this world, they will have to penetrate the defenses of the Imperial Naval Base on the surface of Phaylenn and steal the required module from an Epsilon-class shuttle stationed there. Although it is not identical to the one they need, anyone with a talent for engineering and electronics can quickly adapt it.

While en route to the base, they encounter a number of local hazards and samples of hostile native fauna which must be overcome. Once they reach the base, they find themselves confronted by numerous guards, stormtroopers, and security systems which must be overcome if they are to succeed.

The return trip will probably be a hectic chase scene, with Imperial forces in
hot pursuit of the characters. Once back at their ship, they can install the component and blast off.

With repairs made, the ship hurtles spaceward with a handful of TIE fighters close behind it. After a brief space battle, the characters make the jump to hyperspace and escape to rejoin the alliance.

**BATTLE ABOVE PHAYLENN**

The rebel force which drops out of hyperdrive above Phaylenn should be designated by the referee to fit in with the current state of affairs in his campaign. As a rule, it should be large enough to overcome a single *Imperial*-class star destroyer in a fair fight. Normally, this would be nowhere near enough firepower to tackle a technological horror like the Enforcer. In her current condition, however, the Enforcer is only slightly more powerful than an *Imperial*-class ship.

As combat erupts between the major fight elements, long-range scans detect a large number of TIE fighters being scrambled from the planet below. In a short time, they join the battle. The referee should allocate one or more fighters to engage the ship the player characters find themselves aboard. Optionally, if the ship they are on is large enough, the referee should allow them to exchange salvos with a larger ship or, perhaps, even the Enforcer herself.

In the end, after a pitched battle with the Imperials, the player characters’ ship is hit and badly damaged. Her main drives fail, and the helm ceases to function. Trailing smoke and flame, she enters the atmosphere of Phaylenn and tumbles toward the surface far below.

**CRASH LANDING**

Characters may attempt to perform damage control operations as the ship races ever closer to a crash landing (Difficulty 20). If they fail, the pilot will have almost no control over the ship when it strikes the surface. If they manage to get the engines back on-line, a controlled crash landing can be made.

As the surface races closer and closer, the pilot spots a large lake ahead of the ship. Since most of the terrain visible below is a thick rain forest, the lake seems to be the best site for the landing. Straining against the resisting controls, the pilot brings the ship down. If the engines have been restored to nominal operation, the Difficulty for this task is 20. If attempts to repair the drive have failed, the Difficulty for the landing is 30.

If the pilot wishes to expend a force point during the landing, it should be considered a heroic action, and the character should receive his point back after the session terminates. Similarly, the engineer who uses a force point to save his ship should be considered as undertaking a heroic action, and should also receive his point back.

No matter how good the pilot’s roll is, the impact will be quite severe. All characters aboard the ship should throw 2D – 1 to determine the number of damage dice they are subjected to. Normal strength rolls are permitted, but armor will not protect the characters from harm in this case. For example, a character throws a 9 (−1 equals 8), so he must suffer an 8D attack.

**CONDITIONS ON PHAYLENN**

When the characters recover from the shock of the impact, they find that their ship has come to rest on a small stretch of stony beach which is covered by the shroud of a tall broadleaf forest. In addition to providing shade from the hot sun, the towering trees make the ship hard to spot from overhead. With a little effort and a few hours of time, this effect can be enhanced by the crewmembers, and they will remain undetected by the occasional Imperial patrol which races high overhead.

This region of Phaylenn is hot and steamy. The temperature is nearly 45 degrees C, and the humidity is extreme. All the characters will quickly become very uncomfortable.

Although the waters of the lake are fairly safe for both swimming and drinking, the surrounding jungles are dangerous places indeed. Characters who stray into these wild regions are fair game, and the referee is free to unleash any type of hostile creature upon them. Although few beasts are larger than a man in the jungles of Phaylenn, many make up for their smaller size with a high natural dexterity, keen senses, and razor-sharp talons. The typical example of a Phaylenn jungle carnivore might have characteristics as indicated in the following description.

- **Dexterity:** (5D)
- **Perception:** (4D)
- **Strength:** (2D)
- **Speed Code:** (4D)
- **Size:** About 1 meter in length
- **Combat:** Typical Phaylenn carnivores employ very deadly claws and fangs in combat which do 6D of damage.
DAMAGE REPORT

After several hours of study, the ship’s crew may determine that the starship has suffered some fairly heavy damage, but most of it can be repaired in some manner or jury-rigged for the time being. The only exception to this is the power distribution module, which controls the flow of energy from the power plant to the hyperdrive unit. Both the primary and secondary units were overloaded by the attack on the ship and have been totally destroyed.

Due to the complex microcircuitry in these modules, a jury-rigged duplicate is impossible. The only source of repair parts for the ship is the Imperial Garrison, which launched the TIE fighters that attacked Commander Fenris’ fleet. Although the modules employed by Imperial Lambda-class shuttles are not as complex as those which the characters’ ship normally uses, they can be quickly modified to serve for a brief time. Estimates of the base’s position indicate that it must be some three days away (on foot) to the northeast, and it is almost certain that at least one shuttle is docked there at any given time.

After careful consideration of the facts, it becomes clear that a small raiding party must make its way to the Imperial base and break in. Once within the complex, the raiders will have to make their way to the shuttle landing platform and gain access to one of the crafts docked there. Locating and extracting the module should be a fairly simple operation, and the characters can then make their escape.

TRAVEL TO THE BASE

The voyage across the jungles of Phaylenn should be very difficult for the characters, but not so harsh that they cannot survive it. The exact details of their crossing are left to the referee, but numerous hazards should be encountered. These can range from an attack by a pack of the carnivores described above, to encounters with meat-eating plants, to the traditional quicksand bog. By the time the characters reach the Imperial base, they should be battered and bruised, but not unable to face the challenges which lie before them.

OUT OF THE FRYING PAN...

The garrison on Phaylenn is typical of many such facilities scattered around the galaxy. As such, the referee should make use of the Imperial Base Plans presented in chapter 14 of the Star Wars Sourcebook in adjudicating the characters’ raid on the complex. The first obstacle which the characters face is that of entry into the base.

After careful study of the standard operations of the base, it becomes clear that the only possible means of getting past the outer defenses is by capturing one of the AT-ST walkers patrolling the jungle around the complex. The characters should decide how they want to go about attacking the walker and how they will prevent it from warning the Imperials about the rebels’ presence.

Once they have gained control of the scout, the characters will have to con their way past the controllers (Difficulty 15) to get inside the outer defenses.

...AND INTO THE FIRE

Once inside the death fence which surrounds the facility, the characters can maneuver the walker to the shuttle dock and take up a position near it. From here, they can exit the craft and make their way upward to the landing platform. Depending on the capabilities of the party, the referee will want to make this more or less challenging.

As a general rule, sneaking from the AT-ST to the shuttles will require three Difficulty 20 rolls by the party. The first roll allows the party to move from the walker to the stairs, which run up the outside of the landing platform’s support pylons. The second will enable them to climb the stairs and reach the edge of the platform without being spotted. The final roll covers the passage from the edge of the platform to the shuttle’s open boarding ramp. Each of these rolls must be made by the party member with the lowest Hide/Sneak skill since it is that individual who is most likely to draw attention to their presence.

THE MODULE

Once the characters reach the shuttle, they must sneak or fight their way on-board. The referee should scale the number of stormtroopers aboard the craft to match the strength of the party. If the characters use force, each round of combat requires a Difficulty 20 roll to avoid drawing the attention of the rest of the complex. If they make use of Stealth to reach the module, a single Difficulty 20 roll will enable them to reach it unobserved.

Removing the module is Easy (Difficulty 10) and takes only a few seconds. As soon as it has been taken out of the circuit, an alarm sounds and the ship’s security systems begin to come on-line. Aware that the landing ramp will soon be retracted and their escape route severed, they must sprint to the front of the ship.

They reach the ramp as it is starting to close and must dive to get through it. Each must make a Difficulty 15 Dexterity roll to escape before they are sealed inside the shuttle.

Characters who make it are clear of the ship. Those who are trapped inside have only one option short of surrender: They can blow the explosive bolts on the hatch. For easy access, trigger mechanism for these is clearly marked and placed near the normal hatch controls.

The referee will want to consider what effects this might have on the characters who have already gotten out of the ship. If they are standing outside the door trying to figure out how to get it open, they could be in for a nasty surprise. If they have gotten clear, then only the Imperials need to worry about the multiton sheet of metal that will be launched into the heart of their garrison.

Some characters may wish to take over the shuttle and try to run for it with the Imperial craft. If they do not have the module with them, then the trip will not be possible even if they get past the Imperial sentry ships. If they have the module, it should be made clear to them that they will be leaving behind their friends and their downed starship. If both these conditions fail to thwart the players’ desires, the referee need only point out (after they have fought a horde of stormtroopers and taken control of the ship) that it is undergoing repairs and is not able to lift off at this moment.

When the characters have all gotten clear of the shuttle, they can fight their way back to the AT-ST and make their escape. Once again, the referee will want to scale the encounters on

Continued on page 79
THE VITALITY of the newly founded Imperium was evidenced by its rapid expansion and economic growth. The time was right for a new empire; the human populations of the territory wanted and needed this vast interstellar government. The Third Imperium was an expression of the people who populated it: strong, vital, ambitious.

A THOUSAND years later, the strength and vitality of the human populations were missing; all that remained was the ambition, and that ambition was channeled inward. No longer did the population see expansion as the means to a better future; leaders looked at redistributing the wealth of the Imperium and at carving out petty dukedoms within the known boundaries of the empire. AGAINST this background, it was inevitable for some small stimulus to trigger the fall of the Imperium. And once that happened, there was no turning back.

IN THE founding days of the Imperium, great men dreamed great dreams...and achieved them. In the last days of the Imperium, petty men dreamed petty dreams...and achieved them too.

What Happens When A Thousand-Year Empire Is Eleven Hundred Years Old?

The Imperium began as a small pocket of scientific and technological innovation in the sea of primitive star systems. It expanded out to eventually take over more than 10,000 systems. In the course of a thousand years, it fought countless wars and conquered countless races. But after that thousand years, the Imperium is old, tired, and strained at the borders by dissention and civil unrest. Now the Imperium is split into many factions. The emperor's nephew-Dulinor-claims the throne; so does his cousin. Even his assassin claims the throne. No one knows whom to follow; someone is following each of the claimants. Several border regions have lost faith in the Imperium and have declared their independence. A few neighboring interstellar powers, learning of the Imperium's internal chaos, have begun to advance into unprotected frontier provinces. The Imperium has shattered...

Against this background of star-spanning rebellion and splinter empires, Traveller is set. Its role-playing game rules provide an entire universe to be explored. Players assume any role and any mission in the universe of the future. Traveller says that mankind has conquered the stars, travel between star systems is commonplace, but the distances involved make interstellar voyages take weeks, months, even years. The situation is similar to Earth in the 18th century. Communication is limited by the speed of travel, setting the stage for adventure in a grand fashion with all the trappings of classic science fiction: star-spanning empires, huge star fleets, interstellar merchants (and interstellar pirates), complex diplomatic maneuvers, and larger-than-life heroes, heroines, and villains.

Traveller is the name of the overall game. MegaTraveller is the name of this rules set, and is used to differentiate it from the 10 years of development and earlier editions that preceded it. 

MegaTraveller— the complete science-fiction role-playing game. The MegaTraveller Players' Manual contains the basic information any player needs to prepare for (and participate in) Traveller adventures. A reference for every participant, it includes character generation, skills, task resolution, experience, personal combat, and psionics. The MegaTraveller Referee's Manual is a basic reference for the referee which expands on the topic of tasks, and deals in depth with vehicle design and combat (including both surface vehicles and starships), worlds, and commerce. The MegaTraveller Imperial Encyclopedia is the basic reference for every Traveller participant. It deals with library data, maps, world data, and equipment. The Encyclopedia includes all the raw information necessary to learn about the Shattered Imperium and role play within it. The boxed MegaTraveller set includes all three of these books, plus a poster-size map of the Spindward Marches. GDW: 0210. ISBN 0-943580-49-8. Boxed: $30. Each book is also available separately.


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Design Background

One of the Commonwealth’s newer designs, the well-crafted Gnome was introduced in 6817 to supplement the Guardian. Specifications called for a lightly armed fighter with the heaviest practical defenses and a maximum unit cost of one million talents. Three firms made proposals, two exceeding that price; the staff college favorably evaluated the third. The Gnome was a success with budget-conscious ministers (three Gnomes can be built for the price of two Guardians). Although production has been slow, quotas have increased lately; it may become one of the most heavily produced Commonwealth fighters.

Combat Capabilities

Its single laser is reasonably powerful but far from overwhelming. The single hardpoint permits limited capability for one-shot missile attacks or ECM defense. What individual units lack in offense, they can (and must) make up in quantity.

Defensively, the Gnome is far more impressive. Better shielding and armor than even the Guardian gives the Gnome time to absorb moderate damage and press on. Resulting pilot casualties have been light, making this craft popular with those who fly it. It is a slow fighter, but it has good maneuverability and handles well, especially within an atmosphere.

Vulnerabilities

Speed, firepower, and tactical deployment can be disadvantages for the Gnome. Primarily a defensive fighter because of its low speed, it is more effective in protecting a specific area than intercepting or conducting running battles. With its limited armament, it is not an effective fighter in one-on-one engagements, being outgunned by most TOG fighter classes: Gnome pairs must remain close together in combat. Two or more Gnomes operating against a single target provide a respectable offensive threat.

Operational Roles

The Gnome is a one-seat point defense fighter, close-support fighter, system defense craft, counter-insurgency attack craft, convoy escort, multipurpose atmospheric interceptor. It is deployed in some first- and second-line pursuit and fighter squadrons. With no end to its usefulness in sight, the Gnome makes an excellent combat companion for the Guardian.

Pilot Comments

“Rugged for being disposable.”
“A thick skin—not much ummph.”
“Underarmed but tough.”
“Good time-at-target capabilities.”
“I wish they’d drop the laser and put on more hardpoints.”
**PILOT COMMENTS**

"The nose has a heavy punch."
"Handles a little sluggish with all points loaded."
"That turret's real mean."
"A pair of wing lasers would be nice."
"Thick-skinned for a standoff fighter."
"Pretty to watch during turret ripple salvoes."

---

**Commonwealth Whirlwind**

Class: Medium Fighter (Missile)
Mass: 142
Cost: 3,221,250

**Engines**

Right Engine Rating: 1250
Left Engine Rating: 1250
Thrust: 9
High Thrust Modification (with laser replaced): 10
Streamlining: Yes
AntiGrav: No
Crew: 2

**Shields**

Bow: 60
Right: 40
Left: 40
Stern: 50

**Armor**

Bow: 70
Right: 40
Left: 40
Stern: 60

**WEAPONS**

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**Design Background**

The *Whirlwind* was first introduced in 6798 to replace the obsolescent *Space Goblin* strike fighter (no longer in service). The *Whirlwind*'s main criterion was to be a high-speed fighter equipped with as many hardpoints as practical. The Commonwealth Staff College evaluation board approved the original design without comment; production has been uneventful and free of incident.

**Combat Capabilities**

Though the *Whirlwind* packs a respectable punch in its single 7.5/6 laser, its main armament consists of a dozen hardpoints dispersed throughout the hull's underside and large turret. The sheer quantity of missiles and pods carried in a single load permits a nearly infinite number of payload combinations, ranging from overwhelming defensive ECM to barrage missile salvoes, or a generous mix of both.

The armor and shielding are considered light for a medium fighter but have proven adequate—the *Whirlwind* is not intended to close with its target. The high speed and maneuverability add to its survivability when on strike missions because it isn't around long enough to present much of a target.

**Vulnerabilities**

The side shields and armor are vulnerable. Few TOG fighters are major threats unless the *Whirlwind* is boxed in. Lanceas, as well as high-thrust Spiculums, are perhaps the greatest danger, although the latter's armament is no match for a fully loaded *Whirlwind*.

**Operational Roles**

The *Whirlwind* is a two-seat medium strike fighter, deep-space attack craft and standoff interceptor, electronics warfare fighter, convoy escort and raider, multipurpose atmospheric attack fighter. It is deployed in first-line strike, pursuit, fighter, interceptor, and carrier squadrons. Popular with flight crews, it continues to be one of the Commonwealth's most effective front-line strike fighters—and may be for another decade.
Design Background

The Nii'cor Golnud, or Starhawk, is a KessRithian design. After the combat successes of the production model Fluttering Petal, some KessRithians realized the hardpoint-equipped fighter might not be entirely a bad thing. Although they adamantly continue to emphasize lasers and strong defensive systems, this model (acknowledged by everyone as a rare, though intentional, exception) was a deliberate effort to show conciliation toward senior Commonwealth and Renegade Legion military leaders. The fighter was better accepted by non-KessRithians than by their own race because many saw the comprised design as a form of economic and political extortion on the Commonwealth's part (entirely incorrect, actually).

Combat Capabilities

A well armed fighter with a point-blank kill zone, the Starhawk is most effective when it is at its closest range. The combination of nose and wing-mounted lasers permits frequent, deep-armor penetration, with an excellent opportunity to inflict crippling damage on an adversary's fighter.

Though not streamlined, the Starhawk is often considered to be the laser-armed equivalent of the Penetrator. The Starhawk's mass is virtually the same, with nearly identical shielding and armor distribution. The Starhawk's side armor is thicker, however, overcoming a Penetrator design weakness. But for its high cost, the Starhawk might have seen wider use.

Vulnerabilities

Missile payloads and price are the main vulnerabilities. It is capable of carrying only one missile or pod, limiting the offensive flexibility. Otherwise, it has few real weaknesses. The TOG Lancea has a speed advantage, but a Starhawk can tear it apart with superior firepower. Spiculum is almost as well armored and shielded, and presents a greater one-on-one challenge.

Operational Roles

The Starhawk is a one-seat, high-speed, medium-range interceptor, fleet defense fighter, convoy escort, heavy reconnaissance fighter, multipurpose atmospheric interceptor. It is deployed in first-line pursuit, fighter, interceptor, reconnaissance, and carrier squadrons. Popular with some KessRithian and many Renegade Legion pilots, it is often used with Penetrators or on recon missions where Cheetahs might not be durable enough.

Pilot Comments

"Could use another hardpoint or two, and a smaller wing laser."
"Perfect the way it is."
"My number-one choice for tight maneuvering in asteroid fields."
"It's overrated; I'd rather have my old Penetrator back."
"Only the Cheetah is more fun."
Pilot Comments
“Instant death at any range.”
“Overloaded in the bow.”
“Best fighter flickers (shields) I’ve ever seen.”
“Slower than planetary rotation.”
“Just too much fighter for one man to fly.”
“The high-thrust variant is a joke— I’ll take my seven-five sixes any day.”
“Real ugly—to the TOG.”
“Expensive, but worth every denarii.”

Commonwealth Cavalier
Class: Heavy Fighter
Mass: 241
Cost: 4,521,000

Engines
Center Engine Rating: 900
Right Engine Rating: 800
Left Engine Rating: 900
Thrust: 3
High Thrust Modification (with lasers replaced): 3
Streamlining: No
AntiGrav: Yes

Shields
Bow: 110
Right: 90
Left: 90
Stern: 100

Armor
Bow: 100
Right: 100
Left: 100
Stern: 100

WEAPONS

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Design Background
The Cavalier is a brand-new Commonwealth design, first introduced in 6830 and seeing its first combat action with the 982nd Wing. Unlike with the Gnome, cost was no consideration for this model. It was designed to have extensive shielding and armor, a powerful armament effective at any range, and a number of hardpoints for offensive or defensive payloads. These criteria were met with great success, though speed was sacrificed for shielding.

Combat Capabilities
In terms of combat (and movement), the Cavalier resembles a small gunboat more than a large fighter. The combination of nose-mounted EPC, MDC, and NPC provide deadly impact at up to 150 kilometers, and wing-mounted 7.5/6 lasers make a tremendous secondary battery. The hardpoints offer a coup de grace when engaging TOG installations, the Cavalier’s most common combat target.

On defense, the Cavalier simply has no peers. Equipped with some of the largest shields ever used on a Commonwealth production model fighter, combined with heavy all-facing armor, the Cavalier’s pilot is almost guaranteed to return unscathed no matter what his destination or opposition might be.

Vulnerabilities
Speed, speed, speed. If the Cavalier can actually engage its target (most often a stationary TOG outpost, but occasionally a gunboat or disabled fighter) and maintain contact, the target will be in for a very rough time. The Cavalier is slower than some Corvettes, so it can rarely pursue a mobile quarry; such a battle has to be brought to the fighter more often than not.

Operational Roles
The Cavalier is a one-seat heavy strike fighter, deep-space attack fighter and standoff craft, heavy point-defense fighter, deep-space strike fighter, electronics warfare fighter, system defense craft, multipurpose atmospheric attack fighter. It is deployed with the 982nd Wing, and may see subsequent use in first- and second-line strike, pursuit, fighter, and carrier squadrons. It may be the best low-speed, one-seat heavy fighter design in the Commonwealth inventory.
Reviews

Julia Martin

Wasteland: a computer game which might amuse Twilight:2000 players

Wasteland

Computer adventure game. Electronic Arts. $39.95.

Programming: Alan Pavlish

Design: Ken St. Andre, Brian Fargo, Alan Pavlish, Michael A. Stackpole

Graphics: Todd J. Camasta

Producer: Dave Albert

Apple II family and other computers

Prices vary depending on the version purchased. If you own a microcomputer, you can get in on some post-holocaust action almost as much fun as Twilight: 2000. In Wasteland, released by Electronic Arts, you take the part of a party of Desert Rangers, attempting to claw a semblance of civilization back out of the devastation of a nuclear exchange. Strange disturbances have occurred in the area your organization attempts to protect—strange enough to attract your attention in a world where mutant creatures roaming the wastes around the few surviving towns are considered a fact of life.

CHARACTERS

Your characters have a fairly usual assortment of attributes and personal statistics. The attributes included are Strength, Intelligence, Luck, Dexterity, Charisma, and Maxcon (hit points). Although Charisma is often included as a characteristic in computer adventure games, it rarely seems to serve any actual function. In Wasteland, however, it does have an effect—mainly in getting NPCs in your party to do what you want them to do. Intelligence is undoubtedly the most important attribute in Wasteland; it determines the amount of skills a character can have (i.e., a character must possess a certain level of Intelligence to acquire certain skills).

To round out the "personalities" of the characters you make, you can choose their gender and nationality. These qualities make little difference, as nothing special comes of making a character male, female, or of any particular nationality. The pictures shown of characters when they are promoted are identical, and one on-screen icon stands for the whole party, except when you disband into separate groups (up to four separate groups can exist, with certain limitations to their actions).

Characters gain experience by killing creatures, a standard means in computer adventure games. They gain greater experience for an encounter by putting themselves more at risk—killing a mutant lizard with your character's bare hands will garner more experience than killing it with your Uzi. When a character gains enough experience, he can radio Ranger Center to see whether he is eligible for a promotion. If he is promoted, he gains a rank and two skill points to use toward improving his attributes and gaining new skills (or improving old ones). Skills are also improved automatically through frequent, successful use.

COMBAT

Combat is controlled in a similar manner as in many other adventure games. Each character selects his combat option from a small menu of options. A round of combat is then rapidly carried out for both the party's side and the group the party is fighting. The exciting thing about combat in Wasteland is the interesting factors and options available. For instance, the weapons which are offered to pick from are "actual," specific weapons, such as Uzi 27 SMGs, VP91Z 9mm pistols, AK-97 assault rifles and even LAW rockets. When you use the weapons in combat, you have to keep track of the ammunition because it can run out, unlike the endless ammunition weapons of many computer games. The number of shots you get depends on the ammunition capacity of the magazine for the particular weapon your character is armed with. You can fire a weapon which has the capacity on single shot, semiautomatic, or full automatic. Also, your weapon can jam. When your character purchases new ammunition, he has to buy it in the correct caliber for his weapon in order to load it.

Combat is not restricted to gun combat. A character with the skill can use a knife or throw knives until he runs out of them, or he can engage in hand-to-hand combat. He can even throw explosives, if he can find them. And combat is not a matter of engaging an opponent and blasting away until he drops. Intelligent opponents can break off combat and run away, as can your characters. Running, however, is not an all-or-nothing option. Both your character and your opponents can use it as a tactic to gain a more advantageous field of fire; as long as you are within the view and range of your opponent, you can pursue each other. You can disband into separate groups to deal with separate opponents or you can join forces and sneak up on a persistent sniper from two different directions.

STORY

Wasteland has an engaging story. Like well constructed adventure games, it combines solving puzzles in the game situation with action scenes. The best solution to any given situation is not necessarily indiscriminately engaging people in combat; negotiation with people or doing small favors for them for information is often a better course of action. The game contains smaller puzzles within its larger framework, allowing you to build up your character's skills and obtain objects necessary for solving the big problem in the game—stopping the disturbances. Like in an espionage or a mystery novel, the entirety of the plot is not apparent to your party at the beginning, and information must be pieced together from solving many puzzles which lead to the revelation of the "menace behind it all."

Winning in Wasteland requires brainwork, persistence, and adequate management of both your material and human resources. Non-player characters are an integral part of the story, and are necessary to solving most problems and puzzles the game presents.

You are allowed to generate four characters of your own, but your party can contain up to seven members; its ranks are filled by non-player characters whose knowledge, skills, or presence in your party is required to allow you to solve certain problems and puzzles.
Sometimes obtaining a prime NPC for your party can be a puzzle in itself. Whether NPCs join your party often depends on the manner in which they are approached; obviously if you attack everyone, no one will ever join your group.

GRAPHICS
The graphics in Wasteland for the Apple II family version are very good. Encounters are represented by animated on-screen pictures in a manner similar to The Bard’s Tale. The countryside is adequately delineated by varying textures and colors which your party moves across—represented by a small icon of a person—very much as movement is presented in Ultima IV and V. The graphics are limited or enhanced by the version of computer the game is run on, so they may vary somewhat. The extremely good graphics capabilities of the Apple II GS are not supported, for instance, as the program runs in lie emulation mode—but they are nothing to complain about and fill the job of making the game more appealing and entertaining.

GRUMBLIES
The complaints I have about this game are small and few in number. While the game is able to be, and must be, completely copied to four disks in order to play (because you can save at any point in the game rather than only at certain places, like an inn—a plus), you still need to boot up using the original A disk. This gets annoying. I much prefer copy protection schemes which allow me to copy all the disks once and then rely on a printed aid, like a booklet or a wheel, especially if so many disk sides of material are required to be copied. Also, the way the save capability works is a little tricky, and the section of the Command Summary Card which describes how saving works should definitely be read carefully and experimented with a little, or you may be disappointed in the results. Finally, many pieces of equipment which are included in the inventory of a beginning character are virtually useless. They are also available at many stores, and until you figure out which are important and which are not, quite a bit of your character’s carrying capacity is consumed by nonessentials. A few cosmetic pieces of equipment make the game more realistic and help preserve the puzzle value as you try to figure out what is useful for what. But using this many useless items is a trifle annoying. A useful hint: Ditch the mirrors and save the water bottles (buy some for NPCs who don’t have them).

HINTS
Here are a few hints for general play and a few, admittedly cryptic, more specific ones: Beef up Intelligence consistently; the manual underplays its usefulness. Go ahead and invest in a skill at level one—often it will improve through use, and you can’t improve what you don’t have. Have two or more characters with the Doctor skill. Keep weapons with a variety of ammunition calibers among your group. Toaster repair is not useless. Make sure everyone has Swimming and Climbing skills. Pugilism comes in handy when your weapon runs out of ammo. Metallurgy has mining applications. Don’t overuse energy weapons. Mad Dog Fargo and/or Metal Maniac are good NPCs to have, along with VAX, of course. Ropes and shovels have uses, as do chemicals. When you meet a recalcitrant computer, try “run.”

EVALUATION
I highly recommend this game, if you like computer role-playing/adventure games. The more realistic combat sequence and choices in Wasteland are a welcome change, as is a good adventure game which is not in the sword and sorcery fantasy genre. The game is well done, and hours and hours of enjoyment can be obtained from it. It is neither incredibly easy nor impossible to solve. Rather than feeling that I paid too much, I came away from the game wanting more, and I hope that the designers and makers of Wasteland can be persuaded to do a sequel, if not many sequels.

Call of Cthulhu Keeper’s Screen.

The original Call of Cthulhu Keeper’s Screen has been hard to obtain for quite awhile now, and in the meantime, new Cthulhu supplements such as Cthulhu by Gaslight and Cthulhu Now have rendered portions of it inadequate or outdated. Chaosium has remedied the situation by releasing a new Keeper’s Screen.

CONTENTS
The new screen contains pretty much what the old one did and more. The screen now has four panels, one of them actually the back of the loose card which functions as the cover to the product. The frequently used Resistance Table is included in large print on the player’s side for easy player reference, and again on the reference card for the Keeper’s use. Statistics for selected weapons from Cthulhu Now and Cthulhu by Gaslight are provided, although not all the new weapons in Cthulhu Now are covered. I suppose that is what is meant by “selected.” The new rule for knockout attacks is incorporated, and the malfunction (jam) numbers of all weapons listed on the screen are now given. Other tables included the Ranged Weapons and Melee Weapons Table from the basic game, a Monster Table, a Spell List, a Typical SAN Losses Table, the Sanity Result Table, and the Books of the Mythos Table, among others. The tables are all graphically clear, and easy to read and reference, with applicable footnotes to the tables given clearly beneath them.

EVALUATION
This is a useful product for the Call of Cthulhu keeper. It is done in the usual Cthulhu products graphic style, and while it is not ugly, it certainly could have been done in more appealing colors. But perhaps the color selection is supposed to reflect the sometimes grim nature of the game. I don’t understand where a keeper would be expected to put the “fourth panel” reference card; it must be laid in front of the keeper and would tend to get buried under scenario information. The screen has once again been done as three 8 1/2 by 11-inch panels connected at the short sides, producing a very low screen. It seems to me that a better product would have been produced if the fourth panel could have been attached to the screen and all of the panels joined along the long edges. The screen would have been a little taller, and area enclosed behind it would
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Continued from page 70
the way back to the walker to fit the party. In any event, Stealth
is no longer a viable option for the rebels.

CHASE SCENE

Every good Star Wars adventure has to have at least one good
chase scene. In this case, it begins with the characters crashing
through the death fence and making a run for the forest in
their stolen AT-ST.

As they thunder through the trees, the Imperials will order
the other three AT-ST walkers stationed at the base to pursue
and destroy the escaping characters. The rest of the base’s AT-
ST walkers will be alerted to intercept the refugees, but their
position prevents them from hindering the characters in any
way. The chase begins with the three Imperial-controlled
walkers at Medium range.

Once the characters deal with their pursuers, they can either
abandon the walker and continue on foot or return to the
downed starship in the stolen vehicle. In either case, the im-
mense forest which is around them cloaks them from the
stepped-up patrols which are searching for any sign of their
movements.

THE HEROES RETURN

The characters arrive at the starship without further en-
counters with the Imperials. If they are on foot, they will have
had to deal with the hazards of the jungle to get there, but
if they are in the walker the trip will be fairly uneventful.

Modifications to the module will take about half an hour (Dif-
ficulty 15) and must be made by someone using his Starship
Repair skill or Technical attribute. Once it is completed and
in place, the rebels can make ready for their escape from
Phaylenn.

FLIGHT FROM PHAYLENN

As soon as the ship clears the treetops, it shows up on the
Imperial sensors, and a squadron of TIE fighters is dispatched
to intercept it. As the ship clears the upper atmosphere, they
overtake it, and a battle begins. The number of TIE fighters en-
countered should depend upon the condition and armaments
of the rebel spacecraft.

As the battle progresses, it becomes clear to the characters
that Commander Fenris’ fleet was able to destroy not only the
Enforcer but also the complex to which it was tethered. It may
be, though they cannot tell, that the explosion of the star
destroyer also brought down the orbital facility. In any case,
wreckage is scattered throughout the area, and all piloting rolls
are increased in Difficulty by 5 points. A failed roll indicates
a collision with fragments and debris which does 5D of damage
to the craft.

Once the TIE fighters are dealt with, or during the battle if
they wish, the characters are able to cut in their hyperdrive
and...woosh!

WRAPPING IT UP

Each of the characters should receive a minimum of 3 skill
points for their actions in this adventure. Those characters who
played unusually well should be granted 1 or 2 extra points
as a reward for their achievements, while those who played
poorly might find themselves awarded only 1 or 2 points.

Correction

The editing on the Star Wars Campaign Pack, reviewed in
Challenge 34 was done by Jonatha Ariadne Caspian not
Jonathan. I apologize for any confusion or inconvenience this
might have caused her.

Continued from page 27
ship, and goes directly to the captain of the naval vessel in-
volved. He may disburse it further as he sees fit, and most wise
officers will indeed be ready to spread the wealth around a bit.

CONCLUSIONS

The above suggestions are not intended as an easy means
to get rich quick. As always, the referee must keep in mind
the need to maintain the players’ motivations for further adven-
turing. Coming into megacredits does not necessarily mean
that a character’s days of action are over. Sometimes access
to generous capital can serve as a springboard to even greater
suspense. In any case, the referee should feel free to deter-
mine the outcome of a prize court decision himself, if it is clear
that a certain result will benefit the players’ enjoyment!
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